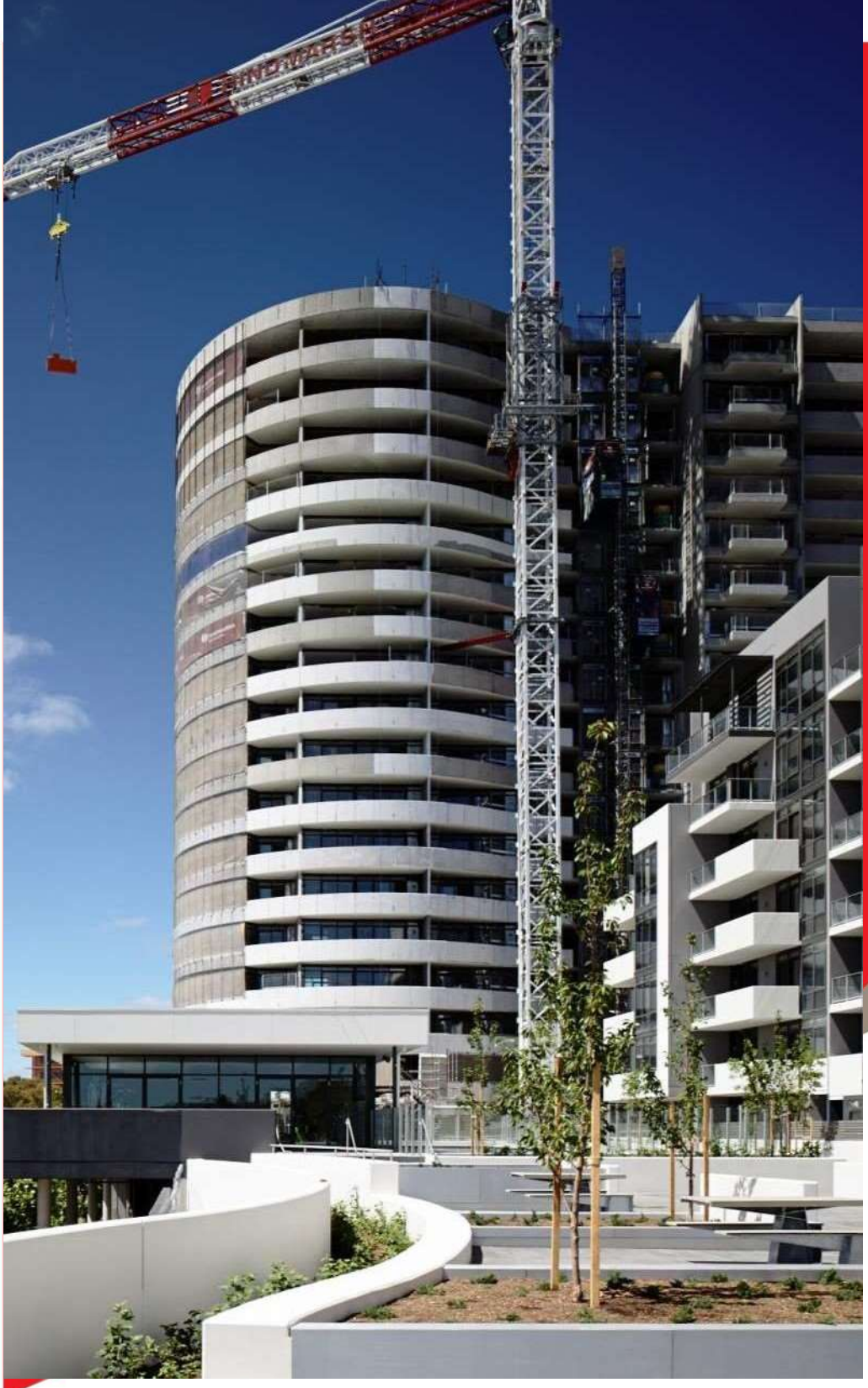


Construction Environmental Management & Sustainability Plan (CEMP)

MONARO SCHOOLS CLUSTER – NEW HIGH SCHOOL AT JERRABOMBERRA - REV.16

Construction
Development
Retirement
Capital

HINDMARSH
Leadership at work

Table of Contents

1. Document Control – Revision History

1.1 REVISION STATUS

Approved revisions to this document may be independently issued.

Date Issued	Revision	Details	Section	Page	Approval
14/07/22	Rev 8 - NV	Final – formatting and conditions table	All	All	
19/07/22	Rev 9 NV	Final – formatting and conditions table	All	All	
20/07/22	Rev 10 NV	Final	All	All	
01/08/22	Rev 11 NV	Final amended	All	All	
04/08/22	Rev 12 NV	Final amended & internal review	All	All	
05/08/22	Rev 13 NV	Final amended – TSA and SINSW comments inc	All	All	
12/08/22	Rev 14 NV	Final with QPRC comments	All	All	
21/09/22	Rev 15 NV	DPE comments incorporated			
		Typo corrected	Condition satisfaction table	4	
		Updated unexpected finds protocol	Section 16.7	11	
		Updated reference to EPBC Poplars document added	Section 16.8	31	
		Updated opening hours information to include noisy works condition C7	Section 16.1	11	
		Waste management plan update to include Subcontractor details and revision number	Appendix G	46 & C.3 and C.3 of CWMP	
		Preconstruction reference B16 changed to B15	Appendix H	5 of sub-plan	
		Mitigation measures added	Section 16.1	29	
		Updated and accepted by civil contractor	Appendix B	38 of CEMP	
		Updated plan sent to QPRC 9/9/22 for further comment, noting no changes from last review and expect QPRC's approval	Appendix B	Awaiting QPRC response - 38	

		Acknowledgement of Douglas Partners and dated 16 September 2021	16.7 and 16.7	30-31	
17/10/22	Rev 16	Further DPE Comments Incorporated			
		Page numbering update	All	All	
		Addition of revegetation comment against section 4.5 of the EPBC	16.8	P33	
		Unexpected finds in the EPBC section 4.12, addition of 4 dot points on the use of an ecologist (Engaged by others)	16.7 – 16.8	P32	
		Note added to Appendix B – noting that BM+G are certifying authority not QPRC, BM+G were consulted and provided approval in CC1 submission of this plan.	Appendix B	Section 7.5 P17 & P38	
		Appendix F – Martens Flood sub-plan correctly references the EHG Added additional name of document	Appendix F	Section 1.3 of sub-plan P137 of CEMP	
		Notes added 1. Copy of EPBC available to all workers at HCA site office, workers are invited to review the document at induction per Section 4.3 of the EPBC 2. The EPBC document is not specific to JHS site but the larger estate	Appendix B		James Last Senior Project Manager

1.2 SSD CONDITION SATISFACTION TABLE

Condition	Condition Requirement		Document / SubPlan Reference
B12	Management plans required under this consent must be prepared having regard to the relevant guidelines, including but not limited to the Environmental Management Plan Guideline: Guideline for Infrastructure Projects (DPIE April 2020). Notes: • The Environmental Management Plan Guideline is available on the Planning Portal at: https://www.planningportal.nsw.gov.au/majorprojects/assessment/post-approval • The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.		Appendix I Page 47
B13	Construction Environmental Management Plan		
	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; (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 B9;	i) Section 3.2 Page 12 ii) Section 3.3 Page 12 iii) Section 16.8 page 32 iv) Section 16.10 page 31 v) Section 10.3 page 19-21
	(b)	an unexpected finds protocol for contamination and associated communications procedure to ensure that potentially contaminated material is appropriately managed;	Section 16.6 page 30 -31

	(c)	an unexpected asbestos finds protocol and associated communications procedure prepared in accordance with the recommendations of the Report on Limited Contamination Assessment (Document No. R.002.Rev3), prepared by Douglas Partners and dated 16 September 2021 to ensure that any asbestos or suspected asbestos material is appropriately managed (this must include fencing off and assessment of any suspected asbestos material found by an NSW licensed asbestos assessor);	Section 16.7 Page 30-31

