

Construction Environmental Management Plan

Kingscliff High School Upgrade
SSD-8744305

December 2021

RICHARD CROOKES

CONSTRUCTIONS

Document Control

Version no.	Description	Prepared by	Reviewed by	Date
Rev 0	DRAFT	ENV Solutions P/L	Ben Pieterse	08/10/2021
Rev 1	DRAFT	ENV Solutions P/L	Ben Pieterse	22/10/2021
Rev 2	Final	ENV Solutions P/L	Ben Pieterse	06/12/2021
Rev 3	Final	ENV Solutions P/L	Jenny Hellyer & B.P.	09/12/2021

SSD-8744305 Compliance Table

Kingscliff High School - CEMP Condition Satisfaction Table		
Condition	Details	Section & Page No.
B15	Prior to the commencement of construction, the Applicant must submit a Construction Environmental Management Plan (CEMP) to the Certifier and provide a copy to the Planning Secretary for information. The CEMP must include, but not be limited to, the following:	
	(a) Details of:	
	(i) hours of work;	CEMP Section 1.2 page 9
	(ii) 24-hour contact details of site manager;	CEMP Section 1.3 page 10
	(iii) management of dust and odour to protect the amenity of the neighbourhood;	CEMP Section 2 page 32
	(iv) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting;	CEMP Section 3 page 34
	(v) community consultation and complaints handling as set out in the Community Communication Strategy required by condition B9;	CEMP Section 4 Page 35 - 36
	(b) an unexpected finds protocol for contamination and associated communications procedure to ensure that potentially contaminated material is appropriately managed;	CEMP Section 6 page 39 - 40 ACHMP Section 4.3.2 page 11 - 14
	(c) an unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure;	CEMP Section 6 page 39 - 40 ACHMP Section 4.3.2 page 11 - 14
	(d) Construction Traffic and Pedestrian Management Sub-Plan (see condition B15);	CEMP Section 7 page 41 Refer to CTPMSP
	(e) Construction Noise and Vibration Management Sub-Plan (see condition B16);	CEMP Section 8 page 44 Refer to CNVMSP
	(f) Construction Waste Management Sub-Plan (see condition B17);	CEMP Section 9 page 46 Refer to CWMSP
	(g) Construction Soil and Water Management Sub-Plan (see condition B18);	CEMP Section 10 page 48 Refer to CSWMSP
B16	(h) Biodiversity Management Sub-Plan (see condition B19);	CEMP Section 11 page 50 Refer to BMSP
	(i) Flood Emergency Response (see condition B20);	CEMP Section 12 page 56 Refer to FERSP
	The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following:	
	(a) be prepared by a suitably qualified and experienced person(s)	CTPMSP Cover Page: Registration Number of the suitably qualified and experienced person who prepared the report Appendix K: Certificates and competencies

Kingscliff High School - CEMP Condition Satisfaction Table		
Condition	Details	Section & Page No.
	(b) be prepared in consultation with Council and TfNSW	CTPMSP Refer to zip file & consultation record attached.
	(c) detail:	
	(i) measures to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services;	CTPMSP Page 12, Section 9 Page 22, Section 12.25
	(ii) measures to ensure the safety of vehicles and pedestrians accessing adjoining properties where shared vehicle and pedestrian access occurs	CTPMSP Page 22 section 12.25
	(iii) detail heavy vehicle routes, access and parking arrangements;	CTPMSP Page 21 section 12.18
	(iv) the swept path of the longest construction vehicle entering and exiting the site, in accordance with the latest version of AS 2890.2; and	CTPMSP Page 27 Plant dump truck swept path
	(v) arrangements to ensure that construction vehicles enter and leave the site in a forward direction unless in specific exceptional circumstances under the supervision of accredited traffic controller(s);	CTPMSP Page 27 Plant dump truck to ensure
	(vi) measures to prohibit construction access through Council's land to the east of the site (Lot 66 DP858466)	CTPMSP Appendix J
	(vii) measures to minimise truck movements between 7:45am to 9am and 2pm to 3:45pm	CTPMSP Appendix J
B17	The Construction Noise and Vibration Management Sub-Plan must address, but not be limited to, the following:	
	(a) be prepared by a suitably qualified and experienced noise expert;	CNVMSPP Appendix A Page 36
	(b) describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009);	CNVMSPP Section 7 Page 15 -21
	(a) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers;	CNVMSPP Section 7 Page 15 -21
	(b) include strategies that have been developed with the community for managing high noise generating works;	CNVMSPP Section 7 Page 15 -21
	(c) describe the community consultation undertaken to develop the strategies in condition B17(d);	NA
	(d) include a complaints management system that would be implemented for the duration of the construction; and	CNVMSPP Section 7 item NV26 Page 27
	(e) include a program to monitor and report on the impacts and environmental performance of the development and the effectiveness of the implemented management measures in accordance with the requirements of condition B14.	CNVMSPP Section 7 Page 15 -21
B18	The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the procedures for the management of waste including the following:	
	(a) the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed use;	CWMSP Section 5 Pages 3- 7
	(b) information regarding the recycling and disposal locations; and	CWMSP Section 5.5 Table 5-2 Page 8 -9
	(c) confirmation of the contamination status of the development areas of the site based on the validation results.	N/A

Kingscliff High School - CEMP Condition Satisfaction Table		
Condition	Details	Section & Page No.
B19	The Applicant must prepare a Construction Soil and Water Management Sub-Plan (CSWMSP) and the plan must address, but not be limited to the following:	
	(a) be prepared by a suitably qualified expert, in consultation with Council;	CSWMSP Appendix D page 26
	(b) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;	CSWMSP Page 17 Appendix A - Page 23
	(c) describe all erosion and sediment controls to be implemented during construction, including as a minimum, measures in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom 2004) commonly referred to as the 'Blue Book';	CSWMSP Section 6 Page 13
	(d) include an Acid Sulfate Soils Management Plan, if required, including measures for the management, handling, treatment and disposal of acid sulfate soils, including monitoring of water quality at acid sulfate soils treatment areas;	CSWMSP Appendix C page 26
	(e) provide a plan of how all construction works will be managed in a wet-weather events (i.e. storage of equipment, stabilisation of the Site);	CSWMSP Appendix A
	(f) detail all off-site flows from the site; and	CSWMSP Section 4 Pages 10, Section 6.2 Page 14, Section 6.3 Page 15 & Table 3 Page 19
	(g) describe the measures that must be implemented to manage stormwater and flood flows for small and large sized events, including, but not limited to 1 in 5-year ARI.	CSWMSP Section 6.3 Pages 15 & Table 3 Page 19 Appendix A page 23
B20	The Biodiversity Management Sub-Plan (BMSP) must address, but not be limited to, the following:	
	(a) be prepared by a suitably qualified and experienced person/s;	BMSP Appendix 1
	(b) identify areas of land where impacts on biodiversity are to be avoided as outlined in the Biodiversity Development Assessment Report prepared by Kleinfelder, dated 15 April 2021 and the Bush Stone-curlew Management Plan prepared by Kleinfelder, dated 5 August 2021 and set out how these areas will be protected from construction impacts;	BMSP Section 3 Page 3 - 9
	(c) set out the measures identified in the Biodiversity Development Assessment Report to minimise, mitigate and manage impacts on biodiversity, including timing and responsibility for delivery of the measures.	BMSP Section 3 Page 3 - 9
B21	The Flood Emergency Response Sub-Plan (FERSP) must address, but not be limited to, the following:	
	(a) be prepared by a suitably qualified and experienced person(s);	FERSP Appendix 1
	(b) address the provisions of the Floodplain Risk Management Guidelines (EESG);	FERSP Section 2 - 6 Page 2 - 22
	(c) include details of:	
	(i) the flood emergency responses for both construction phases of the development;	FERSP Section 5.4 - 6 Page 18 - 22
	(ii) predicted flood levels;	FERSP Section 4.4.1 Page 8 & Section 4.5.1 Page 13

Kingscliff High School - CEMP Condition Satisfaction Table		
Condition	Details	Section & Page No.
	(iii) flood warning time and flood notification;	FERSP Sections 4.4.2 Page 13 Section 4.5.2 Page 14, & Section 5.2 Page 17
	(iv) assembly points and evacuation routes;	FERSP Sections 5.3 & 5.4 Page 18
	(v) evacuation and refuge protocols; and	FERSP Section 5.4 Page 18 & Section 6 page 21 - 22
	(vi) awareness training for employees and contractors, and users/visitors.	FERSP Section 6.1 page 21 - 22
B22	A Driver Code of Conduct must be prepared and communicated by the Applicant to heavy vehicle drivers and must address the following: (a) minimise the impacts of earthworks and construction on the local and regional road network; (b) minimise conflicts with other road users; (c) minimise road traffic noise; and (d) ensure truck drivers use specified routes.	CTPMSP Page 37, Appendix J
B23	Prior to the commencement of construction, the Applicant must submit a Construction Worker Transportation Strategy to the Certifier. The Strategy 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. The Strategy must include arrangements to prohibit workers using the informal path through the adjacent Council land to Cudgen Foreshore Park. A copy of the strategy must be provided to the Planning Secretary for information.	CWTS

Contents

SSD-8744305 Compliance Table	3
Glossary/Abbreviations	6
1 Introduction	8
1.1 Project Overview	8
1.2 Hours of Work	9
1.3 24 hour Contact Details of Construction Manager	9
1.4 Objectives of the Construction Environmental Management Plan	9
1.5 Relationship to other Reports	10
1.6 Roles and Responsibilities	10
1.7 Implementation	13
1.8 Relevant Legislation	23
1.9 Communication	25
1.10 Emergency and Incident Planning	27
1.11 Monitoring, Inspections and Auditing	27
1.12 Environmental Nonconformities	29
1.13 Records of Environmental Activities	30
1.14 Management Review	30
1.15 CEMP/Sub Plan Revision	30
2 Management of Dust and Odour	32
2.1 Consent Requirements	32
2.2 Relevant Conditions to Consider	32
2.3 Air Quality	32
3 External Lighting	34
3.1 Consent Requirements	34
4 Community Consultation and Complaints Handling	35
4.1 Consent Requirements	35
4.2 Relevant Conditions	35
4.3 Communications Strategy	35
4.4 Complaints Handling	36
5 Unexpected Finds Protocol for Contamination	37
5.1 Consent Requirement	37
5.2 Summary of Protocol	37
6 Unexpected Finds Protocol for Aboriginal and Non-Aboriginal Heritage	39
6.1 Consent Requirement	39
6.2 Summary of Protocol	39
6.3 Aboriginal Cultural Heritage Management Plan	40
7 Construction Traffic and Pedestrian Management Sub Plan	41
7.1 Consent Requirements	41
7.2 Relevant Conditions to Consider	41
8 Construction Noise and Vibration Sub-Plan	44
8.1 Consent Requirement	44
8.2 Relevant Conditions to Consider	44
9 Construction Waste Management Sub Plan	46
9.1 Consent Requirement	46
9.2 Relevant Conditions to Consider	46
10 Construction Soil and Water Management Sub Plan	48
10.1 Consent Requirements	48
10.2 Relevant Conditions to Consider	48
11 Construction Biodiversity Management Sub Plan	50

11.1 Consent Requirements	50
11.2 Relevant Conditions to Consider	50
12 Flood Emergency Response Sub Plan	56
12.1 Consent Requirements	56
12.2 Relevant Conditions to Consider	56
13 Tree Protection	59
13.1 Consent Requirements	59
14 References	60

Tables

Table 1-1 Conditions of Consent for Construction Activities.....	14
Table 1-2 Relevant Legislation	24
Table 1-3 Auditing Requirements	28

Appendixes

Appendix A – Construction Soil and Water Management Sub Plan
Appendix B – Construction Waste Management Sub Plan
Appendix C – Construction Noise and Vibration Management Sub Plan
Appendix D – Construction Traffic and Pedestrian Management Sub Plan
Appendix E – Construction Biodiversity Management Sub Plan
Appendix F – Flood Emergency Response Sub Plan
Appendix G – Aboriginal Cultural Heritage Management Plan

Glossary/Abbreviations

Term / Abbreviation	Definition / Expanded text
ACHMP	Aboriginal Cultural Heritage Management Plan
ASS	Acid Sulfate Soils
CEMP	Construction Environmental Management Plan
CEMS	Contractors Environmental Management System
Compliance audit	Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (CEMP) (which incorporates the relevant approval conditions).
DPIE	Department of Planning, Industry and Environment
EEC	Endangered Ecological Community
Ecologically sustainable development	Using, conserving and enhancing the community's resources so that the ecological processes on which life depends are maintained and the total quality of life now and in the future, can be increased (Council of Australian Governments, 1992)
EMR	Environmental Management Representative (SINSW)
EMS	Environmental Management System
Environmental Aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.
Environmental Impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.
Environmental Incident	An unexpected event that has, or has the potential to, cause harm to the environment and requires some action to minimise the impact or restore the environment.
EMM	Environmental Management Measure
Environmental Objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental Policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental Target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPA	NSW Environment Protection Authority
ESCP	Erosion and Sediment Control Plan
ESR	Environmental Site Representative (RCC)

EWMS	Environmental work method statement
Hold point	Is a verification point that prevents work from commencing prior to approval from Department of Education NSW (DoE) or Department of Planning, Industry and Environment (DPIE)
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. Note "material harm" is defined in the consent
Material Harm	A) Involves actual or potential harm to the health and safety of human beings or to the environment that is not trivial; or Results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent mitigate or make good hard to the environment.
Minister, the	B) Minister of the NSW Department of Planning, Industry and Environment (or delegate)
Non-compliance	Failure to comply with the requirements of the Project approval or any applicable licence, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of Project system documentation including this CEMP or supporting documentation.
OEH	Office of Environment and Heritage
PESCP	Progressive Erosion and Sediment Control Plan
Principal, the	Department of Education NSW (DoE)
POEO Act	<i>Protection of the Environment Operations Act 1997</i> (NSW)
Project, the	Kingscliff Primary School
RAPs	Registered Aboriginal Parties
SINSW	School Infrastructure NSW

1 Introduction

This Construction Environmental Management Plan (“CEMP”) has been prepared by ENV Solutions on behalf of the Richard Crookes Construction for upgrade of the Kingscliff High School (KHS)(SSD-8744305). The Construction Environmental Management Plan has been prepared in accordance with the conditions of the State Significant Development Approval SSD-8744305.

This has been prepared to meet the requirements of condition B14 & B15 of the developments Conditions of Consent, to be approved by the certifying authority and will be submitted to the certifying authority for information.

1.1 Project Overview

As part of the NSW Governments \$7 billion School Infrastructure Package, the KHS Upgrade Project will include the demolition of existing facilities including carparks, to facilitate the following planned upgrades:

- Construction of a new Visual Arts, Music and Performance Building (Building O) in the north-western portion of the site;
- Refurbishment of a car park to the east of Building O;
- New bike parking facilities in the northern portion of the site;
- An extension to the south of the existing Building A;
- A new hydrant booster, tank and pump room in the north-eastern portion of the site;
- A new Covered Outdoor Learning Area (COLA) to the east of existing Building H;
- Demolition of a footpath and new landscaping works to the north of the current Building F; and
- Alterations and refurbishment of existing buildings ‘C’ and ‘G’.

The proposed design is shown as Figure 1-1.

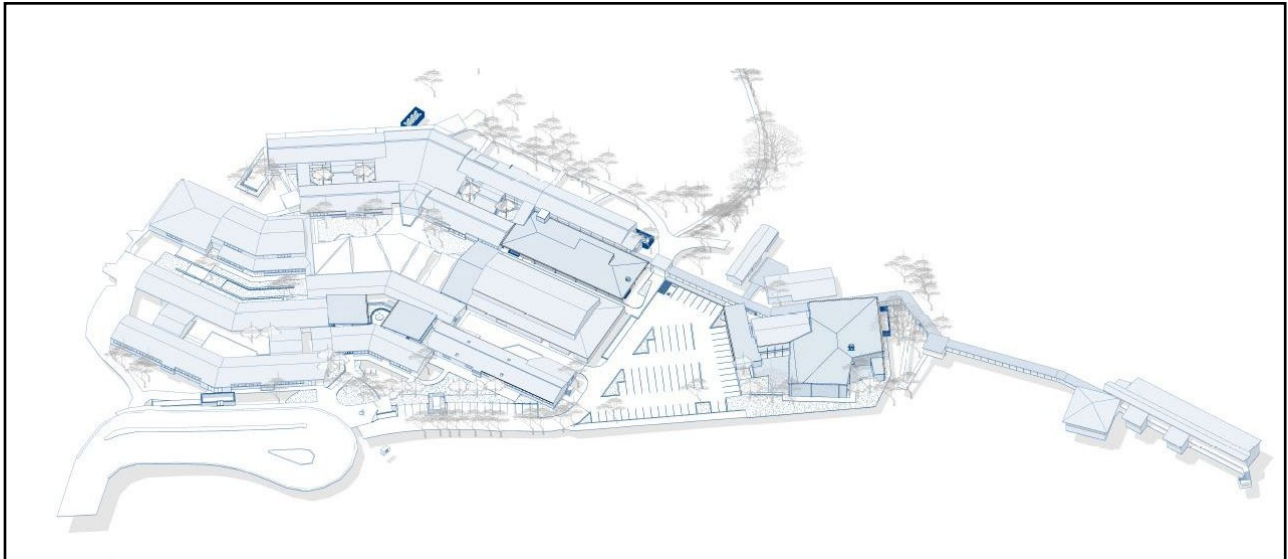


Figure 1-1 Proposed Design

1.1.1 Indicative Date of Commencement of Construction

The indicative date of commencement of construction is late 2021 to early 2022.

1.1.2 Submission to Planning Secretary for Information.

In accordance with Condition B15, this CEMP must be submitted to the Certifying Authority for approval and submitted to the Planning Secretary for information.

1.2 Hours of Work

The proposed hours of work for the project are as follows:

Monday – Friday: 7am – 6pm

Saturday: 8am – 1pm

Sunday: No work on Sundays or Public Holidays

The proposed hours align to Condition C4 of SSD-8744305

1.3 24 hour Contact Details of Construction Manager

Name of Site Manager: Darren Lovell

Phone number: 0447710735

Email: lovelld@richardcrookes.com.au

1.4 Objectives of the Construction Environmental Management Plan

This Construction Environmental Management Plan (CEMP) and the associated sub plans have been prepared to outline and describe how RCC will, during the construction works for the KHS upgrade, comply with the relevant conditions specified within the EIS documentation, Development Conditions of Consent (SSD-8744305) and all associated licences, permits and approvals.

It outlines how RCC will minimise the environmental risks and achieve environmental outcomes on the project by providing a structured approach to ensure appropriate mitigation measures and controls are implemented.

The CEMP has been prepared in accordance with:

- The Environmental Impact Statement (EIS) documentation
- Developmental Conditions of Consent
- Guideline for the Preparation of Environmental Management Plans (DIPNR)
- AS/NZS ISO 14001.

This CEMP will:

- Ensure appropriate controls and procedures are implemented during Construction to avoid or minimise real and potential impacts to the environment and sensitive receivers.
- Ensure appropriate measures are implemented to comply with all relevant legislation and other requirements.
- Provide site workers with an increased level of understanding and awareness of sensitive environmental issues associated with the Project and ensure effective communication is maintained with all regulatory agencies.
- Fulfil compliance requirements and contractual obligations under the Project's approved EIS documentation, the Developmental Conditions of Consent, and other relevant approval documents.
- Align with the Project EMS.
- Ensure the needs and expectations of the Department of Education are addressed.
- Manage environmental and sustainability risks and opportunities through development of the CEMP and associated Management plans.
- Communicate that active and visible leadership and commitment are integral in achieving compliance with the daily mitigation of environmental impact.
- Demonstrate the processes and the Project's commitment to the principles of Ecologically Sustainable Development.
- Internalise and apply risk management methodologies, including the pre-cautionary principle to the Project.

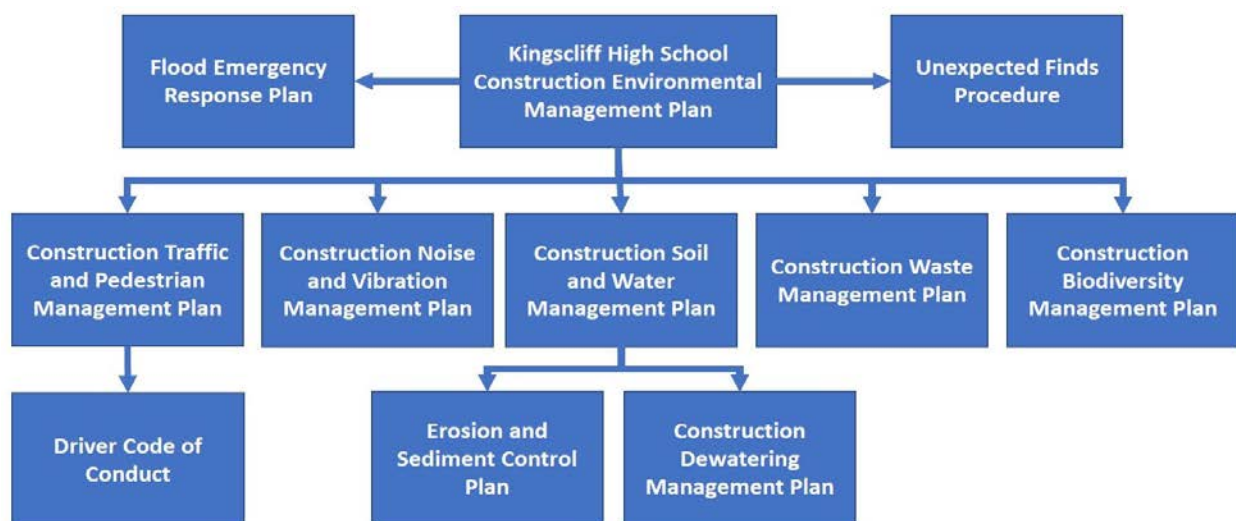
- Apply intuitive environmental management tools and incentivised mechanisms to assist in decision-making in the protection of the environment.
- Internalise hold-points to assist in decision-making.
- To assure biodiversity, ecological and heritage values are conserved.
- Assist and set the framework for establishing workshops and other forums at all levels to facilitate learning, innovation and knowledge-sharing.
- Integrate environmental management practices and processes across other disciplines such as safety, quality and engineering.

The requirements of this approval and where they are met in this CEMP are shown in Table 1-1, (Section 1.7).

This CEMP is the overarching document in the environmental management system for the KHS Upgrade that includes a number of management documents. It is applicable to all staff and sub-contractors associated with the construction of the Project.

1.5 Relationship to other Reports

This CEMP is the overarching document in the environmental management system for the Kingscliff Public School Upgrade that includes a number of management documents. It is applicable to all staff and sub-contractors associated with the construction of the Project.



1.6 Roles and Responsibilities

This CEMP has been prepared for Richard Crookes Construction (RCC), engaged as the Principal Contractor (PC) by School Infrastructure NSW (Client Representative) on behalf of Department of Education (Client), to upgrade the site. As the PC, RCC hold primary accountability in upholding the agreed minimum environmental standard, as required by the Conditions of Consent specified within the State Significant Development Approval SSD-8744305.

Individual roles and responsibilities are listed below.

1.6.1 Project Manager

- Inform and instruct RCC personnel in the application of the Environmental Management System.
- Ensure all aspects of the Environmental Management System are in place as required and any issues are resolved in a timely manner.

- Be available for all personnel to confirm procedures or ask questions on any aspect of the Environmental Management System.
- Provide advice on compliance with standards, codes of practice, etc.
- Oversee site process control.
- Reporting, as required, both internal (RCC) and to SINSW (Client Representative).
- Review all incident/non-conformance records, accident & incident reports and audit reports.
- Authorise subcontract tendering and subcontract procedures, and establish an administrative system to monitor the subcontracts and the payment of subcontractors in relation to their environmental responsibilities.
- Cooperate, consult and coordinate activities with the principal to ensure that all contractors engaged to perform any part of this work assists in ensuring the principal complies with all relevant environmental legislation and site-specific rules.
- Ensure all works comply with relevant regulatory and Project requirements.
- Ensure the requirements of this CEMP are fully implemented, and in particular, that environmental requirements are not secondary to other construction requirements.
- Endorse and support the Project environmental policy.
- Liaise with SINSW, DoE and Government Authorities as required.
- Participate and provide guidance in the regular review of this CEMP and supporting documentation.
- Provide adequate resources (personnel, financial and technological) to ensure effective development, implementation and maintenance of this CEMP.
- Ensure that all personnel receive appropriate induction training, including details of the environmental and community requirements.
- Ensure that complaints are investigated to ensure effective resolution.
- Stop work immediately if an unacceptable impact on the environment is likely to occur.

1.6.2 Site Construction Manager

- Implement and ensure adherence to this and other project plans.
- Implement all environmental plans and procedures as required.
- Co-ordination of all on site activities including subcontract interface.
- Organization of all deliveries and managing materials handling.
- Establish and maintain site environmental measures.
- Implementation of all inspection and testing requirements.
- Liaison and co-ordination with testing and inspection authorities.
- Preparation of check sheets and supervision of remedial works.
- Liaise with Project Manager to co-ordinate the works and resources required.
- Provide the Principal access to the site and all necessary assistance to allow system audits, site audit, checks or obligations.
- Communicate with all personnel and sub-contractors regarding compliance with the CEMP and site-specific environmental issues.
- Ensure all site workers attend an environmental induction prior to the commencement of works.
- Co-ordinate the implementation of the CEMP.
- Co-ordinate the implementation and maintenance of pollution control measures.
- Identify resources required for implementation of the CEMP.
- Support the Environmental Site Representative (ESR) (RCC) and/or Environmental Management Representative (EMR) (SINSW) in achieving the project environmental objectives, including on ground implementation of the Erosion and Sediment Control Plan (ESCP).
- Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the construction ESR (RCC) and/or EMR (SINSW).

- Co-ordinate action in emergency situations and allocate required resources.
- Stop activities where there is an actual or immediate risk of harm to the environment.
- Plan construction works in a manner that avoids or minimizes impact to environment.
- Ensure the requirements of this CEMP are fully implemented.
- Ensure construction personnel manage construction works in accordance with statutory and approval requirements.
- Support the ESR and/or EMR in achieving the project environmental objectives.
- Ensure environmental management procedures and protection measures are implemented.
- Ensure all Project personnel attend an induction prior to commencing works.
- Liaise with School Infrastructure NSW and the Department of Education and other government authorities as required.
- Stop work immediately if an unacceptable impact on the environment is likely to occur.
- Undertake any environmental duties as defined by the Superintendent or Project / Site Engineer.
- Control field works and implement/maintain effective environmental controls.
- Where required, undertake environmental risk assessment of works prior to commencement;
- Ensure all site workers are site inducted prior to commencement of works.
- Attend to any spills or environmental incidents that may occur on-site.
- Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the Superintendent.
- Stop activities where there is an actual or immediate risk of harm to the environment and advise the Project Manager, ESR and/or EMR.