	(d)	an unexpected finds protocol for Aboriginal and non Aboriginal heritage and associated communications procedure;	Section 16.7 Page 30-31
	(e)	the Poplars EPBC Act Construction Environmental Management Plan (EPBC No. 2020/8801), prepared by Indesco and dated 17 October 2021;	Appendix J Page 265
	(f)	the construction phase mitigation measures detailed in the Aviation Wildlife Hazard Assessment, prepared by Alison Rowell and dated February 2022;	Appendix K Page 298 Section 6 Page 13
	(g)	Construction Traffic and Pedestrian Management Sub-Plan (see condition B14);	Appendix E Page 80
	(h)	Construction Noise and Vibration Management Sub-Plan (see condition B14);	Appendix H Page 233
	(i)	Construction Waste Management Sub-Plan (see condition B16);	Appendix G Page 214
	(j)	Construction Soil and Water Management Sub-Plan (see condition B17); and	Appendix B Page 37 of CEMP
	(k)	Construction Flood Emergency Management Plan (see condition B18).	Appendix F Page 130
B19	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;	Section 11.2a Page 22
	(b)	minimise conflicts with other road users;	Section 11.2b Page 22
	(c)	minimise road traffic noise; and	Section 11.2c Page 22
	(d)	ensure truck drivers use specified routes.	Section 11.2d Page 22

B20	Construction Parking Prior to the commencement of construction, the Applicant must provide sufficient parking facilities on-site, including for heavy vehicles and for site personnel, to ensure that construction traffic associated with the development does not utilise public and residential streets or public parking facilities.		Section 11.3 Page 23
B21	Flood Emergency Management – Construction Phase Prior to the commencement of construction, the Applicant must prepare and implement for the duration of construction:		Appendix F Page 43 Section 34 Page 10-18 (sub-plan)
	(a)	flood warning and notification procedures for construction workers on site;	Appendix F Page 43 Section 3.2 – 3.2.2 page 10, Section 3.7 Page 16 – 17 (sub-plan)
	(b)	appropriate management of materials on site; and	Appendix F Page 43 Section 3.3.1 Page 11 (sub-plan)
	(c)	evacuation and refuge protocols.	Appendix F Page 43 Section 3.5 & 3.6 Page 15 &16(subplan)

1.3 PROJECT SPECIFICS

Company Name:	Hindmarsh Construction Australia Pty Ltd
ABN:	15 126 578 176
Project:	Monaro Schools Cluster – New High School at Jerrabomberra
Project No:	2045
Location:	Jerrabomberra High school 101 Environa Dr, Jerrabomberra NSW
Client:	Department of Education - SINSW

Contract:	GC 21 (Edition 2) with amendments - Contract number SINSW 01204-20
Work Description	New High School built in two stages. First stage to accommodate 500 students. Comprising 25 GLS, Hall, Admin, Library, Carparks and outdoor areas

1.4 APPROVAL FOR IMPLEMENTATION

This revision of the Environmental Management and Sustainability Plan (CEMP) has been reviewed by the Project Manager, it complies with environmental aspects of Compass and contractual obligations and is authorised for use.

1.5 EMP INDUCTION

Every Project Hindmarsh employee receives induction training into the purpose and use of this EMP. Each acknowledges that they fully understand this EMP's requirements and their roles \ responsibilities associated with it..

Key elements of this EMP have be extracted for inclusion in the project specific site induction training which is given to all employees, subcontractors and site workers prior to commencing works on site.

2. Purpose and Scope of EMP

Hindmarsh operates a fully integrated Business Management System, known as Compass which incorporates our Safety, Quality and Environment business systems.

This EMP describes the environmental strategy, methods, controls, and requirements to be implemented during the execution of the project. The purpose of this EMP is to:

- Ensure company environmental objectives and targets are achieved
- Identify the environmental issues (impacts and aspects) for this project;
- Establish, communicate and implement controls to reduce any adverse impacts on the environment which may arise from project's activities, products and services;
- Identify controls which will be implemented to mitigate high risk environmental impacts, which may eventuate during construction.
- Ensure Hindmarsh, its suppliers and subcontractors comply with all relevant environmental legislation, any applicable licenses, approvals, permits and regulatory requirements;
- Ensure works are managed to reduce adverse impacts on the environment;
- Action any outcomes from environmental incidents or accidents, project audits or other identified non-conformances and to continually improve the Environmental Management System elements within Compass; and
- Establish project-specific objectives and targets (where appropriate), and identify strategies and evidence in support of their achievements.

This EMP is intended to stand alone as the master document for the management of all site environmental activities. It should, however, be read in conjunction with other management plans, referenced appendices and documents, including;

- Project Management Plan (PMP)
- Emergency Management Plan (EMMP)
- Safety Management Plan (SMP)
- Temporary Traffic Management Plan (TTMP)
- Quality Management Plan (QMP)

2.1 SUSTAINABILITY

Responsible Environmental Management extends far beyond that of simple mitigation measures. Sustainability embraces environmental, social and economic accountability. Hindmarsh seeks, with its project partners, to reduce those negative impacts and maximise benefits related to all three areas across the entire project life cycle. Fundamentally, our environmental strategy and EMP requires every project to consider:

- A reduced resource consumption
- reuse of resources
- use and support of recyclable resources
- protection of the natural environment
- elimination of toxic substance \ material use
- focus on quality

2.2 ENVIRONMENTAL MANAGEMENT SYSTEM

Hindmarsh operates an Environmental Management System as per the requirements of AS14001:2004 and the NSW Government Environmental Management System Guidelines Edition 2. The system has been independently certified as meeting the requirements of both. Please refer to the Compass Manual for further information regarding the Hindmarsh Management System.

2.3 REFERENCED PROCEDURES AND DOCUMENTS

Documents, procedures, and forms supporting this EMP have been referenced accordingly throughout this plan. Please refer to the Environmental Management and Sustainability Process Map for instruction and guidance information relating to these documents. Compass documents detailed within this plan are identifiable by title and are formatted in italics and underlined.

2.3.1 Client \ Project Specific Documents

The following project specific environmental \ sustainability related documents have been referred to in the preparation of this EMP:

- Poplars EBC Act Construction Environmental Management Plan EPBC no. 2020/8801 dated October 2021

3. Project Information

3.1 DESCRIPTION (SCOPE)

Please refer the Hindmarsh Project Management Plan document, specific to this project, for the full detailed project description information. The new high school in Jerrabomberra will accommodate 500 students and the key components include:

- General Learning Spaces, Wood/metal workshop, Science labs & Visual Arts workshop, Admin facilities & Library – Block A&B
- Multi-purpose Hall & change facilities - Block C,
- Amenities - Block D
- Basketball court
- External outdoor area

- Carpark

The project will commence construction in August of 2022 with a projected completion date in September of 2023.

- Milestone 1 – Site possession HCA (08/08/22)
- Milestone 2 – Structure completion (09/03/23)
- Milestone 3 – Fitout completion (26/07/23)
- Milestone 4 – External works completion (28/09/23)

3.2 HOURS OF OPERATION

Site operating hours for construction activities will be in accordance with the development approval determination, except as agreed with the client and authorities for out of hours work, will be restricted as follows:

- between 7:00 am and 6 pm, Mondays to Fridays inclusive;
- between 8:00 am and 1 pm, Saturdays;
- No work on Sundays and public holidays.

Out of hours work as agreed with the client and authorities will only be undertaken:

- Provided noise level do not exceed existing background noise level plus 5dB, works may also be undertaken between 6pm-7pm Monday - Friday, and between 1pm and 4pm Saturdays in line with condition C3, 4,5 & 6 of the consent.
- To facilitate deliveries that cannot be easily delivered within normal hours
- Road and other works that require street closures or out of hours services cutovers
- Provided 7 days notice to project and community stakeholders to be affected by the works.
- To facilitate deliveries that cannot be easily delivered within normal hours and or road and other works that require street closures or out of hours service cutovers are compliant with condition conditions C5 and C6

Rock breaking or rock hammering in accordance with C7 hours are listed below

9am – 12pm Monday to Friday
2pm – 5pm Monday to Friday: and
9am – 12pm Saturdays

3.3 24HR EMERGENCY CONTACT (HCA)

Senior Project Manager – James Last 0467 762 120

Senior Site Manager – Nick Valois 0421 286 395

Site Supervisor – Peter Maselos 0455 563 215

Site Supervisor – Jake Rowlands 0433 562 281

Project Engineer – Luis Martinez 0424 140 974

4. Environmental and Sustainability Strategy, Policy, Objectives and Targets

4.1 STRATEGY

This EMP is implemented in support of the Hindmarsh Environmental and Sustainability Strategic Framework, this strategy is to be communicated and made available to all workers at all times.

4.2 POLICY

The Hindmarsh Environmental and Sustainability Policy and the PPE Policy are to be communicated and made available to all workers at all times. At time of site induction workers are briefed on the Policy and its intent. A PPE Requirements document is also available.

4.3 COMPANY OBJECTIVES AND TARGETS

Current company environmental and sustainability objectives and targets are detailed within the Environmental and Sustainability Strategic Framework.