1.6.3 Environmental Site Representative (ESR)

- Liaison with the Principal and with all relevant authorities on environmental matters.
- Maintaining a register of all environmental management documents for the Contract.
- Ensuring that the CEMP is established, implemented and maintained in compliance with the Conditions of Consent, including all Sub-Plans and procedures, and upgrades to these documents (as needed) to remain current with the progress of the Works.
- Overall responsibility for the establishment, management, monitoring and maintenance of erosion and sediment controls within the Site.
- Carrying out regular inspections and auditing of the works to ensure that environmental safeguards are being followed.
- Identifying where the implemented environmental measures are not meeting the targets set and identifying areas where improvement can be achieved.
- Preparing monthly reports outlining the works that have been undertaken and the achievements that have been met, as well as identifying those areas where improvements were made.
- Facilitating environmental induction and toolbox talks for all site personnel.
- Specific authority to stop work on any activity where the ESR deems it necessary to prevent environmental nonconformities.
- Notification to relevant parties of any environmental incidents.
- Ensure that all community consultation activities are carried out.
- Report any environmental issues to the ESR raised by stakeholders or members of the community.
- Communicate general Project progress, performance and issues to stakeholders including the community.
- Maintain the 24 hour complaints hotline and complaints register.

1.6.4 Contractor Project/Site Engineers

- Provide input into the preparation of environmental planning documents as required.

- Ensure that instructions are issued and adequate information provided to employees that relate to environmental risks on-site.
- Ensure that the works are carried out in accordance with the requirements of the CEMP and supporting documentation, including the implementation of all environmental controls.
- Identify any environmental risks.
- Identify resource needs for implementation of CEMP requirements and related documents.
- Ensure that complaints are investigated to ensure effective resolution.
- Take action in the event of an emergency and allocate the required resources to minimise the environmental impact.
- Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the Superintendent and the ESR and/or EMR.

1.6.5 Wider Project Team (including sub-contractors)

- Comply with the relevant requirements of the CEMP, or other environmental management guidance as instructed by a member of the Project's management.
- Participate in the mandatory Project/site induction program.
- Report any environmental incidents to the foreman immediately or as soon as practicable if reasonable steps can be adopted to control the incident.
- Undertake remedial action as required to ensure environmental controls are maintained in good working order.
- Stop activities where there is an actual or immediate risk of harm to the environment and advise the Project Manager, Construction Manager, Superintendent or ESR (and EMR if required).

1.7 Implementation

The CEMP for this project has been prepared in accordance with *Guideline for the Preparation of Environmental Management Plans* (DIPNR) and all relevant licences, permits and approvals for the project.

The CEMP will assist in guiding the Project Managers, Construction Managers and Contractors responsible for the construction of the proposed works to mitigate environmental risk associated with the works. Under B15 of the Conditions of Consent the CEMP must be prepared and approved prior to the commencement of construction activities and shall include the following items:

(a) Details of:

- (i) hours of work;
- (ii) 24-hour contact details of site manager;
- (iii) management of dust and odour to protect the amenity of the neighbourhood;
- (iv) external lighting in compliance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting;
- (v) community consultation and complaints handling as set out in the Community Communication Strategy required by condition B10;

(b) an unexpected finds protocol for contamination and associated communications procedure to ensure that potentially contaminated material is appropriately managed;

(c) an unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure;

- (d) Construction Traffic and Pedestrian Management Sub-Plan (see condition B16);
- (e) Construction Noise and Vibration Management Sub-Plan (see condition B17);
- (f) Construction Waste Management Sub-Plan (see condition B18);
- (g) Construction Soil and Water Management Sub-Plan (see condition B19);
- (h) Biodiversity Management Sub-Plan (see condition B20); and
- (i) Flood Emergency Response (see condition B21);

The following table (Table 1-1) is a list of the conditions of consent relevant for construction activities.

Table 1-1 Conditions of Consent for Construction Activities

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Notification / Consultation	B1	The Applicant must notify the Planning Secretary in writing of the dates of the intended commencement of construction and operation at least 48 hours before those dates	Pre-Construction	N/A
Notification / Consultation	B2	If the construction or operation of the development is to be staged, the Planning Secretary must be notified in writing at least 48 hours before the commencement of each stage, of the date of commencement and the development to be carried out in that stage.	Pre-Construction	N/A
General	C4	Construction, including the delivery of materials to and from the site, may only be carried out between the following hours: (a) between 7am and 6pm, Mondays to Fridays inclusive; and (b) between 8am and 1pm, Saturdays. No work may be carried out on Sundays or public holidays.	Construction	CEMP Section 1.2 page 9 CNVMSP Section 6.3 page 16
General	C9	The Applicant must carry out the construction of the development in accordance with the most recent version of the CEMP (including Sub-Plans).	Construction	CEMP Section 1.6.3 page 12

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Notification / Consultation	B10	No later than 48 hours before the commencement of construction, a Community Communication Strategy must be submitted to the Planning Secretary for information. The Community Communication Strategy must provide mechanisms to facilitate communication between the Applicant, the relevant Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during the design and construction of the development and for a minimum of 12 months following the completion of construction.	Pre-Construction	CEMP Section 4 page 35
Notification / Consultation	C1	A site notice(s) must be prominently displayed at the boundaries of the site during construction for the purpose of informing the public of project details	Pre / During Construction	N/A
Notification / Consultation	C7	Notification of such construction activities as referenced in condition C6 must be given to affected residents before undertaking the activities or as soon as is practical afterwards	Construction	CEMP Section 4 – page 35 CNVMSP Section 6 – page 14, Section 7 Table 7-1 item VN9 – Page 19
Heritage	C27	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 must be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by Heritage NSW under Department of Premier and Cabinet 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 Heritage NSW to develop and implement management strategies for all objects/sites. Works may only recommence with the written approval of Heritage NSW.	Construction	CEMP Section 6 Page 39 ACHMP Section 4.3.2 page 11 - 14

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Dilapidation Heritage	C28	If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the Heritage NSW 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 Heritage NSW.	Construction	CEMP Section 6 Page 39 ACHMP Section 4.3.2 page 11 - 14
Noise	C2	All construction plant and equipment used on site must be maintained in a proper and efficient condition and operated in a proper and efficient manner	Pre-Construction	CNVMSPP Section 7 Table 7-1 item NV5 page 18
Noise	C5	Notwithstanding condition C4, provided noise levels do not exceed the existing background noise level plus 5dB, works may also be undertaken during the following hours: (a) between 6pm and 7pm, Mondays to Fridays inclusive; and (b) between 1pm and 4pm, Saturdays.	Construction	CNVMSPP Section 6.3 page 14
Noise	C6	Construction activities may be undertaken outside of the hours in condition C4 and C5 if required: (a) by the Police or a public authority for the delivery of vehicles, plant or materials; or (b) in an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or (c) where the works are inaudible at the nearest sensitive receivers; or (d) where a variation is approved in advance in writing by the Planning Secretary or his nominee if appropriate justification is provided for the works	Construction	CNVMSPP Section 6.3 page 14
Noise	C8	Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours: (a) 9am to 12pm, Monday to Friday; (b) 2pm to 5pm Monday to Friday; and (c) 9am to 12pm, Saturday	Construction	CNVMSPP Section 6.3 page 14 Section 7 Table 7-1 item VN10 – Page 19

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Noise	C13	The development must be constructed to achieve the construction 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 Noise and Vibration Management Plan	Construction	CNVMSP Section 7 page 15 - 22
Noise	C15	The Applicant must implement, where practicable and without compromising the safety of construction staff or members of the public, the use of 'quackers' to ensure noise impacts on surrounding noise sensitive receivers are minimised.	Construction	CNVMSP Section 7 Table 7-1 item VN13 – Page 20
Noise	C14	The Applicant must ensure construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work outlined under condition C4.	Construction	CNVMSP Section 7 Table 7-1 item VN12 – Page 20
Vibration	B5	Prior to the commencement of construction, the Applicant must: (a) consult with the relevant owner and provider of services and Infrastructure that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure; (b) prepare a Pre-Construction Dilapidation Report identifying the condition of all public (nonresidential) infrastructure and assets in the vicinity of the site (including roads, gutters and footpaths) that have potential to be affected; (c) submit a copy of the Pre-Construction Dilapidation Report to the asset owner, Certifier and Council; and (d) provide a copy of the Pre-Construction Dilapidation Report to the Planning Secretary when requested.	Pre-Construction	CNVMSP Section 7 Table 7-1 item VN17 – Page 21 Public Infrastructure Dilapidation Report provided under B5 of SSDA

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Vibration	C16	Vibration caused by construction at any residence or structure outside the site must be limited to: (a) for structural damage, the latest version of DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures (German Institute for Standardisation, 1999); and (b) for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: a technical guideline (DEC, 2006) (as may be updated or replaced from time to time).	Construction	CNVMSP Section 7 Table 7-1 item VN14 – Page 21
Vibration	C17	Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in condition C16.	Construction	CNVMSP Section 7 Table 7-1 item VN15 – Page 21
Vibration	C18	The limits in conditions C16 and C17 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by condition B17 of this consent	Construction	CNVMSP Section 7 Table 7-1 item VN16 – Page 21
Light Spill	B11	Prior to commencement of lighting installation, evidence must be submitted to the satisfaction of the Certifier that all outdoor lighting within the site has been designed to comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-2019 Control of the obtrusive effects of outdoor lighting.	Pre-Construction	CEMP Section 3 Page 34
Light Spill	C35	The Applicant must ensure that all external lighting is constructed and maintained in accordance with AS 4282-2019 Control of the obtrusive effects of outdoor lighting.	Construction	CEMP Section 3 page 34
Construction Traffic	B23	Prior to the commencement of construction, the Applicant must submit a Construction Worker Transportation Strategy to the Certifier. The Strategy 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. A copy of the strategy must be provided to the Planning Secretary for information	Pre-Construction	CWTS

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Construction Traffic	B16	Prior to the commencement of construction, evidence of compliance of construction parking and access arrangements with the following requirements must be submitted to the Certifier: (a) all vehicles must enter and leave the site in a forward direction; (b) the swept path of the longest construction vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, is in accordance with the latest version of AS 2890.2; and (c) the safety of vehicles and pedestrians accessing adjoining properties, where shared vehicle and pedestrian access occurs, has been addressed.	Pre-Construction	CTPMSP page 27
Air Quality	C20	The Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.	Construction	CEMP Section 2 page 32 - 33
Air Quality	C21	During construction, the Applicant must ensure that: (a) activities are carried out in a manner that minimises dust including emission of windblown or traffic generated dust; (b) all trucks entering or leaving the site with loads have their loads covered; (c) trucks associated with the development do not track dirt onto the public road network; (d) public roads used by these trucks are kept clean; and (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.	Construction	CEMP Section 2 page 32 - 33
Biodiversity	B20	The Biodiversity Management Sub-Plan (BMSP) must address, but not be limited to, the following: (a) be prepared by a suitably qualified and experienced person/s; (b) identify areas of land where impacts on biodiversity are to be avoided as outlined in the Biodiversity Development Assessment Report prepared by Kleinfelder, dated 15 April 2021 and the Bush Stone-curlew Management Plan prepared by Kleinfelder, dated 5 August 2021 and set out how these areas will be protected from construction impacts; (c) set out the measures identified in the Biodiversity Development Assessment Report to minimise, mitigate and manage impacts on biodiversity, including timing and responsibility for delivery of the measures	Pre-Construction	CBMSP – Executive Summary / Section 3 page 3 - 9

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Soil Contamination	C22	The Applicant must: (a) ensure that only VENM, ENM, or other material that meets the requirements of a relevant order and exemption issued by the EPA, is brought onto the site; (b) keep accurate records of the volume and type of fill to be used; (c) make these records available to the Certifier upon request; (d) ensure the exportation of waste (including fill or soil) from the site is in accordance with the provisions of the Protection of the Environment Operations Act 1997 and the NSW Environment Protection Authority "Waste Classification Guidelines"; and (e) ensure the exportation of waste is transported to a licenced waste facility or an approved site subject to a resource recovery order and exemption.	Construction	CSWMSP section 6.6 page 16
Waste Management	C29	All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.	Construction	CWMSP – Section 6.4 page 15 - 16
Waste Management	C30	All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	Construction	CWMSP Section 13.2 page 25 - 26
Waste Management	C31	The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.	Construction	CWMSP section 6.1.3 page 14
Waste Management	C32	The Applicant must record the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations for the duration of construction.	Construction	CWMSP – Section 7.5 page 20 / Section 13.4 page 26

Aspect / Impact	Condition Number	Condition Requirement / Safeguard	Timing	Relevant Section of CEMP / Sub Plan
Emergency Response	C24	The Applicant must prepare and implement awareness training for employees and contractors, including locations of the assembly points and evacuation routes, for the duration of construction.	Construction	CEMP Section 1.10 page 27
Auditing	A22	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, noncompliance notification, Site audit report and independent auditing.	Construction	CEMP Section 1.10 and 1.11 Page 27 - 29
Auditing	C38	The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those agreed to above, upon giving at least 4 week's notice to the Applicant of the date or timing upon which the audit must be commenced.	Construction	CEMP Section 1.11 Page 27 - 29
Auditing	C39	In accordance with the specific requirements in the Independent Audit Post Approval Requirements, the Applicant must: (a) review and respond to each Independent Audit Report prepared under condition C38 of this consent, or condition C39 where notice is given; (b) submit the response to the Planning Secretary; and (c) make each Independent Audit Report and response to it publicly available within 60 days after submission to the Planning Secretary.	Post-Construction	CEMP Section 1.11 Page 27 - 29
Auditing	C40	Independent Audit Reports and the applicant/proponent's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements unless otherwise agreed by the Planning Secretary.	Post-Construction	CEMP Section 1.11 Page 27 - 29
Auditing	C41	Notwithstanding the requirements of the Independent Audit Post Approval Requirements, the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that an audit has demonstrated operational compliance.	Post-Construction	CEMP Section 1.11 Page 27 - 29

1.7.1 Induction

All personnel (including sub-contractors) will attend a compulsory site induction that includes an environmental component prior to commencement on-site. This is done to ensure all personnel involved in the Project are aware of the requirements of the CEMP.

Short-term visitors to site undertaking inspections / entering the site (such as regulators) will be required to undertake a visitors induction and be accompanied by inducted personnel at all times.

Temporary visitors to site for purposes such as deliveries will be required to be accompanied by inducted personnel at all times.

The construction ESR (or delegate) will conduct the environmental component of the site inductions.

The environmental component must cover all elements of the CEMP and would include as a minimum:

- Relevant details of the CEMP including purpose and objectives
- Requirements of due diligence and duty of care
- Conditions of environmental licences, permits and approvals
- Potential environmental emergencies on Site and the emergency response procedures
- Reporting and notification requirements for pollution and other environmental incidents
- High risk activities and associated environmental safeguards
- Working in or near environmentally sensitive areas
- Specific environmental management requirements and responsibilities
- Mitigation measures for the control of environmental issues
- Incident response and reporting requirements
- Information relating to the location of environmental constraints.
- Key environmental issues

A record of all environment inductions will be maintained and kept on-site. The construction ESR may authorise amendments to the induction at any time. Possible reasons for changes to the induction may be Project modifications, legislative changes or amendments to this CEMP or related documentation.

An Induction Register is kept on site.

1.7.2 Pre-Start Meetings

The pre-start meeting is a tool for informing the workforce of the day's activities, safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, coordination issues with other trades, hazards and other information that may be relevant to the day's work.

The Site Construction Manager will conduct a daily pre-start meeting with the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Daily pre-start meetings are generally succinct in nature and will take approximately 10-15 minutes.

The environmental component of pre-starts will be determined by the ESR and will include any environmental issues that could potentially be impacted by, or impact on, the day's activities. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

1.7.3 Toolbox Talks

Toolbox talks will be one method of raising awareness and educating personnel on issues related to all aspects of construction including environmental issues. The toolbox talks are used to ensure environmental awareness continues throughout construction and shall be facilitated by the Environmental Site Representative.

Toolbox talks will also be tailored to specific environmental issues relevant to upcoming works.

Relevant environmental issues include (but are not limited to):

- Erosion and Sedimentation Control
- Dewatering / Stormwater Management
- Hours of Work
- Emergency and Spill Response
- Aboriginal and Non-Aboriginal heritage
- Biodiversity and biosecurity
- Noise and Vibration
- Dust Control

Toolbox talk attendance is mandatory and attendees of toolbox talks are required to sign an attendance form and the records maintained.

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact. Topics covered may include those detailed above, or others deemed necessary in the lead up to or during construction.

Another way to inform construction personnel will be through the development and distribution of awareness notes. These will typically take the form of a poster, booklet, or similar and will be distributed to Engineers, Leading Hands, Foreman and others with a responsibility for managing specific work locations or activities. This documentation will be used to inform the broader workforce through either daily pre-starts meeting or provision in worker crib sheds / break facilities.

A Training Register is kept on site.

1.8 Relevant Legislation

The legislation below is current at the time of submission of the CEMP for approval and will be updated thereafter as legislative changes occur, and/or legal requirements become relevant.

A register of legal requirements for the Project is contained in the EIS Documentation. This register will be reviewed at regular intervals, such as during management reviews, and updated with any applicable changes. Any changes made to the legal requirements register will be communicated

to the wider project team, including subcontractors where necessary through toolbox talks, specific training and other methods.

The construction project team will regularly review legal and other requirements and ensure the register remains up to date and current.

Table 1-2 Relevant Legislation

Act / Regulation / Planning Policy	Interaction with Consent / Development	Jurisdiction
EP&A Regulation 2000	The EP&A Regulation requires the following four (4) principles of ecologically sustainable development be considered in assessing a project: <ul style="list-style-type: none"> • The precautionary principle; • Intergenerational equity; • Conservation of biological diversity and ecological integrity; and • Improved valuation and pricing of environmental resources. 	National
State Environmental Planning Policy (State and Regional Development) 2011	State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) identifies development and infrastructure that is State and Regionally significant.	State
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP) aims to (amongst other things) streamline the planning system for education and childcare facilities including changes to exempt and complying development.	State
State Environmental Planning Policy (Infrastructure) 2007	ISEPP 2007 provides a consistent planning regime for infrastructure and the provision of services across NSW, along with providing for consultation with relevant public authorities during the assessment process. The ISEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.	State
State Environmental Planning Policy No. 55 – Remediation of Land	SEPP 55 prescribes a statutory process associated with the development of land that is contaminated and needs remediation.	State
State Environmental Planning Policy (Coastal Management) 2018	The site is mapped as being within the Coastal Environmental Area and Coastal Use under the Coastal Management SEPP (Clauses 13 and 14 of the Coastal Management SEPP).	State
Biodiversity Conservation Act 2016	The Biodiversity Conservation Act 2016 (BC Act) and its supporting regulations set out the environmental impact assessment framework for threatened species, threatened ecological communities and Areas of Outstanding Biodiversity Value (formerly critical habitat) for Division 5.1 activities (amongst other types of development).	National

Act / Regulation / Planning Policy	Interaction with Consent / Development	Jurisdiction
Protection of the Environment Operations Act 1997	The Protection of the Environment Operations Act 1997 (POEO Act) focuses on environmental protection and provisions for the reduction of water, noise and air pollution and the storage, treatment and disposal of waste. The POEO Act introduces licensing provisions for scheduled activities that are of a nature and scale that have a potential to cause environmental pollution. It also includes measures to limit pollution and manage waste	National
Heritage Act 1977	The Heritage Act 1977 provides for the protection or conservation of buildings, works, maritime heritage (wrecks), archaeological relics and places of heritage value through their listing on various State and local registers. The Act makes it an offence to harm any non-Aboriginal heritage values without approval.	National
Environment Protection and Biodiversity Conservation Act 1999	Under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) a referral is required to the Australian Government for proposed 'actions that have the potential to significantly impact on matters of national environmental significance (MNES) or the environment of Commonwealth land'	National
Tweed Local Environmental Plan 2014	Local environmental planning provisions.	Local
Tweed Development Control Plan 2008	Local Planning Provisions	Local

1.9 Communication

1.9.1 Internal Communication

Clear lines of communication throughout all levels and functions (e.g. management, staff and sub-contracted service providers), is key to minimising environmental impacts and achieving continual improvements in environmental performance.

The construction team will meet regularly to discuss any issues with environmental management on-site, any amendments to plans that might be required or any new/changed construction activities.

Regular meetings may also be scheduled with relevant authorities (SINSW, EPA, DPIE) and the ESR. The purpose of these meetings would be to communicate ongoing environmental performance and to identify any issues to be addressed.

In addition, construction team members will participate in toolbox talks on at least a weekly basis. This forum will provide an opportunity for the environment team members to communicate on environmental performance, to advise on any upcoming sensitive environmental matters for future work areas and to receive feedback from on-site personnel.

Further internal communications regarding environmental issues and aspects will be through awareness training as described in Section 1.7.3.

1.9.2 Liaisons with EPA and Government Authority Consultation

The ESR has the responsibility of reporting on the ongoing environmental performance of the Project to the EMR (SINSW). The construction ESR will report regularly to SINSW on progress and any key environmental matters.

The Project Manager and the ESR are the two 24-hour contacts. They have the authority to halt the progress of the works if necessary. They are the key emergency response personnel during an environmental site emergency.

The EMR is the authorised contact person for communications with the client and Agencies on environmental matters.

1.9.3 Community Liaison and/or Notification

RCC will develop a Community Consultation Strategy that facilitates the mechanism for communication with all stakeholders which will be developed in accordance with the Community Involvement and Communications Resource Manual (RTA, 2008). Consultation will be undertaken with potentially affected residences prior to the commencement of and during works. Consultation would include newsletters or letterbox drops providing information on the proposed works, working hours and a contact name and number for more information or to register complaints.

Local residents will be notified about any new or changed construction activities which will affect access to their properties or otherwise disrupt the stakeholders and residents' use of their property, at least 5 working days before commencing work affecting residents. Such notification will state the nature of the work, why it is necessary, the expected duration, details of any changes to the traffic arrangements or property access and the name and contact telephone number of the Project Manager who can respond to any resident concerns.

Staff and sub-contractors would be made aware of these procedures and trained in their application via Toolbox Talks.

1.9.4 Complaints Management

As part of the Community Communication Strategy, a Complaints and Enquiries Procedure, consistent with AS 4269: Complaints Handling, will be developed for the Project, in accordance with the requirements of the Conditions of Consent. A Communications Register is kept on site.

All community inquiries and complaints related to the construction activities will be referred to:

SINSW Complaints Line	1300 482 651	24-Hour Toll Free
------------------------------	---------------------	--------------------------

An initial response to complaints will be provided within 24 hours of a complaint being received. A further detailed response, including steps taken to resolve the issue(s) that lead to the complaint, will be provided within 10 days. All complaints will be closed off in the stakeholder database. At all times the stakeholder will be kept informed of when they will receive a response.

The construction ESR will apply an adaptive approach to ensure that corrective actions are applied in consultation with the appropriate construction staff to allow modifications and improvements in the management of any environmental issues resulting in community complaints.

Within one working day of receiving a complaint about any environmental issue, including any pollution incidents, arising from the Work Under the Contract, a written report will be submitted to the Principal detailing the complaint and the action taken to remedy the problem. A final report together with proposed measures to prevent the recurrence of such incidents would be submitted to the Principal within 5 working days.

A register of all complaints will be kept, which will include the following details:

(a) date and time of complaint;

- (b) method by which the complaint was made (telephone, letter, meeting, etc);
- (c) name, address, contact telephone number of complainant (if no such details were provided, a note to that effect);
- (d) nature of complaint;
- (e) action taken in response including follow up contact with the complainant.;
- (f) any monitoring to confirm that the complaint has been satisfactorily resolved;
- (g) if no action was taken, the reasons why no action was taken.

1.10 Emergency and Incident Planning

The EPA will be notified of any pollution incidents on or around the site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the *Protection of the Environment Operations Act 1997* (NSW) (POEO Act). The circumstances where this will take place include:

- i. it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- ii. it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations)

The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident including all records associated with the environmental incident and corrective and regulatory actions required.

1.11 Monitoring, Inspections and Auditing

This section includes a procedure to monitor and measure, on a regular basis, the environmental management performance and to evaluate compliance with specific conditions of consent.

1.11.1 Environmental Inspections

Copies of all environmental inspection reports will be kept with the project records and closed out within the agreed timeframes.

1.11.2 Weekly and Post Rainfall Site Inspections

The ESR will undertake weekly and post rainfall inspections of the work sites to evaluate the effectiveness of environmental controls. The ESR will record inspection findings on an inspection checklist form.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority. Actions will be closed out in accordance with the identified priority and evidence of close out kept on file.

1.11.3 Pre - Work Inspections

Prior to the commencement of works on each shift, an inspection will be carried out and will include a check of relevant environmental controls and resources required to ensure effective operation and maintenance. Works are not to commence unless inspections are found to be satisfactory. The Construction Manager or delegate will undertake the inspections.

1.11.4 Environmental Monitoring

Where required, monitoring will be undertaken to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this CEMP. The monitoring requirements for required aspects are included in the relevant environmental management sub plans.

1.11.5 Auditing

Independent auditing of the site will occur throughout all stages of construction. The purpose of these audits is to verify compliance with:

- ☐ This CEMP and Sub Plans
- ☐ Approval requirements
- ☐ Any relevant legal and other requirements (e.g. licenses, permits, regulations, DPIE contract documentation)

To ensure RCC complies with regulatory obligations, an audit checklist will be developed and amended as necessary to reflect changes to this CEMP, subsequent approvals and changes to Acts, Regulations or Guidelines. The Compliance and Safety Manager shall perform the audits. The results of each audit shall be documented and discussed with site staff and SINSW Auditor. Should corrective actions be identified these shall be agreed with the SINSW Auditor and implemented in a timely manner by the responsible site staff.

The Project Manager shall sign off on the audit form once all corrective actions have been completed.

Table 1-3 presents the auditing requirements that are applicable to the Project.

Table 1-3 Auditing Requirements

No.	Audit	Requirement	Timing	Responsibility	Recipient
1	3 rd Party Audit	Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements.	The first audit within eight weeks of the notified commencement date of construction.	SINSW Delegated Auditor	Planning Secretary, Project Manager, DPIE
2	3 rd Party Audit	Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements..	A subsequent Independent Audit of construction must be undertaken no later than six months from the date of the initial construction Independent Audit	SINSW Delegated Auditor	Planning Secretary, Project Manager, DPIE
3	3 rd Party Audit	Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements..	The timing of ongoing Independent Audits shall be conducted at intervals agreed upon with the Planning Secretary	SINSW Delegated Auditor	Planning Secretary, Project Manager, DPIE

RCC will complete Risks Assessments throughout the project for high risks activities and processes, and when site conditions change adversely. From here, management auditing tools will be used to assess the overall environmental compliance and assess the implementation of environmental hazard and risk controls. The following auditing tools will be used:

Considering the duration of the project, it is expected that a review of the effectiveness and implementation of the CEMP will be completed once during the project. This review will ensure that RCC environmental management processes and practices remain relevant to required Work Under the Contract.

The ESR, PM and a member of RCC's management team will look into the system to assess the following:

- Identification of areas of opportunity for improvement in environmental performance on the project;
- Analysis of the non-conformities and deficiencies on the project and why these occurred;
- Verification of corrective and preventative actions raised following the issue of non-conformities;
- Highlighting any changes in procedure resulting from process improvement.

Independent Audit Reports and the applicant/proponent's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approval Requirements unless otherwise agreed by the Planning Secretary.

1.12 Environmental Nonconformities

Any member of the Project team may raise a non-conformance or improvement opportunity. The RCC Quality Plan - *Far North Coast Schools – Stage 2 Main Works (Kingscliff) 1227 – Project Management Plan (PMP) dated 27 May 2021* Section 2 – *Quality Management* - describes the process for managing non-conforming work practises and initiating corrective/preventative actions or system improvements.

The DPIE Representative / Site Auditor or other public authority may also raise a non-conformance or improvement opportunity using the same process.

A non-conformance is the failure or refusal to comply with the requirements of this CEMP and supporting documentation.