Hindmarsh objectives and targets established at company and project level are managed and maintained in accordance with Company & Project Objectives & Targets – Maintenance, Management & Monitor procedure.

4.4 PROJECT OBJECTIVES AND TARGETS

The ESD initiatives of the proposed development will be verified through a Green Star Design & As-Built v1.3 formal certification, with the development targeting a 4 Star rating.

Below is a summary of the initiatives to meet this target:

- Good management - adopted from design phase, construction and through to building operation.
- Healthy indoor environmental quality.
- Minimise energy consumption through good passive design and maximise energy efficiency of systems.
- Sustainable transport systems.
- Effective water management.
- Construction materials selection.
- Limiting impact of land use on ecology and biodiversity.
- Reductions in emissions.
- Incorporating innovative technologies.

5. Resource Management

General information detailing overall resource management is detailed within the current Project Management Plan (PMP) for this project, Section: Resource Management. The following sections provide details regarding environmental and sustainability specific considerations related to resource management.

5.1 RESPONSIBILITY AND AUTHORITY

It is the responsibility of Hindmarsh project staff to ensure that the Environmental Management Plan (EMP) is complied with, and objectives and targets are met. To facilitate effective environmental management, specific responsibilities for implementing and supporting this EMP have been assigned.

Please refer to the Appendix C (page 40) - Roles and Responsibility Matrix, for the project specific allocations.

5.2 ENVIRONMENTAL TRAINING REQUIREMENTS

Hindmarsh* ensures specific environmental and sustainability training requirements are identified in consultation with each project team member. This is completed as per the Training and Development Procedure – Project, any training needs identified are captured via the Training ID \ Requirements Register.

The following additional forms shall be used as appropriate:

- Training Approval Form
- Training Evaluation Form

Hindmarsh employees provide evidence of training completion to the Human Resource Department (only required for nominated courses \ competencies), such evidence may also be filed electronically or via hardcopy on site for reference purposes. Environmental training requirements are continually revisited throughout the life of the project, particularly where there has been a change in project resources, where a skill gap has been identified, or as required by the Project Manager (PM).

Refer to the Learning and Development Overview document for further information regarding the relationship between company and project training processes.

5.2.1 Unforeseen Training Requirements

Where unforeseen training requirements have been identified by either: Risk Assessment, Training Review or other means, arrangements will be made to ensure the employee involved is appropriately trained. Any such training need identified is captured via the Training ID \ Requirements Register.

6. Compliance

6.1 LEGISLATIVE \ REGULATORY

The Legal Register is a list of relevant legislative and regulatory requirements applicable to general Hindmarsh construction operations. The project team has reviewed this document and has identified relevant legislative and regulatory requirements applicable to project specific operations. The project specific Legal Register is available upon request and has been completed as per the Legal Requirements procedure.

Legislative and or regulatory information may also be included in relevant Environmental Impact Guides (EIGs) and in the site-specific induction training provided to all employees and site workers prior to their commencement of works on site.

6.2 MONITORING \ CHANGES TO: ACTS, REGULATIONS, CODE OF PRACTICE AND AUSTRALIAN STANDARDS (SUBSCRIPTION)

Hindmarsh is notified of SQE legislative and regulatory change via a subscription service called LAWLEX - http:\\www.lawlex.com.au Where relative legislative change is to occur the National SQE Manager informs State SQE Manager who are then required to review changes and forward recommendations (this may be Document Change Request, email, hardcopy or other) to the SQE Systems Manager for Hindmarsh Management System (Compass) coordination.
For more detailed information please refer to Legal Requirements procedure.

6.3 ACCESS TO AND COMMUNICATION OF LEGAL REQUIREMENTS / AUSTRALIAN STANDARDS

Hindmarsh employees, suppliers and subcontractors have access to legislation and regulatory documents via the internet. Where a project receives a request for an applicable legislative \ regulatory document which is not available via the internet, then the request is to be forwarded to one of the following who will arrange for a copy of the required document to be made available to the requestor.

- National SQE Manager
- State SQE Manager

6.3.1 Australian Standards

Hindmarsh subscribes to "Building and Construction" related Australian Standards. Refer to the Australian Standards Online Select Access document for further information regarding access instructions and credentials required for login. Refer to Appendix D – Project & Environmental Risk Assessment.

7. Risk Management

7.1 INTRODUCTION

Project risk management is completed as directed within the Risk Assessment procedure in Compass , and as detailed within PMP. The Risk Assessment – Quick Reference Card provides a summary of the risk assessment process, including consequence and likelihood tables.

7.2 ENVIRONMENTAL ASPECTS AND IMPACTS

The project specific Environmental Risk and Opportunity Profile takes into account identified hazards (aspects) and impacts which are relevant to the project. The Project team has reviewed all available information (i.e. risk assessments, consultant reports, advice, papers, scope of works etc) to ensure the Environmental Risk and Opportunity Profile accommodates all known issues.

Hindmarsh ensures environmental aspects and impacts are continually reviewed, risks assessed and that monitoring requirements remain relevant and current.

Key environmental aspects and risks are communicated to Hindmarsh employees and subcontractors based on level risk, controls implemented and or as deemed appropriate by project requirements.

Please refer to the project specific Environmental Risk and Opportunity Profile. Refer to Appendix D.

7.3 ENVIRONMENTAL IMPACT GUIDES – EIG'S

Hindmarsh has developed a number of standard Environmental Impact Guides (EIGs), these are documented procedures targeting high risk and \ or common environmental aspects and impacts which arise from general construction activities. EIGs provide the project team with general guidance regarding the management of each respective environmental impact, describes the processes involved, the permits or licenses required, the control measures to be implemented, the monitoring and reporting requirements and any emergency response measures to be implemented.

These documents are available upon request and are communicated to workers as required. A number of these EIGs are available via Compass these include:

- EIG001-Soil Erosion, Sediment, Surface Run Off
- EIG002-Disturbance Flora Fauna
- EIG003-Disturbance Aqua Flora Fauna
- EIG004- Noise Emissions
- EIG005- Atmospheric Emissions
- EIG006- Vibration
- EIG007- Storage, Maintenance, Refuel
- EIG008- Storage, Handling or Hazardous \ Dangerous Substances \ Materials
- EIG009- Social Impact
- EIG010-Presence of Infectious Plant, Disease or Weeds
- EIG011- Solid and \ or Liquid Waste, Recycling
- EIG012- Heritage \ Culture Management \ Disturbance
- EIG013- Land Contamination
- EIG014- Visual Amenity
- EIG016-Acid Sulphate Soils
- EIG017-Ballast
- EIG018- PCB Management
- EIG019- Energy and or Water Consumption

Note: EIGs relevant to this project are detailed within the Environmental Risk and Opportunity Profile

7.3.1 Monitoring and Review of Environmental Impact Guides

EIG effectiveness and currency is monitored throughout the life of the project. The project team accomplishes this by identifying an active EIG (or several) and attaching it to the Weekly \ Daily Environmental and Sustainability Check Sheet. During completion of the check sheet the EIG content is also checked for efficiency and currency. The EIG is marked accordingly and amendments made and or controls altered as required. The EIG sheet under review accompanies the completed check sheet and filed (electronic or hardcopy) as evidence of review.

7.4 DESIGN AND REVIEW CHANGES

The Design Involvement Management Risk procedure ensures that where Hindmarsh is involved in the design, or has input into design, a process exists for ensuring effective participation and management. In support of this procedure a Design Change Authority Form is completed, upon which any environmental aspects or impacts will be considered. This system ensures all related documents, forms and or risk and opportunity profiles are also updated accordingly.

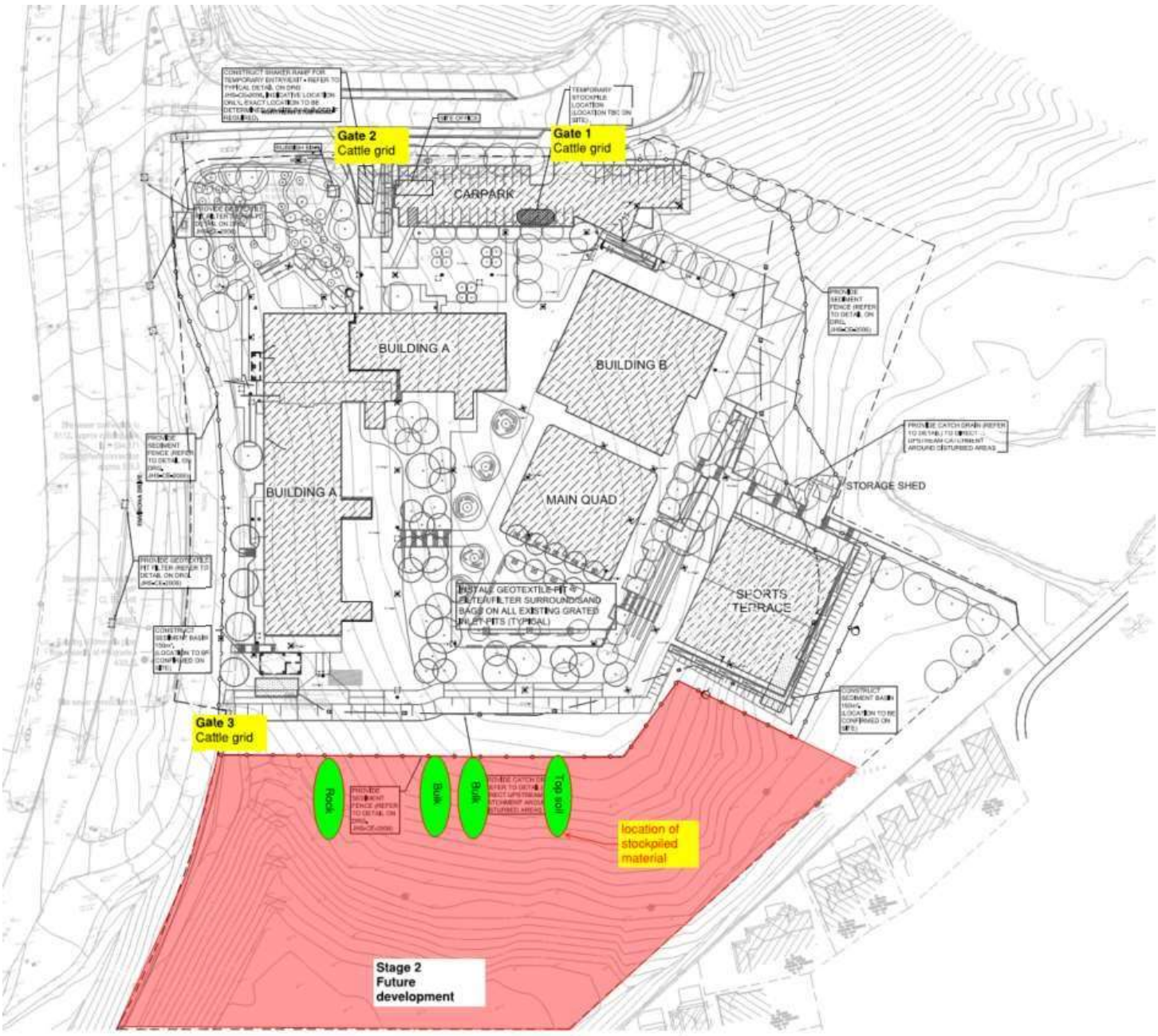
Design changes may be tracked via the Design Change Register, Aconex or similar system.

Safety in design documentation may also be reviewed to ensure environmental considerations are addressed appropriately. Please refer to the Safety in Design procedure and Safety in Design Risk and Opportunity Profile where available.

7.5 CONSTRUCTION SOIL AND WATER MANAGEMENT PLAN

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. For The full SubPlan refer to APPENDIX B

- Soil erosion and water management set out provided by M+G Consulting shown below JHS-CE-2005
- HCA has incorporated cattle grids and all 3 gates to shake debris from the wheels of leaving vehicles. Additionally, The traffic controller at the gates will inspect vehicles leaving the site to ensure no transfer of materials outside of the site confides.
- The measures implemented in the approved Sediment and erosion control plan has been fully adopted by the civil contractor and is monitored daily for damage and wear and tear. The creation of this plan considers the EPBC section 4.5 and is endorsed and approved by BM+G the certifying authority for Jerrabomberra Highschool.



SEDIMENT AND EROSION CONTROL PLAN

- The following controls will be utilised on the JHS site per the above drawing. Additional protection may be required to strengthen the design should heavier than predicted weather events require it. All external kerb inlets located on Environa dr will be protected with sandbags and geotextiles fabric per JHS-CE-2005 and 2006. Sediment fencing and drainage ditches to direct overland flow to settlement ponds to be treated.
- The agreed quantity of soil will be stockpiled on the stage 2 site for future use by SINSW. The stockpiles will be seeded for stability and have sediment fencing as detailed in JHS-CE-2006 installed to the low side of each stockpile to protect against unfiltered run off entering the close by Jerrabomberra Creek.
- During heavy rain events and immediately after the site will be assessed by the project team to determine if the site will close of if works can continue and manage site, and;
- Prior to major rain fall events high risk for soil erosion, such stockpiles and at-risk elevation on the construction site will be covered with geotechnical fabric above the line of the sediment

control fence. Thorough inspection and record keeping will be maintained by HCA both before and after weather events. Pre and post rainfall procedures

8. Hazard Reporting

Hindmarsh employees, subcontractors, those working on site, as well as those visiting have a duty to report any hazard observed on site. If a hazard is suspected or identified, report the matter with urgency to a Hindmarsh Management representative who shall be responsible for recording this in the OnSite CAR Module.

Hazard information may be communicated via site induction, safe work method statement review, and \ or safety meetings (e.g. Pre Start and Toolbox) held on site.

Where a Corrective Action has been submitted reporting a hazard, Hindmarsh shall investigate and take necessary corrective action to address the issue raised to remove the hazard and \ or prevent a reoccurrence.

9. Emergency \ Incident Management

Please refer to the Projects Emergency Management Plan (EMMP) for information regarding emergency preparedness and response. The project-specific Emergency Management Plan (EMMP) ensures Hindmarsh controls, and assesses Emergency preparedness elements as required for the project.

9.1 INCIDENT MANAGEMENT

Refer to the Injury, Illness and Incident Management and Reporting flow chart for detailed guidance regarding the management and reporting of injuries, illness and incidents.

Procedures and processes referenced within the above mentioned document address the following:

- Detailed definitions (SQE Definitions)
- Actions to be taken in the event of an injury, illness or incident (Injury, Illness and Incident Response)
- Additional reporting responsibilities and obligations associated with higher level injuries \ incidents (Incident Actions \ External Notifications)
- Incident Reporting responsibilities and expectations (Incident Reporting Flowchart)
- Site and or National investigation requirements
- Corrective and Preventive Action
- Analysis of data \ findings (including Objectives \ Targets status) Refer to SSDA incident notification process.

A Crisis Management and Recovery Plan supports the injury, illness and incident management process.

9.1.1 Significant SQE Incident Alerts

Hindmarsh communicates lessons learnt information, from both internal and external events, via Significant SQE Incident Alerts. Refer to the Safety Management and Sustainability Process Map for a list of those available.

10. Communication \ Consultation

10.1 INTRODUCTION

With many interested parties involved in the project it is critical that communication and consultation occurs efficiently and effectively between all.

With regards to environmental issues consultation and communication generally occurs when the following matters arise:

- An employer or employees identifies a hazards
- assessing any aspect \ impact (risk)
- deciding on measures to control risks
- implementing controls
- reviewing the effectiveness of controls
- reviewing and developing policies
- investigating incidents \ complaints
- changing work practices and procedures
- introducing new substances to the workplace
- changes to current health and safety Acts, Regulations, Australian Standards, Codes of Practice and other relevant environmental requirements

10.2 MEETINGS \ REPRESENTATIVE \ OTHER AGREED ARRANGEMENTS

In discussion with site workers (Hindmarsh employees and Subcontractors), the following arrangements have been made with regards to communication and consultation regarding environmental matters:

Determine (preferably by obtaining agreement from workers onsite to which of the above mentioned forums is most acceptable) communication and consultation arrangements. Arrangements may include one or more of the following:

- The formulation of an Environmental Meeting (Hindmarsh Internal \ Contractor)
- Inclusion of environmental issues in other meetings \ forums
- Other agreed arrangements, eg (detail what the specifics are)
  - Environmental Meeting
  - Daily Prestart Meetings
  - Toolbox Meetings
  - Site Induction
  - Weekly Subcontractor \ Supervisor meetings
  - Hazard Identification \ Reporting and Communication
  - SWMS Submission and Review

Once determined or agreed arrangements are to be summarized here and communicated to all workers on site. Supporting posters \ flow charts may be posted to assist with communication.

10.3 KEY STAKEHOLDER, COMMUNITY AND AUTHORITIES COMMUNICATIONS \ CONSULTATION

Hindmarsh seeks to ensure stakeholders, the local Community and authorities are satisfied by the manner in which construction activities and tasks are managed.