For each non-conformance identified a corrective/preventative action (or actions) must be implemented. In addition any environmental management improvement opportunities can be initiated as a result of incidents or emergencies, monitoring and measurement, audit findings or other reviews. Improvement opportunities may also result in the implementation of corrective/preventative actions.

Corrective/preventative actions and improvement opportunities will be entered into the contractor's quality system database and include details of the issue, action required and timing and responsibilities. The record will be updated with date of close out and any necessary notes. The database will be reviewed regularly to ensure actions are closed out as required.

Non-conforming activities may be stopped, if necessary, by the construction ESR and/or Site Construction Manager or delegate. The works will not commence until a corrective / preventative action has been closed out. DPIE may also stop works in these circumstances. In such circumstances a non-conformance report must be prepared in accordance with the Quality Plan.

The Planning Secretary must be notified through the major projects portal within seven days after the Applicant becomes aware of any non-compliance. The Certifier must also notify the Planning Secretary through the major projects portal within seven days after they identify any non-compliance.

1.13 Records of Environmental Activities

1.13.1 Environmental Records

The construction ESR is responsible for maintaining all environmental management documents and records as current at the point of use. Types of documents and records include:

- ☐ All site monitoring, inspection and compliance reports/records;
- ☐ Correspondence with public authorities;
- ☐ Internal and external audit reports;
- ☐ Induction and training records;
- ☐ Reports on environmental incidents, other environmental non-conformances, complaints and follow-up action;
- ☐ Community engagement information;
- ☐ Minutes of CEMP and construction environmental management system review meetings and evidence of any action taken;
- ☐ CEMP and Sub Plans; and,
- ☐ Waste register.

All environmental management documents are subject to ongoing review and continual improvement. This includes times of change to scheduled activities or to legislative or licensing requirements.

Only the construction ESR, or delegate, has the authority to change any of the environmental management documentation. These documents would be held for five years after the actual completion date and be available to DPIE and EPA upon request.

1.13.2 Document Control

The ESR will coordinate the preparation, review and distribution, as appropriate, of the environmental documents and records referred to in this CEMP. During the Project, the environmental documents and records will be stored at the main site compound.

A register and distribution list will identify the current revision of particular documents, records or data.

1.14 Management Review

The Project Team will periodically review the effectiveness and implementation of the CEMP. The management review process will identify opportunities for continual improvement of the environmental management processes and practices and ensure that the CEMP remain relevant to the Work Under the Contract.

The outcomes of the reviews, where appropriate, will be included as amendments to this CEMP and related documentation, revision to the Project's environmental management system, risk assessment review, re-evaluation of the Project objectives and targets as well as feeding into other Project documents.

1.15 CEMP/Sub Plan Revision

A document review process ensures that environmental documentation including this CEMP is updated as appropriate for the specific works that are occurring on-site.

Should the document review process identify any issues or items within the documents that are either redundant or in need of updating, it is the responsibility of the ESR, or their delegate, to prepare the revised documents.

The revised document will then be issued to the Project Manager and the DPIE Certifier for endorsement of the changes.

Document review will occur:

- Following serious environmental incidents
- Upon identification of new risks, including risks identified during risk register updates
- When non-compliances are identified
- Following environmental audits that identify matters that require attention
- In response to project change (including modifications and amendments)
- Following changes to relevant legislative requirements.
- As part of a continuous improvement process.

A full copy of the sub plans associated with the CEMP are located in Appendix A to Appendix G.

2 Management of Dust and Odour

The management of dust and odour is to primarily protect the amenity of the neighbour and secondly to avoid environmental degradation.

The management of dust and odour impacts are achieved through the following measures.

2.1 Consent Requirements

In accordance with SSD-8744305 condition B15(a) (iii), repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; (iii) management of dust and odour to protect the amenity of the neighbourhood. Whilst Condition C20 stipulates that the Applicant must take all reasonable steps to minimise dust generated during all works authorised by this consent.

This section of the CEMP addresses this condition, outlining the likely impacts of air quality and dust control for the various aspect of the construction works, along with the mitigation strategies that will be implemented to minimise these impacts on the neighbourhood.

2.2 Relevant Conditions to Consider

Condition C21 stipulates that during construction, the Applicant must ensure that:

- (a) exposed surfaces and stockpiles are suppressed by regular watering;
- (b) all trucks entering or leaving the site with loads have their loads covered;
- (c) trucks associated with the development do not track dirt onto the public road network;
- (d) public roads used by these trucks are kept clean; and
- (e) land stabilisation works are carried out progressively on site to minimise exposed surfaces.

2.3 Air Quality

2.3.1 Summary of potential impacts

Dust generation can occur at any time from exposed areas due to dry conditions, wind action, vehicle movements and several other sources consistent with earthworks. Increased levels of dust generation may occur during demolition, clearing and grubbing, excavation and stockpiling. Given the proximity to of neighbouring properties and existing buildings, there is the potential for impact by dust, particularly during windy conditions.

2.3.2 Mitigation Measures:

The following mitigation measures shall be adopted to reduce the impact on air quality and dust generation:

- Construction vehicles and equipment to be suitably serviced prior to commencement of construction activities and all necessary maintenance to be undertaken during the construction period to meet EPA air quality requirements;
- Excessive use of vehicles and powered construction equipment will be minimised where possible;
- All construction machinery will be turned off when not in use to minimise emissions where possible;
- Construction contractors to monitor dust generation progressively;

- Dust suppression methods will be adopted where required (i.e. on windy days when earthworks and vehicle movements are generating dust);
- Examples of dust suppression methods include:
 - Water carts;
 - Application of soil binding polymers;
 - Localized use of water to suppress excavation activities as they are occurring to suppress dust;
 - Covering stockpiles;
 - Any stockpiled spoil/fill will be protected to minimise dust generation and avoid sediment moving offsite;
- Vehicles transporting spoil from the site to be covered where required; and,
- The burning of waste materials will not be permitted on site.

2.3.3 Reporting / Compliance

All reporting and assessment of compliance shall be conducted as per the specifications listed Sections 1.11 and 1.13 of the Construction Environmental Management Plan.

If dust related complaints are generated from the construction activities, then RCC shall investigate the source of the dust generating activities and determine an appropriate course of action which may include ambient air quality monitoring. All complaints shall be handled as per the Community Consultation Strategy.

3 External Lighting

The management of external lighting is to primarily avoid light spill on surrounding sensitive receivers and road users within the localised area.

The management of light spill shall be achieved through the following measures.

3.1 Consent Requirements

In accordance with Condition B12 of SSD-8744305, repeated (in part) as follows; prior to commencement of lighting installation, evidence must be submitted to the satisfaction of the Certifier that all outdoor lighting within the site has been designed to comply with AS 1158.3.1:2005 Lighting for roads and public spaces – Pedestrian area (Category P) lighting – Performance and design requirements and AS 4282-2019 Control of the obtrusive effects of outdoor lighting.

4 Community Consultation and Complaints Handling

Consultation with stakeholders is key to preventing delays in the delivery of the project and mitigate backlash that may occur from an unsettled community.

The management of community consultation and complaints shall be achieved through the following measures.

4.1 Consent Requirements

In accordance with Condition B10 of SSD-8744305, repeated (in part) as follows; a Community Communication Strategy must be developed to provide mechanisms to facilitate communication between the Applicant, the relevant Council and the community (including adjoining affected landowners and businesses, and others directly impacted by the development), during the design and construction of the development.

4.2 Relevant Conditions

As per Condition B10, the Community Communication Strategy must:

- (a) identify people to be consulted during the design and construction phases;
- (b) set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the development;
- (c) provide for the formation of community-based forums, if required, that focus on key environmental management issues for the development;
- (d) set out procedures and mechanisms:
 - (i) through which the community can discuss or provide feedback to the Applicant;
 - (ii) through which the Applicant will respond to enquiries or feedback from the community; and
 - (iii) to resolve any issues and mediate any disputes that may arise in relation to construction and operation of the development, including disputes regarding rectification or compensation.

The Community Communication Strategy must be submitted to the Planning Secretary for information no later than 48 hours before the commencement of any work.

The Community Communication Strategy, must be implemented for a minimum of 12 months following the completion of construction.

4.3 Communications Strategy

Community consultation is primarily the responsibility of the client. Richard Crookes Construction will ensure that the relevant strategies/outcomes are incorporated within the relevant management plans and construction process where possible. The main channels that the client is planning on conducting consultation is through a selection of the following:

- Community information phone line;
- Community contact cards;
- Door knock;
- Face-to-face meetings/briefing;
- Fact sheets;
- Information Booths;
- Project updates;
- Project Reference Group;

- Website;
- Works notifications; and,
- Letterbox drops.

4.4 Complaints Handling

The primary form of assistance that Richard Crookes Construction will provide is through the complaints handling process. During the project delivery phase, a complaint defined as in regards to construction impacts – such as – safety, dust, noise, traffic, congestion, loss of parking, contamination, loss of amenity, hours of work, property damage, property access, service disruption, conduct or behaviour of construction workers or other environmental impacts. If a complaint is made directly to RCC, it will be redirected to the following SINSW communication channels:

Phone: 1300 482 651 (24 hour toll free number)

Email: schoolinfrastructure@det.nsw.edu.au

Upon receipt of the complaint from the Project Director, RCC will endeavour to close out the complaint in a timely manner. The complaint will be logged to ensure that the impact of future construction works that may impact the community in a similar manner are minimised.

5 Unexpected Finds Protocol for Contamination

5.1 Consent Requirement

In accordance with condition B15(b) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; an unexpected finds protocol for contamination and associated communications procedure to ensure that potentially contaminated material is appropriately managed.

5.2 Summary of Protocol

If asbestos is detected in unexpected areas prior to, or during, site development works the following 'Unexpected Finds Protocol' will apply:

- a. Upon discovery of suspected asbestos containing material, the Construction Manager is to be notified and the affected area closed off by the use of barrier tape and warning signs. Warning signs shall be specific to Asbestos Hazards and shall comply with the AS1319-1994 – Safety Signs for the Occupational Environment.
- b. An Occupational Hygienist is to be notified to inspect the area and confirm the presence of asbestos and to determine the extent of remediation works to be undertaken. A report detailing this information would be compiled by the Occupational Hygienist and provided to the Principal (or their representative) and the Construction Manager.
- c. The location of the identified asbestos material would be surveyed using sub-meter Differential Global Positioning System (DGPS).
- d. If the impacted soil is to be disposed off site, it should be classified in accordance with the DECCW's Waste Classification Guidelines (2008) and disposed of, as a minimum, as asbestos contaminated waste to a suitably licensed landfill. In dry and windy conditions, the stockpile would be lightly wetted and covered with plastic sheet whilst awaiting disposal.
- e. All work associated with asbestos in soil would be undertaken by a contractor holding a class ASA Licence. WorkCover must be notified 7 days in advance of any asbestos works.
- f. Monitoring for airborne asbestos fibres is to be carried out during the soil excavation in asbestos contaminated materials.
- g. Documentary evidence (weighbridge dockets) of correct disposal is to be provided to the Principal (or their representative).
- h. At the completion of the excavation, a clearance inspection is to be carried out and written certification is to be provided by an Occupational Hygienist that the area is safe to be accessed and worked. If required, the filling material remaining in the inspected area can be covered/sealed by an appropriate physical barrier layer of non-asbestos containing material prior to sign-off.
- i. Validation samples would be collected from the remedial excavation to confirm the complete removal of the asbestos containing materials. If the asbestos pipes/conduits are uncovered, then sampling density would typically comprise one sample per 10-20 linear meter (depending on the length of the pipe). If asbestos debris are found, then the sampling density would typically comprise 1 sample per 5 metre x 5 metre grid point.
- j. The sampling locations should be surveyed using a sub-meter DGPS.
- k. Details are to be recorded in the site record system.

l. Following clearance by an Occupational Hygienist, the area may be reopened for further excavation or construction work.

m. All information gathered as part of this investigation, clean up and reporting process shall be submitted to the Planning Secretary, prior to its removal from the site.

In the event that other sources of contamination are observed onsite then the following protocols should be adopted:

1. Immediately cease work and contact Site Foreman.
2. Site Foreman to construct temporary barricading to prevent worker access to the unexpected substance(s) and install appropriate stormwater/sediment controls.
3. Construction Manager to contact Client and arrange inspection by Environmental Consultant.
4. Environmental Consultant to undertake detailed inspection and sampling, analysis and reporting in accordance with the NSW EPA (2020) Guidelines for Consultants Reporting on Contaminated Sites.
5. If substance assessed as presenting an unacceptable risk to human health, a Remediation Action Plan (RAP) must be prepared, actioned, and validated.
6. If substance assessed as not presenting an unacceptable risk to human health Site foreman to remove safety barricades and environmental controls and continue work.
7. Environmental Consultant to supervise remediation and undertake validation/clearance as per the remediation/validation/clearance plan.
8. Site Foreman to remove barricades and environmental controls and continue work.
9. Environmental Consultant to submit assessment/validation/clearance to Construction Manager for distribution to Client and/or delegate and appropriate Regulatory Authorities.

6 Unexpected Finds Protocol for Aboriginal and Non-Aboriginal Heritage

6.1 Consent Requirement

In accordance with condition B15(c) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; an unexpected finds protocol for Aboriginal and non-Aboriginal heritage and associated communications procedure. Condition C26 stipulates that; Construction must be undertaken in accordance with the recommendations of the Aboriginal Cultural Heritage Assessment Report prepared by EMM Consulting dated April 2021.

6.2 Summary of Protocol

6.2.1 Aboriginal Heritage Unexpected Finds Protocol

In the event that surface disturbance identifies a new Aboriginal object:

- All works within the location of the Aboriginal object/s must stop.
- The person who identified the Aboriginal objects must immediately notify the person in charge of the activity eg Senior Project Manager, Foreman, Environmental Representative. The responsible person should contact Schools infrastructure as soon as possible.
- All construction that could potentially harm the Aboriginal objects or values must cease (including stopping all construction within at least 15 m). Only construction that is required to make the area safe is permissible.
- The Aboriginal object/s is to be protected with the establishment of a no-go zone.
- Contact the project heritage consultant (Section 1.2) and RAPs (see Section 2.3) to lead the subsequent management of the find. An initial step to contact the Tweed Byron Local Aboriginal Land Council (T: 0407 643 349) to provide timely on-site advice may be considered where necessary.
- Consideration of avoidance of the cultural materials should be undertaken. Where avoidance can be achieved, implement the following:
 - where the find is within 20 m of the development footprint, the find will be managed through active protection using suitable fencing (eg star pickets, stakes and wire, bollards, concrete blocks, etc) and appropriate signage (eg 'no access' and/or 'heritage site'). These measures should be established by a heritage professional with the participation of the RAPs; and/or
 - where the find is over 20 m from the development footprint, no fencing, signage or active land management measures are required for these sites. Suitable recording of the site must be undertaken by a heritage professional and representatives of the RAPs (Appendix B). The site/s must be integrated into the cultural inductions (Section 4.3.1) to ensure all personnel are aware of the location and to avoid inadvertent impacts during the construction.
- Where avoidance cannot be achieved:
 - For isolated Aboriginal object (eg stone artefacts, shell fragments, etc) found in disturbed contexts, the site should be recorded as found (see Appendix B), and subsequently collected by a heritage professional with participation of the RAPs.
 - Where intact cultural deposits are identified with any Aboriginal objects by the heritage professional, additional archaeological excavations should be undertaken prior to any further work in the area. Excavations should include an initial investigative phase to characterise the site, followed by a more extensive salvage excavation where significant cultural material is identified. Excavation methods that can be used as a guide are presented in Appendix D.

- Once the archaeological on-site activities are complete to the satisfaction of the heritage professional in consultation with the RAPs, construction activities may continue.
- All archaeological activities should ensure suitable analysis of any cultural materials, chronological, palaeoenvironmental and sedimentological samples collected are suitably analysed and documented in a report that is provided to Heritage NSW (see Appendix B).

6.2.2 Non-Aboriginal Heritage Unexpected Finds Protocol

As stipulated in Condition C28, if any unexpected archaeological relics are uncovered during the work, then:

- a) all works must cease immediately in that area and notice is to be given to Heritage NSW and the Planning Secretary;
- b) 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 as determined in consultation with Heritage NSW; and
- c) works may only recommence with the written approval of the Planning Secretary. If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the OEH 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 Heritage Division of the OEH. The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.

6.3 Aboriginal Cultural Heritage Management Plan

An investigation of Aboriginal cultural heritage for the project area was undertaken by Indigeco with specialist assistance from EMN Consulting Pty Ltd. As a result of the investigation an Aboriginal cultural heritage management plan (ACHMP) dated November 2021 prepared by EMN was developed to provide a framework for managing Aboriginal heritage during the pre-construction and construction phases of the project.

The plan has been developed to provide guidance on:

- Processes to maintain ongoing consultation during with the project's registered Aboriginal parties (RAPs) and Heritage NSW;
- Management procedures for Aboriginal cultural heritage values within, and adjacent to, the project area during pre-construction and construction phases;
- Protocols and procedures for unexpected finds, such as human remains;
- Protocols for undertaking activities in areas that have not been previously assessed; and
- Other administrative requirements, including post-project management of Aboriginal finds and recovered material, ongoing compliance, regular review and update of the ACMP to ensure its functionality is maintained through the project.

A copy of the ACHMP is located in Appendix G.

7 Construction Traffic and Pedestrian Management Sub Plan

The site will continue to operate as a school and is situated in close proximity to a significant residential population. Vehicle access to the site requires transit through a residential street (Oxford Street) and through the school pick-up/set-down area. Therefore, it is likely that some impacts associated with construction traffic shall occur.

This section details the mitigation measures that will be implemented to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services, and detail heavy vehicle routes, access and parking arrangements for construction related activities.

7.1 Consent Requirements

In accordance with condition B15(d) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; the development of a Construction Traffic and Pedestrian Management Sub-Plan.

This section of the CEMP addresses these conditions, outlining the likely impacts associated with construction traffic, the management of civilian traffic during construction activities and the mitigation strategies that will be implemented to ensure that these impacts are minimised.

7.2 Relevant Conditions to Consider

Condition B16 stipulates that during construction, the Applicant must ensure the Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following:

- a) be prepared by a suitably qualified and experienced person(s);
- (b) be prepared in consultation with Council and TfNSW;
- (c) detail:
 - (i) measures to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services;
 - (ii) measures to ensure the safety of vehicles and pedestrians accessing adjoining properties where shared vehicle and pedestrian access occurs;
 - (iii) detail heavy vehicle routes, access and parking arrangements;
 - (iv) the swept path of the longest construction vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, in accordance with the latest version of AS 2890.2; and
 - (v) arrangements to ensure that construction vehicles enter and leave the site in a forward direction unless in specific exceptional circumstances under the supervision of accredited traffic controller(s);
 - (vi) measures to prohibit construction access through Council's land to the east of the

site (Lot 66 DP858466); and

(vii) measures to minimise truck movements between 7:45am to 9am and 2pm to 3:45pm.

In accordance with Condition B22, A Driver Code of Conduct must be prepared and communicated by the Applicant to heavy vehicle drivers and must address the following:

- (a) minimise the impacts of earthworks and construction on the local and regional road network;
- (b) minimise conflicts with other road users;
- (c) minimise road traffic noise; and
- (d) ensure truck drivers use specified routes.

Additionally, as per Condition B23, Prior to the commencement of construction, the Applicant must submit a Construction Worker Transportation Strategy to the Certifier. The Strategy 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. The Strategy must include arrangements to prohibit workers using the informal path through the adjacent Council land to Cudgen Foreshore Park. A copy of the strategy must be provided to the Planning Secretary for information.

7.2.1 Summary of Potential Impacts

Construction of the new site facilities shall see some increase in traffic in the local area. The increased traffic is not predicted to have an impact on local traffic flow and only a minor inconvenience to local road users is expected. Construction vehicle routes have been developed with the intention of minimising the impact of construction traffic on the local streets in the immediate vicinity. Access to site is to be via Oxford Street. The management of construction traffic developed as a result of these works is summarised in the Construction Traffic Management Plan. All construction activities would be carried out with due diligence, duty of care and best management practices.

7.2.2 Mitigation Measures

The following mitigation measures shall be adopted to reduce the impacts on local traffic users and pedestrians during construction:

- Follow the Construction Traffic Management Plan (TMP) based on the detailed construction methodology and use of specific heavy vehicles and construction plant. The Traffic Management Plan is to include measures to minimise traffic impacts ensure public safety and is to be prepared in accordance with:
 - Traffic Control at Work Sites Manual (RTA, 2010)
 - Australian Standard 1742.3 - 2002 Traffic Control Devices for Works on Roads.
- The TMP has been developed in consultation with Tweed Shire Council, The Crown Certifier and TfNSW.
- The TMP details hours of operation, heavy vehicle volumes (numbers) and routes, construction staff parking, loading / unloading areas and site access arrangements, all temporary warning, guidance and information signage, and appropriate traffic control devices
- Notify surrounding land-owners at least one week in advance of the works impacting access to residences
- All vehicles accessing the sites will use the designated access roads
- All roads will be kept clean and free of dust and mud. Where material is tracked onto sealed road, it will be removed so that road pavements are kept safe and trafficable

- All vehicles transporting spoil onsite will be covered and filled to maximum capacity to minimise vehicle movements as required
- All roads, kerbs, gutters and footpaths damaged as a result of construction are to be restored to their pre-construction condition. A dilapidation report has been carried out prior to construction
- All traffic shall comply with all applicable traffic laws and regulations including speed limits. All construction vehicles shall comply with the speed limits set for the roads accessing the site
- Construction activities shall be restricted to the hours dictated in the Conditions of Consent.

7.2.3 Reporting

All reporting and assessment of compliance shall be conducted as per the specifications listed Sections 1.11 and 1.13 of the Construction Environmental Management Plan.

8 Construction Noise and Vibration Sub-Plan

The management of noise and vibration is to primarily protect the amenity of the neighbour and secondly to avoid environmental degradation of infrastructure.

The management of noise and vibration impacts are achieved through the following measures.

8.1 Consent Requirement

In accordance with condition B15(e) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; the development of a Construction Noise and Vibration Management Sub-Plan.

This section of the CEMP addresses these conditions, outlining the likely impacts associated with construction activities and the mitigation strategies that will be implemented to ensure that these impacts are minimised.

8.2 Relevant Conditions to Consider

Condition B17 stipulates that during construction, the Applicant must ensure the Construction Noise and Vibration Management Sub-Plan (CNVMSP) must address, but not be limited to, the following:

- (a) be prepared by a suitably qualified and experienced noise expert;
- (b) describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009);
- (c) describe the measures to be implemented to manage high noise generating works such as piling, in close proximity to sensitive receivers;
- (d) include strategies that have been developed with the community for managing high noise generating works in close proximity to sensitive receivers;
- (e) describe the community consultation undertaken to develop the strategies in condition B16(d);
- (f) include a complaints management system that will be implemented for the duration of the construction; and
- (g) include a program to monitor and report on the impacts and environmental performance of the development and the effectiveness of the implemented management measures in accordance with the requirements of condition B14.

8.2.1 Summary of Potential Impacts

Construction of the proposed development will result in short term noise impacts during the construction period (including demolition). The predicted noise levels during the construction phase have been identified in the project Construction Noise & Vibration Management Plan along with associated mitigation strategies that are to be adopted to minimise these impacts.

8.2.2 Mitigation Measures

The following mitigation strategies listed have been developed to control the level of noise and vibration that affect the relevant stakeholders:

Site construction noise will be managed in accordance Construction Noise and Vibration Management Plan (CCNVMS) developed for this project. The CCNVMS is based on the

proposed construction methodology, activities, durations and equipment type and numbers. The core recommendations taken from this report have also been listed as follows:

- Keep the community informed in relation to noise intensive activities in the immediate area.
- Provide consultation where prolonged or consecutive periods of construction works are planned.
- Construction activities shall be restricted to the hours dictated in the Conditions of Consent.
- The consent approval stipulates working times to minimise the impact on the community being generally Monday to Friday 7am-6pm, Saturday 8am-1pm, no work on Sundays or public holidays.
- Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours: (a) 9am to 12pm, Monday to Friday; (b) 2pm to 5pm Monday to Friday; and (c) 9am to 12pm, Saturday
- A site specific inspection will be provided to all site personnel, contractors, sub-contractors with an emphasis on understanding and managing noise impacts from the work activities being undertaken.
- Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance.
- All permanent and temporary noise attenuation paneling shall be installed prior to commencing demolition or construction activities.
- Construction vehicles (including concrete agitator trucks) do not arrive at the site or surrounding residential precincts outside of the construction hours of work.
- Any noise complaint received will be investigated as soon as practicable. Any practicable and feasible measures to minimise noise will be identified and implemented if required.
- All possible steps to be taken to silence construction equipment where possible.
- Optimum siting of work areas, vehicle and plant parking areas, materials stockpiles and equipment storage areas in locations where potential acoustical impacts will be minimised.
- All plant and machinery used for the project shall be well maintained.
- Ensure workers and contractors are regularly trained (such as toolbox talks) to use equipment in ways to minimise noise.
- “Quacker” reversing alarms to be used for all plant on site where required.
- Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria.
- Prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site including roads, gutters and footpaths.
- A ‘Responsible Person’ is to be appointed by the head contractor. The “Responsible Person” is to be onsite during construction hours and who has sufficient time and authority to implement the management plan.

8.2.3 Reporting / Compliance

All reporting and assessment of compliance shall be conducted as per the specifications listed Sections 1.11 and 1.13 of the Construction Environmental Management Plan.

9 Construction Waste Management Sub Plan

9.1 Consent Requirement

In accordance with condition B15(f) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the development of a Construction Waste Management Sub-Plan.

This section of the CEMP addresses these conditions, outlining the likely impacts associated with construction activities and the mitigation strategies that will be implemented to ensure that these impacts are minimised.

9.2 Relevant Conditions to Consider

Condition B18 stipulates that during construction, the Applicant must ensure The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the procedures for the management of waste including the following:

- (a) the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed use;
- (b) information regarding the recycling and disposal locations; and
- (c) confirmation of the contamination status of the development areas of the site based on the validation results.

9.2.1 Impacts

The primary generation of waste will occur during demolition. It is likely that some excess building materials will be produced due to the construction work such as miscellaneous waste associated with packaging and transport of plant and equipment and various other manufactured items forming part of the augmentation works. Waste generated as a result of demolition and construction will be minimised, recycled, reused or recovered, where practical.

The strategy for reducing the waste on the project will be made up of three strategies as detailed below in order of priority. The prime objective is to keep materials transferred to landfill from this project to the minimum possible amount.

9.2.2 Mitigation Measures

The following mitigation strategies listed have been developed to assist in reducing waste on the project and tracking all waste generated onsite. The measures include:

- Reduce the amount of waste material produced on the project by ensuring that only enough materials required to perform the works are ordered.
- Following the waste management hierarchy.
- Where waste generation cannot be avoided, waste shall be reused, recycled or recovered, where possible.
- Maintain a waste management register.
- All waste must be appropriately and securely contained on-site prior to disposal. Labelled, covered waste receptacles should be provided and recycling of general waste undertaken.
- Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each working day.
- Waste is not to be burnt on site.
- Pollution incidents must be reported to each relevant authority in accordance with Section 148 of the Protection of the Environment Operations Act 1997.