10.3.1 AUTHORITIES

Hindmarsh acknowledges at times it will be necessary to communicate, and or consult, with public authorities regarding emergency planning and other relevant environmental issues.

10.4 COMMUNICATION SUMMARY

Communication with internal and external stakeholders regarding environmental issues will be in accordance with the following table:

Notifications

Subject	Action	Recipient	Frequency
Environmental incident	Project Manager	TSA / SINSW Superintendent / SINSW	As per client requirements
Pollution \ Environmental non compliance	Project Manager	TSA / SINSW Superintendent / SINSW	As per client requirements
Public complaints	Project Manager	HCA Construction Manager \ TSA	48 hours and as per client requirements
Complaint response	Project Manager	HCA Construction Manager \ TSA	48 hours and as per client requirements
Extended working hours	Project Manager	TSA / SINSW Superintendent / SINSW	and as per client requirements
Discovery of threatened fauna	Project Manager	State Manager Construction	48 hours
Discovery of archaeological material incl heritage items	Project Manager	State Manager Construction \ TSA	48 hours and as per client requirements
Discovery of skeletal material	Project Manager	State Manager Construction \ TSA	24 hours and as per client requirements
Consultation Package 1	Project Manager	Via SINSW Communications Department	As Required \ as per programme

Consultation Package 2	Project Manager	Via SINSW Communications Department	As Required \ as per programme
High Noise \ Night Works (note these events are not planned to occur)	Project Manager	Via SINSW Communications Department	2 Days prior to works commencing

General

Subject	Action	Recipient	Frequency
EMP	Project Manager	Internal	Quarterly
Environmental CAR	Team	Project Manager	As stipulated within ARN
Audit	National SQE Manager	Project Manager	Notify 5 days prior
Environmental performance	National SQE Manager	State Manager Construction	As scheduled via Internal Audit

Meetings

Type	Chair	Attendees	Frequency
Key Stakeholder Meeting	Project Manager	TBA	Weekly to Fortnightly
Toolbox Meetings	Site Manager	As Required	Weekly
Daily Prestart Meetings	Subcontractor Reps	As Required	Daily

10.5 COMMUNITY CONSULTATION AND COMPLAINTS HANDLING

Contact details for HCA can be found by the public on the “notice of building work” signage at the entry to the site, there will also be additional signage at regular intervals on the perimeter fencing providing contact details for HCA.

In the event of receiving a complaint HCA will review and issue to TSA and SINSW Communications Department. The SINSW Communications Department will then deal with the complaint with assistance from HCA.

SINSW Community Consultation Plan includes processes and notification periods for communication The below exert from the CCS details the process of investigation and handling of complaints and enquiries directed to the project team;

SINSW manages enquiries (called interactions in our Customer Relationship Management (CRM) software, Darzin), and complaints in a timely and responsive manner.

Prior to project delivery, a complaint could be related to lack of community consultation, design of the project, lack of project progress, etc.

During project delivery, a complaint is 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, other environmental impacts, unplanned or uncommunicated disruption to the school.

If a phone call, email or face-to-face complaint is received during construction, it will be acknowledged within 2 working days and logged in our CRM, actively managed, closed out and resolved by SINSW within 2 to 5 business days, where practicable.

Where complaints are unable to be resolved within this timeframe the complainant will be provided with regular updates regarding the complaint resolution process.

A 24-hour contact number for the project site manager will be displayed at the site and can be shared with the community as necessary for any urgent issues that need to be addressed on site, outside of business hours.

As per our planning approval conditions, a complaints register is updated monthly, or as required by the planning authority, and is publicly available on the project's website page on the SINSW website.

If the complainant is not satisfied with SINSW response, and they approach SINSW for rectification, the process will involve a secondary review of their complaint as per the outlined process.

Complaints will be escalated when:

- An activity generates three complaints within a 24-hour period (separate complainants).
- Any construction site receives three different complaints within a 24-hour period. □ A single complainant reports three or more complaints within a three-day period.
- A complainant threatens to escalate their issue to the media or government representative.
- The complaint was avoidable.
- The complaint relates to a compliance matter.
- The complaint relates to a community safety matter.
- The complaint relates to a property damage claim.

Complaints will be first escalated to the Senior Manager, Community and Engagement or Director of Communications for SINSW as the designated complaints handling management representatives for our projects. Further escalation will be made to the Executive Director, Office of the Chief Executive to mediate if required.

If a complaint still cannot be resolved by SINSW to the satisfaction of the complainant, we will advise them to contact the NSW Ombudsman - https://www.ombo.nsw.gov.au/complaints.

11. Induction and Visitor Management

Site Induction is undertaken by all workers (this includes Hindmarsh employees, all subcontractors and any employees working for subcontractors), prior to work commencing on site. Induction consists of the worker completing a Site-Specific Induction and by being made aware of the Site Safety Rules. The worker acknowledges acceptance and understanding of the induction process by signing the Site-Specific Induction form. During induction copies of all appropriate licensing, certification and qualification will be collected by Hindmarsh and retained with the worker's induction record. A nominated Hindmarsh employee* will be responsible for maintaining these records.

It will be a condition of entry, of the project, that each individual worker has a valid White Card/Blue card as issued by a recognised safety training authority.

11.1 VISITOR INDUCTION

A visitor's induction is undertaken by all visitors, prior to site access. Visitor induction consists of the visitor reading and understanding the project's Safety Guidelines for Visitors Pamphlet, Site Safety Rules, and Emergency Management Plan (EMP) - Visitor Information. Visitors to site are to acknowledge understanding of the Visitor Induction by the signing of the Acknowledgement Register.

Those who visit site for a one off short duration visit to carryout non-intrusive work such as – external auditors, delivery drivers may visit site without undertaking the Visitor Induction however these visitors must be accompanied at all times (if on site) and or must follow Hindmarsh representative's instructions.

11.2 DRIVER CODE OF CONDUCT

All contractors and delivery drivers accessing the JHS site are expected to adhere to the site-specific rules which include strict conformance to the temporary traffic management plan and speed limits on

site. Driving outside of the confines of the JHS site it is expected that all HCA contractors conduct themselves in a professional manner that ensures adherence to road rules.

(a) minimise the impacts of earthworks and construction on the local and regional road network;

The location of JHS project lends its self to little disruption to local traffic. Set in a newly released land with no construction either side. At the bottom of the block over the Jerrabomberra creek there is the local primary school. There is no access to the site by vehicle from another road than Environa dr and thus HCA does not expect any cueing of trucks on Environa Dr. The site contains sufficient haulage and parking for construction vehicles to park off Environa drive.

Haulage routes are further detailed in Appendix E CTPMSP.

(b) minimise conflicts with other road users;

The highest level of professionalism is expected from all contractors engaged by HCA.

(c) minimise road traffic noise; and

Covered during induction are driver mitigation strategies surrounding noise on public roads surrounding the project that may impact residents nearby. Air breaks, horns, unattended idling vehicles will be kept to a minimum.

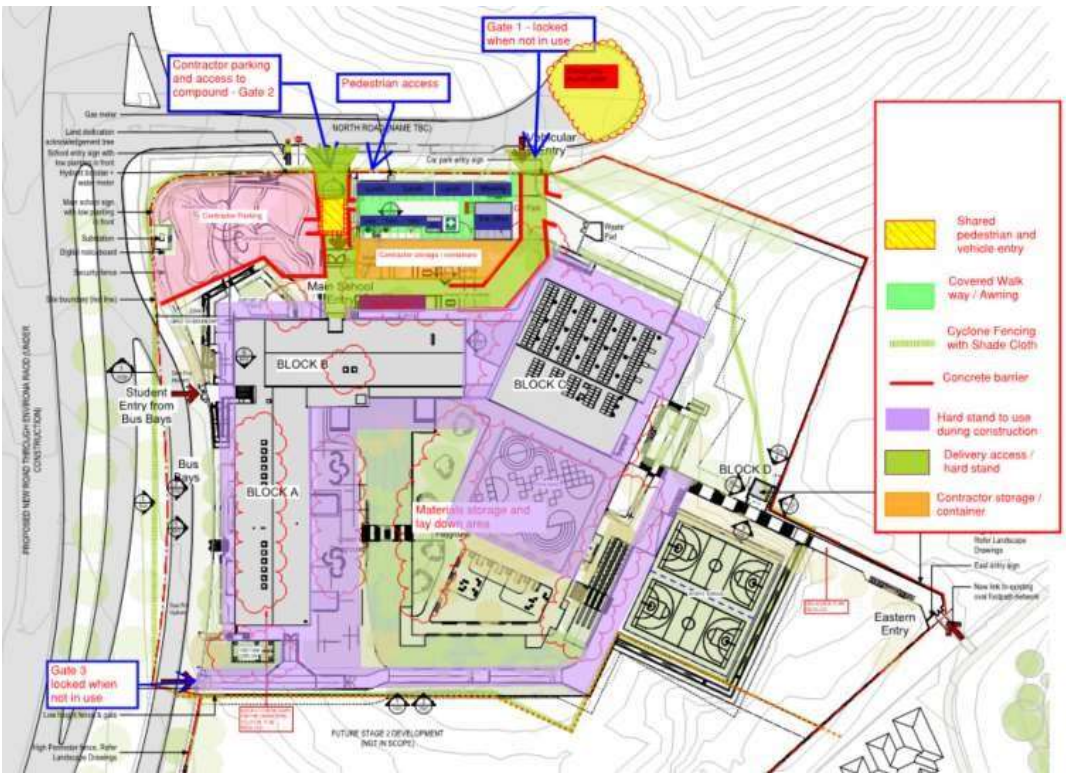
(d) ensure truck drivers use specified routes.

HCA does not anticipate that materials or contractor travel to the JHS site would cause any excess noise during transport that would be considered outside of normal levels. Contact details of the Site manager are posted on the Notice of Building Work sign on the perimeter fencing should a member of the public wish to contact someone to discuss a complaint.

11.3 CONTRACTOR PARKING

Contractor parking will be provided on a flattened area in the top NW corner of the site as shown below in the internal traffic management plan.

No on street parking will be permitted on Environa Dr by contractors



12. Checking

12.1 MONITORING AND MEASUREMENT

Monitoring requirements for the project will be identified within the project specific Environment Risk and Opportunity Profile). Where monitoring has been identified data collected may be analysed and may result in corrective and or preventive action. All Hindmarsh owned measuring equipment must be registered on the Equipment Calibration Register and all associated calibration records maintained. Hindmarsh may outsource environmental monitoring to external consultants as required. Calibration records for nonHindmarsh owned equipment will be requested.

The following should be noted regarding possible noise \ vibration \ dust monitoring regimes:

- Monitoring may be undertaken in response to complaints where this is considered an appropriate response
- Monitoring that is to occur will be undertaken by personnel suitable qualified and experienced in undertaking acoustic measurements
- Monitoring may occur for plant and equipment which is perceived as ‘excessively noisy’ to determine the need for rectification or replacement
- If night works are required: Night works construction noise levels, if approved by EPA, may be monitored at the start of the activity, and at a location equivalent to the most affected noise sensitive land user to confirm operation in accordance with EPA requirements.

12.2 NON-CONFORMITY, CORRECTIVE AND PREVENTIVE ACTION

Any environmental nonconformity observed will be rectified via the Corrective Action process. Where nonconformity creates a hazard this will result in either:

 a record being made within an “Uncontrolled Hazard Booklet”, a Corrective Action Required form being raised and issued, or the completion of an Incident Report.

Where a hazard has not been created by the nonconformity a Corrective Action Required form will be issued if immediate action is not taken to rectify.

Where a Corrective Action Required form is issued and it is not addressed in a timely manner or there is a subsequent re-occurrence of the non-conformance the Corrective Action and Escalation Process will commence.

Please refer to the Corrective Action procedure and Uncontrolled Hazard \ Hazard Reporting - Management flowchart for further information.

During project delivery Hindmarsh anticipates and encourages continual improvement in all areas of business. Continual improvement opportunities may arise from inspections, testing, auditing, incidents and or observations. Hindmarsh promotes and support the issue of corrective actions, as required, to support continual improvement requirements. Please refer to the Preventive Action procedures for further information.

12.3 AUDITING

Hindmarsh actively monitors performance and seeks potential improvement opportunities by completing internal audits. Please refer to Audits Management procedure for detailed information regarding the internal audit function and requirements, including:

- Audit Notification
- Internal Auditor Notes (audit opening \ closing meeting)
- Internal Auditor Notes (audit)
- Internal Audit Report

12.4 INSPECTION (EVALUATION OF COMPLIANCE)

The Weekly Environmental and Sustainability Check Sheet, is completed by the project team to evaluate compliance. The weekly or daily check sheet is customised to reflect specific project requirements. Where applicable, the environmental controls listed within Environmental Risk and Opportunity Profile may also be included within the check sheet.

It is preferred that only persons who have completed environmental awareness training or environmental management training complete the check sheet, however at times it is accepted it may be completed by a resource who has not completed such training but whom has environmental experience.

Hindmarsh management also inspect the site to ensure that the environmental impacts resulting from construction work are being adequately mitigated and environment controls have been implemented, are being met and maintained. Refer Senior Manager’s Visit (SMV) and Management, Project Inspections documents.

12.5 MONITORING REQUIREMENTS

Below items are monitoring requirements as stated in the EIS/ESD reports:

- Evaluate the School Transport Plan process to revise and improve the process to achieve outcomes.
- Pre-commissioning, commissioning, and tuning of building systems to ensure systems are operating as intended. This will be monitored through the building asset management systems.
- A project-specific Aboriginal Participation Plan has been developed to monitor and report on the minimum Aboriginal participation requirements.

- Energy efficiency programs to be developed as targets to aim for, reviewed annually.

13. Reporting

13.1 WEEKLY REPORTING REQUIREMENTS

- Weekly SQE Report
- Weekly Environment & Sustainability Check Sheet or Daily Environmental & Sustainability Check Sheet
  - Results of the Environmental & Sustainability Weekly or Daily Check Sheet are to be reported to the Project Manager

13.2 MONTHLY REPORTING REQUIREMENTS

Monthly Internal Project Report

OnSite Database (Intranet)

- Earthworks
- Structure
- Facade
- Mechanical
- Concrete (insitu and or precast)

13.3 CLIENT & EXTERNAL REPORTING REQUIREMENTS

Monthly Client Report

13.4 REGULATORY REPORTING REQUIREMENTS – EPA

There is a duty to report pollution incidents under section 148 of the Protection of the Environment Operations Act 1997 (POEO Act).

Pollution incidents causing or threatening material harm to the environment must be notified. A 'pollution incident' includes a leak, spill or escape of a substance, or circumstances in which this is likely to occur. 'Pollution incident' is defined in the Dictionary to the Act as an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

If you observe a major pollution incident that presents an immediate threat to human health or property, such as toxic fumes or a large chemical spill, call 000 to report it to emergency services. As first responders, Fire and Rescue NSW, the NSW Police and the NSW Ambulance Service are responsible for controlling and containing incidents.

In the event of a reportable environmental incident the Project Manager (PM) must refer to the Injury, Illness and Incident Management and Reporting flow chart for detailed guidance regarding the management and reporting of environmental incidents.

14. Document and Record Management

Environmental project records are controlled in accordance with the Project Management Plan Section : Document and Record Management. The minimum records maintained include the following:

Category	Record	Responsible	Retention Timeframe
General Requirement	Environmental Management Plan (all versions), Including: • Performance Targets and Measurements • Contact and Service Provider Information Site Diary – Site Manager \ Foreman Site Diary – SQE (where required) • Inspection Records • Training Records – Including Qualifications held by individuals • All formal correspondence with stakeholders • Meeting Minutes • Complaint records • Audit reports (including internal review reports) • Weekly Environmental & Sustainability Checksheets • Induction Records	Project Manager Site Manager Project Manager Site Manager Site Manager Project Manager Project Manager Site Manager Site Manager SQE Supervisor Site Manager Site Manager	Permanent Permanent Permanent Permanent Permanent Permanent Permanent Permanent Permanent
Legislative \ Regulatory	Identified Legislative Regulatory Register	Project Manager	Permanent
Approvals, Permits and Licenses	Any Approvals, Permits and Licenses	Project Manager	Permanent
External Review Reports	Not Applicable		
Construction Waste management	Waste tracking dockets Waste disposal receipts	Site Manager Site Manager	Permanent Permanent
Land Contamination	Not Applicable		
Hazardous Substance	Copies of MSDS's	Site Manager	Permanent
Corrective Action Request	Copies of issued corrective action \ Action Required Notifications Log of corrective actions	Project Manager Project Manager Project Manager	Permanent Permanent Permanent
Incident reporting	Environmental incident reports Incident Investigation Reports	Project Manager Project Manager	Permanent Permanent
Performance Analysis \ Evaluation Reports	Where available	Project Manager	Permanent

Additional information regarding document and record control is available, refer: Control of Documents and Control of Records.