- Stage the delivery of construction materials to reduce the potential of loss / waste due to damage prior to usage.
- Any excess materials from particular work areas are to be retained and incorporated into other work areas where practical.
- Provision of information on waste management shall be communicated through the induction process and via toolbox talks.
- Generate a waste tracking register for the site that includes:
 - Who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste)
 - Copies of waste dockets/receipts for the waste facility (date and time of delivery, name and address of the facility, it's ABN, and contact person).
- The construction contractor to ensure that waste generated by the works is transported to a place that can lawfully accept it as per Section 143 of the Protection of the Environment Operations Act 1997.
- Waste material is not to be left on site once the construction works have been completed.
- Removal of hazardous materials, particularly the methods of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility is in accordance with the requirements of the relevant legislation, codes, standards and guidelines.

9.2.3 Reporting / Compliance

All reporting and assessment of compliance shall be conducted as per the specifications listed Sections 1.11 and 1.13 of the Construction Environmental Management Plan.

10 Construction Soil and Water Management Sub Plan

The management of soil and water is to primarily avoid environmental degradation of the localised area.

The management of stormwater impacts, and the minimisation of soil degradation are achieved through the following measures.

10.1 Consent Requirements

In accordance with condition B15(g) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; the development of a Construction Soil and Water Management Sub-Plan.

This section of the CEMP addresses these conditions, outlining the likely impacts associated with stormwater runoff and the mitigation strategies that will be implemented to ensure that these impacts are minimised.

10.2 Relevant Conditions to Consider

Condition C23 stipulates that during construction, the Applicant must ensure that adequate provisions must be made to collect and discharge stormwater drainage during construction to the Certifier. The prior written approval of Council must be obtained to connect or discharge site stormwater to Council's stormwater drainage system or street gutter.

To meet this condition, RCC must design an operational stormwater management system as per Condition B19 for the development and submit it to the satisfaction of the Certifier. The system must:

- (a) be prepared by a suitably qualified expert, in consultation with Council;
- (b) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;
- (c) describe all erosion and sediment controls to be implemented during construction, including as a minimum, measures in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom 2004) commonly referred to as the 'Blue Book';
- (d) include an Acid Sulfate Soils Management Plan, if required, including measures for the management, handling, treatment and disposal of acid sulfate soils, including monitoring of water quality at acid sulfate soils treatment areas;
- (e) provide a plan of how all construction works will be managed in a wet-weather events (i.e. storage of equipment, stabilisation of the Site);
- (f) detail all off-site flows from the site; and
- (g) describe the measures that must be implemented to manage stormwater and flood flows for small and large sized events, including, but not limited to 1 in 5-year ARI.

10.2.1 Summary of Potential Impacts

Earthworks and general ground disturbances associated with the site works may result in sediment and other materials leaving the site via wind or water movement. This may have the

potential to result in the water pollution such as turbidity and nutrient inputs, should sediment wash into stormwater or natural drainage lines. Aspects of the site identified as potentially impacting on water quality include the excavation for foundations and site levelling, stockpiling and transportation of excess spoil and general construction waste entering drainage lines.

10.2.2 Mitigation Measures

The following mitigation measures shall be adopted to reduce the impacts associated with soil degradation and water quality:

- Construction is to be undertaken in accordance with the Erosion and Sediment Control Plan.
- All erosion and sediment control devices shall be properly maintained for the duration of the work. All structures are to be inspected after rain events and sediment to be removed.
- Any temporary stockpiles should be stabilised using sediment fencing or similar.
- All fuels and other hazardous liquids shall be stored at designated construction compounds
- Any leaks or spills must be managed and cleaned up in accordance with the RCC Spill Response Procedure.
- Vehicles and plant must be properly maintained and regularly inspected for fluid leaks.
- All chemicals used for construction shall be stored and used in accordance with the relevant Safety Data Sheets.
- An emergency spill kit shall be kept at the construction compound.
- Workers are to be made aware of the provisions of Section 120 of the POEO Act with regards to water pollution.
- Notification to the EPA in accordance with Part 5.7 of the POEO Act is to be undertaken where a pollution incident occurs.
- Construction vehicles shall be appropriately cleaned of any soil or mud prior to leaving each works site at dedicated wash down bays.
- “Clean” stormwater shall be diverted around the site where possible.
- All existing stormwater pits and drains subject to RCC construction works will be silt protected with geo-fabric and/or granular socks. Drains will be monitored and maintained by RCC.
- Stockpiles to be established at RCC approved locations.
- Sediment fences shall be installed at required locations at the perimeter of the site as per the Erosion and Sediment Control Plan.
- The location and details of permanent controls shall be included on the Site Layout Plan
- Erosion and sediment controls shall be inspected as part of the weekly Site Inspections

Note: as part of the Soil and Water Management Plan, sediment loss was calculated at 51t/ha/years. The calculated sediment loss is less than the trigger value for sediment detention basin of 150 t/ha/year. Thus, a sediment detention basin is not required for the Project.

10.2.3 Reporting / Compliance

All reporting and assessment of compliance shall be conducted as per the specifications listed Sections 1.11 and 1.13 of the Construction Environmental Management Plan.

11 Construction Biodiversity Management Sub Plan

The management of biodiversity is to primarily avoid degradation of ecosystems the localised area.

The management of biodiversity, and the minimisation of impact on local ecosystems are achieved through the following measures.

11.1 Consent Requirements

In accordance with condition B15(h) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; the development of a Construction Biodiversity Management Sub-Plan.

This section of the CEMP addresses these conditions, outlining the likely impacts associated with disturbance of local ecosystems and the mitigation strategies that will be implemented to ensure that these impacts are minimised.

11.2 Relevant Conditions to Consider

Condition C19 stipulates that during construction, the Applicant must ensure that adequate provisions must be made for tree protection during construction.

To meet this condition, RCC must operate under a Biodiversity Management Sub-Plan as per Condition B20 for the development and submit it to the satisfaction of the Certifier. The Biodiversity Management Sub-Plan (BMSP) must address, but not be limited to, the following:

- a) be prepared by a suitably qualified and experienced person/s;
- (b) identify areas of land where impacts on biodiversity are to be avoided as outlined in the Biodiversity Development Assessment Report prepared by Kleinfelder, dated 15 April 2021 and the Bush Stone-curlew Management Plan prepared by Kleinfelder, dated 5 August 2021 and set out how these areas will be protected from construction impacts;
- (c) set out the measures identified in the Biodiversity Development Assessment Report to minimise, mitigate and manage impacts on biodiversity, including timing and responsibility for delivery of the measures.

11.2.1 Summary of Potential Impacts

Construction works and general disturbances associated with the Project may result in the disturbance of native flora and fauna. A Biodiversity assessment did not identify any threatened species (flora or fauna) within the Project site.

11.2.2 Mitigation Measures – Vegetation and Fauna

There are no threatened vegetation communities or flora in the KHS Development Site but management of the existing areas containing native vegetation is necessary. Measures include:

Prior to Construction

Vegetation Clearing

- Clearing limits will be clearly marked and all site personnel made aware of Exclusion Zones
- Trees to be retained on site will be protected with a protective barrier (e.g., paraweb fencing) so that stockpiling, parking of vehicles and other construction activities do not occur within the dripline of trees.
- A tree protection zone (TPZ) will be established around trees to be retained. The TPZ will extend from the dripline of trees and be erected for the duration of works.

- Native vegetation cleared from the site shall be mulched and used for revegetation, erosion protection or landscaping works.
- Weed species shall be disposed of off-site at a nearby legally operating landfill site.
- Trees to be retained shall be clearly identified for preservation and temporarily protected by "paraweb" fencing placed not less than 3 metres clear of trees where possible, as some retained trees may be less than 3 metres from new and refurbished buildings. There will be no stockpiling or parking of plant/machinery 3 metres from this area.
- Limits of the site clearing shall be marked by temporary fencing.
- No vegetation shall be burnt.
- All trees and stumps on or within the limits of clearing which are unable to be removed by clearing methods, shall be removed by grubbing.
- Vegetation where practical shall be retained to the greatest extent.
- Contact shall be made with a trained wildlife handler / ecologist least 2 weeks prior to the commencement of clearing operations to allow them to prepare for the clearing and construction period.

Weed Management

- Areas of dense weed infestation are to be treated prior to clearing/construction activities.
- Confirm that any proposed herbicide will not affect water quality and native flora and fauna.

Inductions

- Plant operators and employees shall be informed of the above requirement through the induction process for the site.

During Construction.

Vehicles and Equipment

- All vehicles used during the construction process are to stay on existing or constructed roads and tracks, where practicable.
- All earthmoving machinery accessing the Construction Site be cleaned of all soil and vegetable matter prior to entry.
- Construction vehicle reduction in speed limits to 10 km/h in areas regarded as having higher levels of fauna activity or considered to have increased safety risk.
- Vegetation
- No access to any sensitive habitat areas (Exclusion Zones). All areas to be fenced and sign posted. The only Exclusion Zone is outside of the Construction Site (Figure 1) and already fenced but it may require signage.
- Monitor works and ensure the TPZ has been appropriately established and protected.
- All trees to be cleared shall be checked for animals before and after felling.
- All tree pruning works will be carried out in accordance with AS 4373-1996 Pruning of amenity trees and the Code of Practice Amenity Tree Industry August 1998.
- If additional tree clearing or substantial tree pruning is required, an arborist will be consulted prior to undertaking the works.
- In the event of fire or vandalism resulting in the loss of tags or boundary indicators, the Contractor shall re-survey and mark where appropriate.
- 1Within temporary disturbance areas that will later be allowed to regenerate, trees are to be cut off at ground level to facilitate coppicing (new growth from the base).
- The Contractor shall implement protective measures to prevent damage to TPZs and shall ensure that no mechanical damage from plant and equipment occurs to protected areas such as:
 - fencing to restrict access in the immediate vicinity of an area or an individual tree.
 - barriers to protect trunks and exposed surface roots.
 - hand digging where excavation by a mechanical digger is likely to cause damage to roots and limbs.
 - ground cultivation to restore soil within the dripline.
 - tying back overhanging branches.

Fauna

- A wildlife carer shall be promptly notified if any native fauna is inadvertently injured during the construction works
- The taking of domestic animals, particularly dogs and cats, onto the construction site is prohibited.
- Ensure ongoing maintenance and monitoring of any threatened species (the Bush Stone-curlew) or significant trees within the Construction Site.
- If threatened species not identified in previous surveys are found during clearing surveys, and removal of individuals of these species is necessary, liaison with Department of Planning, Industry and Environment (DPIE) and further assessment is required.
- Appropriate wildlife handling and care equipment such as leather gloves, breathable bags, blankets, ropes/ties and buckets (as recommended by the fauna handling specialist) is to be on site and with each clearing crew prior to the commencement of any clearing.

Post Construction

- Regeneration / Landscaping of appropriate areas to begin as soon as possible after clearing and/or construction.
- All removed trees shall be replaced with local native species of trees, shrubs and groundcover as part of the rehabilitation / landscaping plan.
- All exposed earthworks areas shall be revegetated as per the Landscape Plan.
- Cover plants for the purpose of soil stabilisation will be limited to certified clean seed of non-invasive annuals.

Additional environmental safeguards associated with the BDAR Table 6 are listed in Table 5. However, the requirement to use tree trunks and larger branches (over 10 cm diameter) to be placed within the existing gardens or new landscaping for wildlife habitat will not be followed. This is due to the safety hazards and risk of injury to students and staff at KHS from trips and falls.

Additional Environmental Safeguards for Vegetation taken from the BDAR.

- Surveys associated with the clearing and conducted by the project ecologist shall include the following procedures:
 - The ecologist will inspect for active nests of passerine birds in trees and shrubs that will be removed or trimmed, roosting or nests for Bush Stone-curlews in gardens or areas with understorey, and inspect the lawn areas for ground nesting birds such as the Masked Lapwing (*Vanellus miles*).
 - Active nests in the areas to be cleared shall be marked and discussions between the Ecologist and building contractor to determine the most appropriate actions.
 - Inspect gardens for reptiles.
 - Ceiling spaces of buildings to be refurbished, if the ceilings are being removed, should be inspected for use by insectivorous bats, possums or snakes (primarily pythons).
 - A report of the findings and outcomes for any fauna observed or relocated from the clearance activities shall be delivered by the ecologist to the construction contractor.
- Trees to be retained in TPZs within the Development Footprint shall have bunting installed around their drip line, to prevent any disturbance that may impact on their health; this must remain around the tree until all construction activities have been completed.
- The areas of retained vegetation within TPZs shall be marked as 'No Go' zones. All vehicles, construction materials and refuse shall be prohibited from these areas. Compaction and the placement of fill within 5 metres of trees and native vegetation should not occur.
- Removal of trees and shrubs:
 - Removal of any vegetation identified as containing nests or dreys should be undertaken carefully under the supervision of a suitable qualified ecologist or wildlife carer. The vegetation should be gently felled with the nest/drey located on the higher side of tree to avoid crushing impacts.
 - If required, an Ecologist will be onsite where it has been determined necessary by the clearing survey.
 - Directional clearing shall be undertaken whereby clearing will progress from the most disturbed parts of the site, working outwards towards retained vegetation, to

- encourage fauna to move into these areas.
- During any clearing, the ecologist should rescue and relocate any fauna impacted by the clearing activities to a section of the KHS school grounds with suitable habitat that will not be further disturbed.
- If any injured or displaced fauna are encountered onsite in the absence of an ecologist or licensed wildlife carer, the advice of the ecologist and/or a local wildlife rescue group will be sought immediately.
- During site inductions, all contractors, sub-contractors, and personnel must be notified of these vegetation protection requirements.
- Cleared vegetation should be mulched and re-used throughout the site during landscaping.
- All personnel onsite to be made aware of the sensitivity of the surrounding environmental features (e.g., if any threatened flora is identified onsite) through the induction process and a Notice Board with species known to occur in the vicinity.