Each subcontractor is selected on the basis of their ability to meet all specified requirements including Quality, Environment and Health and Safety. The following are examples of environmental documents which may be required from subcontractors:

- Tool box talks and attendance registers
- Environmental Risk Assessment
- Project Risk Assessments
- Safe Work Method Statement (SWMS)
- Material Safety Data Sheets (MSDS)
- SQE information such as logbook, tests records etc of all plant and equipment on site Competency Certificates and training records

Applicable subcontractors may also be required to submit a site specific Quality, Environmental and \ or Health and Safety Plan as determined by the contract requirements and / or risks.

14.1 CUSTOMISED COMPASS TEMPLATES

During the life of the project a number of Compass templates will be customised, and in some cases continually revised to address project specific requirements: for example Risk Profile templates. In order to ensure these documents \ records are appropriately controlled this project will utilise, either or both, Aconex and or the Site Server Electronic Filing System. Where such documents are controlled via the Site Server Electronic Filing System, the Compass to Project Controlled Document Register shall be completed and maintained accordingly.

15. Subcontractor Management

All subcontractors are to ensure they make appropriate environmental inclusions in their SWMS \ JSEAs and abide by all statutory requirement mentioned in this EMP.

Hindmarsh* is to ensure SWMS are reviewed as per SWMS Review, and to ensure legislative \ regulatory requirements are meet as per Legal Register. Risk Profiles completed are also to be used during the review of SWMS to ensure all known risks have been addressed and adequately controlled.

Monthly subcontractor spot audit may be undertaken to ensure each Subcontractor complies with all requirements (Contract, Statutory etc)

16. Project Environmental \ Sustainability Information & Particulars

16.1 EXISTING ENVIRONMENTAL CONDITIONS OF SITE

Existing surrounding development generally includes low density residential developments and local sports facilities to the east, Jerrabomberra Public School to the northeast, and grazing land and natural grasslands to the north, south and west.

The site currently had no road frontage. The future Environa Drive (currently under construction) will border the site to the west. Additionally, there is an unnamed road currently under construction that borders the site to the north and will provide direct access into the school site.

The site is sloped from north to south, with approximately 14m level difference between highest and lowest points. At approximately +606 Australian Height Datum (AHD), the land at the northern site boundary is the highest point of the site, and the land across the north road continues to rise up, away from the site. The land falls away to the south, east and west. The site's lowest point is approximately +592m AHD and occurs at the southern boundary.

Jerrabomberra Creek is located approximately 150m to the southwest of the site, and adjoining land to the southeast is a small dam that forms part of a watercourse and broader wetland.

The site is identified bushfire prone land. The site contains primarily grassland with no remnant trees.

There were no existing services and easements on the site. Once construction is complete on Environa Drive and the north road, services tie-ins will be available for gas, electricity, communications, water supply, drainage and stormwater.

Mitigation measures to be implemented during construction per the Aviation Wildlife assessment are as follows;

- Minimise ponding from interruptions to ponding
- Ensure foodwaste are not accessible to birds on the construction site with the use of secure bins
- Use of direct seeding in replace of spray seeding on verges, bus zone, drop off and paths

16.2 DILAPIDATION REPORT

Dilapidation report will be undertaken prior to site works commencement. This report will include roads and entryways of adjacent properties.

16.3 HERITAGE \ CULTURAL CONSIDERATIONS

The site has no known (non-Aboriginal) heritage or archaeological significance. The site is not a listed heritage item, is not located in a heritage conservation area and is not located near a heritage item or conservation area.

As for cultural, overall, it has been found that the proposal will result in minor and acceptable impacts on Aboriginal cultural heritage, with no further investigation required, subject to ongoing consultation with Aboriginal stakeholders.

16.4 GEOTECHNICAL REPORT

Please refer to Aconex Mail number Hindmars-TRANSMIT-000110 for the Geotechnical Investigation Report for the Jerrabomberra High School site.

16.5 CONTAMINATION \ REMEDIATION REPORT

Please refer to Aconex Mail number Hindmars-TRANSMIT-000848 for the Interim Soil Contamination Report. “Based on the findings of the assessment, potential for gross chemical contamination to be present within the site is considered to be low.” (Page 22 - findings / conclusion of Douglas Partners ‘DETAILED SITE INVESTIGATION (CONTAMINATION)’ report March 2022.

Any suspected contamination discovered during civil works on the site will be dealt with as highlighted below in 16.6 and 16.7

16.6 UNEXPECTED FINDS PROTOCOL (KNOWN HEALTH HAZARD)

Refer to section 17 in the Emergency Management Plan for Jerrabomberra High School;

ALL WORKERS

- Must notify HCA representative immediately. Contact CEW: Nick Valois on 0421286395 or any other HCA Representative
- May immediately call 000 if you believe it necessary
- May activate audible alarm device / system if you believe it necessary

ACTION

HCA

- CEW / EW to assess the emergency
- Cease work in the area, and adjacent work areas and establish a 10m exclusion and containment zone;
- Fence the zone off for additional protection for workers and general public
- Immediately engage the services of an licenced asbestos assessor in NSW or Suitably qualified environmental scientist or sample contamination and provide expert advise.
- Communicate the unexpected find as soon as practical including control measures to potentially affected workers and the regulator (for Asbestos Only) and engage Occupational Hygienist.
- If required commence evacuation of site by activating the site siren through nurse call system of air horn
- The same day Both TSA and SINSW will be notified of a find, potential contamination of person and environment.

ALL WORKERS

EVACUATE / COMMUNICATE

- Evacuation will be in the form of an air horn ‘3 blasts’ or emergency siren through the nurse call system
- In the event of an evacuation HCA management will direct all workers on site to the muster point

16.7 UNEXPECTED FINDS PROTOCOL (ASBESTOS, CONTAMINATION OR ARCHAEOLOGICAL FINDS, ABORIGINAL HERITAGE OR NONABORIGINAL HERITAGE FINDS)

ALL WORKERS

- Must notify HCA representative immediately. Contact CEW: Nick Valois on 0421286395 or any other HCA Representative
- May activate audible alarm device / system if you believe it necessary

ACTION

HCA

- In the event of that surface disturbance identifies a new Aboriginal / historical object, section C25 and C26 of the consent conditions is followed in addition to the below area protection protocol.
- CEW / EW to assess if there is any risk to workers or the environment
- Cease work in the area, and adjacent work areas and establish a 10m exclusion and containment zone;
- Fence the zone off for additional protection for workers and general public
- HCA to notify TSA and SINSW as soon as practical
- Communicate the unexpected find as soon as practical including control measures to potentially affected workers and the regulator (for Asbestos Only) and engage Occupational Hygienist.
- The same day both TSA and SINSW will be notified of a find, potential contamination of person and environment.
- Section 16.7 has considered recommendation of the Limited Contamination Assessment (Document No. R.002.Rev3), prepared by Douglas Partners and dated 16 September 2021 added to section 16.7.
- Pursuant to section 4.12 of the EPBC Act The Building Developer will engage an ecologist to prepare a detailed report;
  - If required the report will be issued to the commonwealth DAWE
  - Depending on the nature of the unexdpected find and associated impact, approval from DAWE may be required for works to recommence
  - If required, the report will identify the number and class of NSW Biodiversity Offset Scheme Credits that should be retired
  - Works will no proceed until sign off is issued t HCA by the Ecologist and DAWE

ALL WORKERS

EVACUATE / COMMUNICATION

- Evacuation will be in the form of an air horn ‘3 blasts’ or emergency siren through the nurse call system
- In the event of an evacuation HCA management will direct all workers on site to the muster point

16.8 NOISE, DUST & VIBRATION MANAGEMENT

HCA’s Construction Noise and Vibration Management Plan will have a simple yet effective structure.

- Gather information
- Formulate actions
- Agree and communicate recommendations Implement everything.
- Review and communicate.

As the Jerrabomberra High school site is green field, the HCA believes the noise and vibration elements to be of a low risk and thus will monitor with no specific actions. Dust management / suppression will be managed with the use of water trucks on a regular schedule.

If required Data loggers / noise and vibration will record in strategic locations around the site, firstly to establish benchmark data for the site prior to the commencement of construction activity and

secondly to monitor noise and vibration periodically during construction. Excessive noise and vibration will be easily identified by the monitors allowing HCA to assess the cause and implement management strategies to remove the risk.
HCA believe the most effective means of dust control is through water suppression. HCA temporary hydraulic scope of services includes provision for hose taps at the primary and secondary entrances. In addition, HCA will utilise water carts in difficult to access areas.