To manage the Bush Stone-curlews (BSc) during the construction phase of the new development and the ongoing operations of the KHS. The following Environmental Safeguards are recommended:

Pre-construction

- Prior to the commencement of earthworks, the site should be inspected by an ecologist to ensure Bush Stone- curlews are not nesting on the site. As part of the inspection, the ecologist should seek advice from the school groundsmen who may know where the birds are roosting or nesting, or where they have in the past.
- If nesting is observed, an Exclusion Zone of at least 30 m is to be established around the nest site using an exclusion fence. The exclusion fence should allow for the non-flying chicks to move out of the nest area.

During Construction

- All works are to cease in the Exclusion Zone until chicks have hatched and moved from the nest site by the adults, which occurs soon after hatching.
- Works elsewhere on the site are to be conducted under the recommendations of an ecologist, so the behaviour of the nesting birds can be monitored.
- Where birds are observed roosting on the site, no construction work is to take place within 20 m and an unfenced BSc Protection Zone (BPZ) is to be established marked with flagging tape while the roost is in use. This is especially important if there are young birds in evidence.
- All employees, contractors and sub-contractors working on the site will undergo site induction training and should be made aware of all matters regarding fauna management, particularly in relation to Bush Stone-curlew. All site personnel are to be made aware of the location of the nest or roosting areas (if present), the extent of the exclusion zones and when the exclusion zones are in force.
- Posters with photographs and information of the Bush Stone-curlew should be placed on the exclusion fencing. The students should also be made aware of the Bush Stone-curlews and their management.
- Maintain no or low artificial lighting in the construction area overnight if night work is not a part of the project. This is to prevent the birds being attracted to the area by insects around the lights.
- The construction site should be inspected at the start of each workday to ensure no Bush Stone-curlews have entered the sites. This includes under demountable buildings and storage areas from August onwards when nesting may commence.
- If a Bush Stone Curlew is found in the construction area, a qualified person (wildlife carer or ecologist) should be contacted to move the bird away from the construction area. Contacts for the qualified person should be established prior to construction commencing.
- Review chemical use and storage, especially insecticides, to minimise possible effects on the Bush Stone-curlews and other wildlife.
- Review construction site controls such as access and vehicle speed limits if Bush Stone-curlews are identified 100 m of the construction area.
- Actions 3.5 and 3.7 of the Bush Stone-curlew Recovery Plan focus on management of

habitat for this species. The provision of mulched garden beds around trees and allowing fallen branches or logs to remain can enhance roosting and nesting habitat. Local native species should predominantly be used as part of any landscaping.

- To prevent an increase in predator activities in the school, general hygiene around the construction site should be maintained so that food scraps are not left on the ground or in places that could attract high predator use.
- Appropriate bins should be placed in easy to access locations, especially those for food scraps.
- The entrance gate to the school and any gates that may be put in place for the construction should be closed at night. There is a fence around the school grounds that should be suitable for restricting dog access.
- No animals should be brought into the school grounds by the construction crew.

Operational phase of the KHS

- Keep the school community informed of the potential presence of bush stone curlew particularly during breeding season to avoid harm. Agreed community lines and notifications protocols should be formalised between the stakeholders.
- Contact Tweed Valley Wildlife Carers Inc. (TVWC) should an injured or trapped Bush Stone-curlew be detected on school grounds.
- Maintain no / low artificial light levels at night particular towards the eastern side of the site.
- Source and install bush stone-curlew awareness signs around the fencing of the school grounds (if required) or on Council-managed land.

11.2.3 Mitigation Measures – Weed & Pest Management

Prior to Construction

- Weed survey to be undertaken by suitably qualified and experienced persons prior to commencement of any construction activities, including site inspections and survey. The consultant is to advise on best practice weed management techniques.
- Weed or exotic species shall be identified and removed from the site.
- Fertilisers and manures to be used sparingly as they can stimulate weed growth, seed set and spread.
- Vegetation to be cleared carefully to minimise the risk of spreading weed propagules.
- Care must be taken that weeds are not introduced to the area in manures or as contaminants in seed of the desirable species.

During construction

- Where possible, vehicle movement is to proceed from areas that are relatively weed free and undisturbed to more heavily weed infested areas to ensure that weed spread is not facilitated by the movement of vehicles and machinery.
- Ongoing monitoring of the construction areas and immediate surrounds to be undertaken to check for weed growth and implement eradication measures if required.
- Any straw bales used for erosion and sediment control must contain no seed or be wrapped in geofabric.
- All weed species and spoil from heavily weed infested areas to be disposed off-site.
- Pre-emergent herbicides registered for the application to be used to prevent the growth of weeds. As these may also inhibit the regeneration of native species, pre-emergent herbicides shall only be used in conjunction with planting and where weed growth is likely to be a problem, i.e., in areas with existing infestations of weeds that are significant problems for agriculture or the environment.
- Selective grass herbicides to be used for grass weeds in areas re-vegetated with non-grass species.
- Where possible, vehicle movement is to proceed from areas that are relatively weed free and undisturbed to more heavily weed infested areas to ensure that weed spread is not facilitated by the movement of vehicles and machinery.
- Remove any weed waste material and have a reasonable period of site maintenance so that

weeds do not re- establish.

Additional Environmental Safeguards for Weed Management taken from the BDAR.

- Weed infestations should be controlled as required during and following construction works. Priority should be given to the control of the following species:
 - *Leucaena leucocephala* (*Leucaena*).
 - *Asparagus aethiopicus* (Sprenger's *Asparagus*).
 - *Senecio madagascariensis* (Fireweed).
- All weeds removed from the site must be transported in a sealed container or bag and disposed at a waste management facility licensed to accept green waste.
- In particular, *Asparagus aethiopicus*, shall be extracted from the ground and taken to landfill as it could spread in green waste. Small plants can be manually removed, and larger plants can be treated by herbicide application.
- Weed management to be undertaken by an experienced weed manger e.g., a bush regenerator.
- The use of herbicides should be in accordance with relevant regulation and safety data sheets.
- Bins shall be placed strategically for food scraps etc. to avoid attracting rodents, snakes, cats and dogs.

11.2.4 Reporting / Compliance

All reporting and assessment of compliance shall be conducted as per the specifications listed Sections 1.11 and 1.13 of the Construction Environmental Management Plan.

12 Flood Emergency Response Sub Plan

The Flood Emergency Response Sub Plan sets out emergency measures to be undertaken on the occurrence of a flood event with the objective to protect human and environmental health and the preservation of plant and equipment.

12.1 Consent Requirements

In accordance with condition B15(i) of SSD-8744305, repeated in part as follows; the Construction Environmental Management Plan (CEMP) which must include, but is not limited to, the following; the development of a Flood Emergency Response Sub-Plan.

This section of the CEMP addresses these conditions, outlining the likely impacts associated with flood emergency response and the strategies that will be implemented to ensure that impacts are minimised.

12.2 Relevant Conditions to Consider

Condition CB21 stipulates that the Flood Emergency Response Sub-Plan (FERSP) must address, but not be limited to, the

following:

- (a) be prepared by a suitably qualified and experienced person(s);
- (b) address the provisions of the Floodplain Risk Management Guidelines (EESG);
NSW Government 16 Upgrades to Kingscliff High School
Department of Planning, Industry and Environment (SSD-8744305)
- (c) include details of:
 - (i) the flood emergency responses for both construction phases of the development;
 - (ii) predicted flood levels;
 - (iii) flood warning time and flood notification;
 - (iv) assembly points and evacuation routes;
 - (v) evacuation and refuge protocols; and
 - (vi) awareness training for employees and contractors, and users/visitors.

12.2.1 Site Flooding

The site is subject to both local overland flooding and to regional creek flooding of Cudgen Creek. Hydraulic modelling conducted by GHD (2021) simulates the impact of the upgrades on overland flow in the local catchment. Details are presented in the FERSP Section 3.3.

12.2.2 Flood Emergency Response

The proposed response to a flood is to evacuate the construction site by foot or shelter inside buildings or sheds with raised floor levels on site as soon as rising water is observed. Any evacuation can stop as soon as floodwaters recede on site.

The trigger for evacuation is limited to visual observation of rising flood waters.

Trigger for action: Rising overland floodwaters are observed on site (ie. rising water is observed while water is flowing downhill from the front of the school):

Actions:

- Personnel should evacuate on foot to either Assembly Point A or Assembly Point B (see Figure 12 for evacuation routes)

- Do not drive through floodwaters. If the access driveway is flooded, wait for floodwaters to recede before driving off-site. Floodwaters should recede within an hour
- If personnel fail to evacuate the site, they should shelter in buildings or structures with elevated ground floor levels
- Do not shelter in the site office
- If flooding occurs during Stage 2, do not shelter in any of the site sheds.

Trigger for action: The site is threatened by flooding by Cudgen Creek (i.e. floodwaters are observed rising from the south)

Actions:

- Personnel should evacuate on foot to either Assembly Point A or Assembly Point B (see Figure 12 for evacuation routes)
- Leave the site via the main entrance, either by car or by foot
- Do not drive through floodwaters on site or off site
- If the access driveway is flooded, wait for floodwaters to recede before driving off-site. Floodwaters should recede within 24 hours
- If personnel fail to evacuate the site, they should shelter in buildings or structures with elevated ground floor levels
- If flooding occurs during Stage 1 it is safe to wait in the site sheds or at Assembly Point A (the netball courts carpark) for floodwaters to recede
- If flooding occurs during Stage 2, do not shelter in any of the site sheds or the site office. It is safe to wait at Assembly Point A for floodwaters to recede.

Trigger for action: Floodwaters have receded and no longer threaten the site

Actions:

- Richard Crookes Construction will organise access to the site making sure that any precautionary measures recommended by the NSW SES are put in place
- Extra care will be taken of potential slips on a muddy floor if floodwaters have entered the ground floor of buildings
- All flood-affected parts of the site will be appropriately cleaned and utilities checked by professionals before construction can recommence
- A hazard assessment will be undertaken for the clean-up, safe work methods statements will be prepared and personal protective equipment supplied consistent with the known hazards which can be associated with floods:
 - Slips, trips and falls;
 - Sharp debris;
 - Venomous animals;
 - Contaminated water and sediments.
- Following the re-commencement of construction activities, a de-brief will be held with key management staff and may involve Council flood staff or the local NSW SES. The flood event and response including the use of this FERP and any emergency procedures will be reviewed
- Changes may be made to this Plan and the requirements for future emergency response should the review identify any improvements which may be made.

12.2.3 Assembly Points

As overland flooding has the potential to cut access between the work zones to the east and west of the access driveway, two flood assembly points have been nominated. The first (Assembly Point A) is the netball courts carpark (the construction carpark) south-west of the main school buildings. The second (Assembly Point B) is the carpark in front of the school on Oxford St.

12.2.4 Evacuation Routes

Detailed flood evacuation routes are set out in Section 4.4 of the FERSP

Construction – Stage 1

- If flooding occurs on site during Stage 1 of construction, personnel in the Block G work zone, the work zone between Blocks A and B and the Block C work zone should evacuate east and then northwards to Assembly Point B (Figure 12).
- Personnel in the work zone to the west of the access driveway should evacuate south to Assembly Point A. If the access driveway is free of flood waters, site personnel may proceed to evacuate the site by vehicle. If the driveway is flooded, personnel should wait until floodwaters have receded before driving off site. No one should drive through floodwaters.

Construction – Stage 2

- If flooding occurs on site during Stage 2, personnel in the work zone south of the main school buildings should evacuate south-west to Assembly Point A (Figure 12) only if the access driveway is free of flooding between this work zone and the netball courts. If the access driveway through the school is still free of flood waters when personnel have reached their vehicles, they may proceed to evacuate the site by vehicle. If the driveway is flooded, personnel should wait until floodwaters have receded before driving off site. No one should drive through floodwaters.
- On the other hand, if floodwaters along the access driveway prevent evacuation from the work zone to Assembly Point A, personnel should instead evacuate north-east from the work zone to Assembly Point B.

12.2.5 Reporting / Compliance

All flood response measures should be reported and recorded as per the specifications listed Sections 1.11 and 1.13 of the Construction Environmental Management Plan.

13 Tree Protection

13.1 Consent Requirements

In accordance with condition C19 of SSD-8744305, Tree protection is to be implemented as follows:

- (a) street trees must not be trimmed or removed unless it forms a part of this development consent or prior written approval from Council is obtained or is required in an emergency to avoid the loss of life or damage to property;
- (b) all street trees immediately adjacent to the approved disturbance area / property boundaries must be protected at all times during construction in accordance with Council's tree protection requirements. Any street tree, which is damaged or removed during construction due to an emergency, must be replaced, to the satisfaction of Council;
- (c) all trees on the site that are not approved for removal must be suitably protected during construction as per the recommendations of the Arboricultural Impact Assessment prepared by Treescience dated May 2021 as amended by the Addendum to the Arboricultural Impact Assessment, prepared by Arbor Ecological and dated 26 August 2021; and
- (d) if access to the area within any protective barrier is required during the works, it must be carried out under the supervision of a qualified arborist. Alternative tree protection measures must be installed, as required. The removal of tree protection measures, following completion of the works, must be carried out under the supervision of a qualified arborist and must avoid both direct mechanical injury to the structure of the tree and soil compaction within the canopy or the limit of the former protective fencing, whichever is the greater.

14 References

Environmental Planning and Assessment Act 1979 No 203

Environmental Planning and Assessment Regulation 2000

Protection of the Environment Operations Act 1997 (NSW)

Protection of the Environment Operations (General) Regulation 2009

ISO 14001; 2015 Environmental management systems - Requirements with guidance for use
AS/NZS ISO 31000:2009 Risk management – Principles and guidelines

NSW Government Environmental Management System Guidelines (edition 3 - August 2013)

Appendix A – Construction Soil and Water Management Sub Plan

Appendix B – Construction Waste Management Sub Plan

Appendix C– Construction Noise and Vibration Management Sub Plan

Appendix D – Construction Traffic and Pedestrian Management Sub Plan

Appendix E – Construction Biodiversity Management Sub Plan

Appendix F – Flood Response Sub Plan

Appendix G – Aboriginal Cultural Heritage Management Plan