HCA will use cattle grids at the entry of the site & regular street sweepers to ensure that the surrounding roadways are kept clean and free from foreign material.

HCA does not envisage any impact for noise, vibration, dust or odour to the adjoining properties located on Palm Court in Jerrabomberra.

The landscaping and revegetation of stripped soil will commence as soon as practical in line with construction programme for landscaping.

This section mirrors the recommendations outlined in section 4.6 of the Dust Management of the Poplars EPBC Act Construction Environmental Management Plan (EPBC No. 2020/8801), prepared by Indesco and dated 17 October 2021. For further information on sediment and erosion control see Appendix B.

16.10 LIGHT POLUTION

External lighting used for safe access and egress as well as security will conform with AS4282-2019.

16.11 WASTE MANAGEMENT

In recent years the waste management industry has responded positively to industry pressure and government legislation. As a result, HCA is able to ensure accurate reporting is available and efficient management of waste separation for recycling is assured. HCA through its waste subcontractor tracks the waste removal from site and provided with statistics at the end of each month with recycling vs landfill.

Through separating onsite waste into different categories HCA further assist with the view to achieve the highest level of recyclability of construction waste. See appendix I

(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 for materials to remain;

(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.

The above items are all documented and reported on monthly as a part of HCA monthly reporting. The location of of the waste disposal will be determined by which waste contractor HCA engages during the procurement process.

Below is an example of the waste reporting HCA receive from a waste contractor.

September-October 2021

Bin Number	Bin Size	Total Weight		Waste Type	Method	Location of Disposal	% of Waste Recycled
101182	15	2.03	Tonnes	Mixed Demo	Screen & Grappled	Tiger Waste Transfer Station	90
101383	15	4.19	Tonnes	Mixed Demo	Screen & Grappled	Tiger Waste Transfer Station	90
101740	15	1.69	Tonnes	Mixed Demo	Screen & Grappled	Tiger Waste Transfer Station	80
102154	15	1.49	Tonnes	Mixed Demo	Screen & Grappled	Tiger Waste Transfer Station	80
102241	15	3.46	Tonnes	Mixed Demo	Screen & Grappled	Tiger Waste Transfer Station	80
102504	15	4.10	Tonnes	Mixed Demo	Screen & Grappled	Tiger Waste Transfer Station	90
102761	15	1.40	Tonnes	Mixed Demo	Screen & Grappled	Tiger Waste Transfer Station	80
Totals	105	18.36					
% Reycled Items			84				
Percentage Waste Recycled to date =				952.16 / 1115.6			85%

All waste collected by Tiger Waste (HCA's preferred waste contractor) is delivered to our ACT Government licenced waste sorting facility in Fyshwick. The waste is sorted by mechanical grabs before it is screened and processed through our hand picking station. The recyclable materials are delivered to local and regional licenced recyclers, whilst the landfill waste is transported daily to the Veolia operated Woodlawn Bioreactor

16.12 ADDITIONAL REPORTS

Refer to section 2.3.1 for list of documents and reports referenced.

16.13 PROJECT SPECIFIC SUSTAINABILITY INITIATIVES

Refer to section 4.4 for full list of project specific sustainability initiatives.

16.14 ENVIRONMENTAL MANAGEMENT SUB-PLANS

This section of the plan is to identify whether there are any sub-plans applicable to this document. This will include (the emergency management plan must be referenced here):

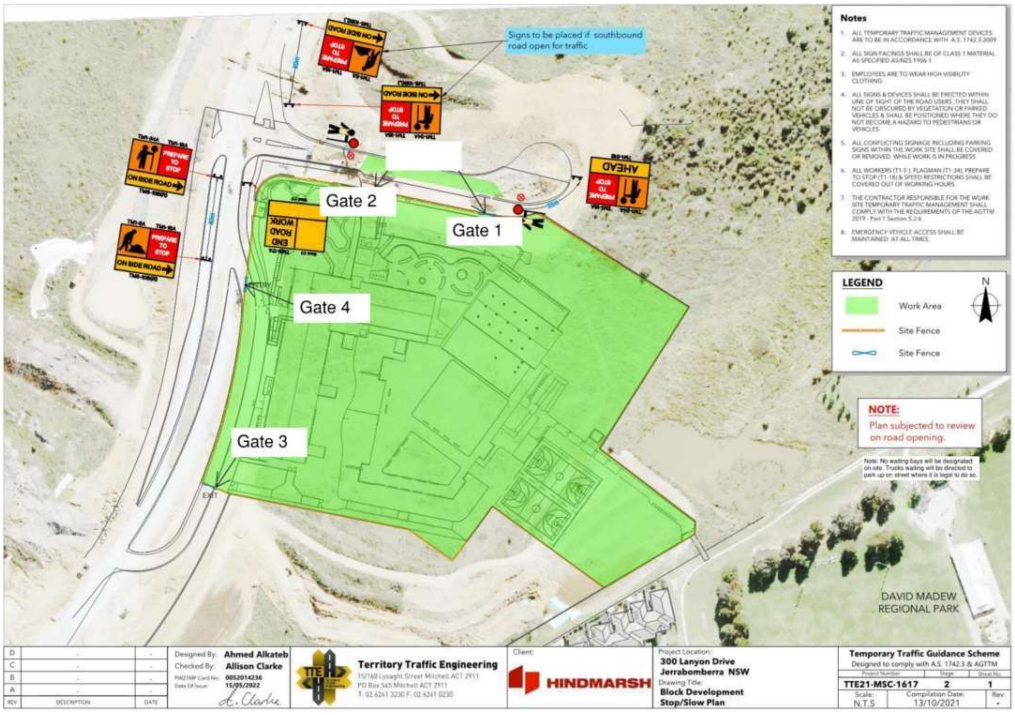
- Archaeological Assessment
- Ecological Assessment
- Contamination assessment
- Heritage assessment
- Bushfire Analysis
- Flood Management

16.15 CONSTRUCTION TRAFFIC AND PEDESTRIAN MANAGEMENT SUBPAN

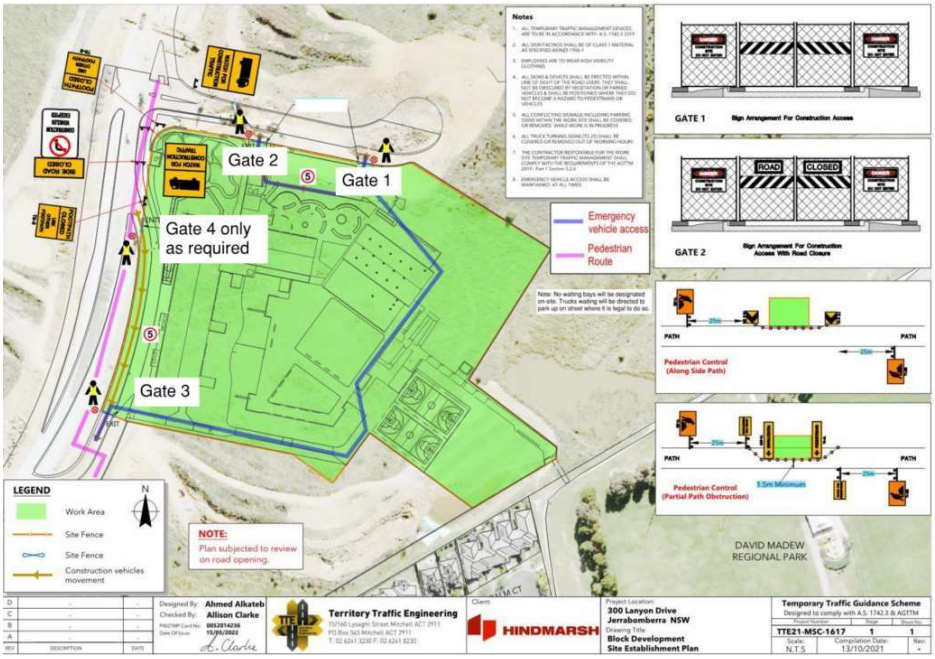
See appendix E for detail access plans. Main entry into the site will be via Gate 1 and Gate 3 for deliveries. Gate 2 will be used to access the contractors internal parking as shown below, from this location vehicles are met with steel sliding gates that will be closed at all times and manned by a CW as documented in the TTMP. There is temporary gravel roads from Enivona dr into the contractor parking and on the haul road around the site for truck and crane access.

Full traffic and pedestrian management plan can be found in the Temporary traffic management plan for Jerrabomberra

Stage 1 (site establishment staging described in 16.16)

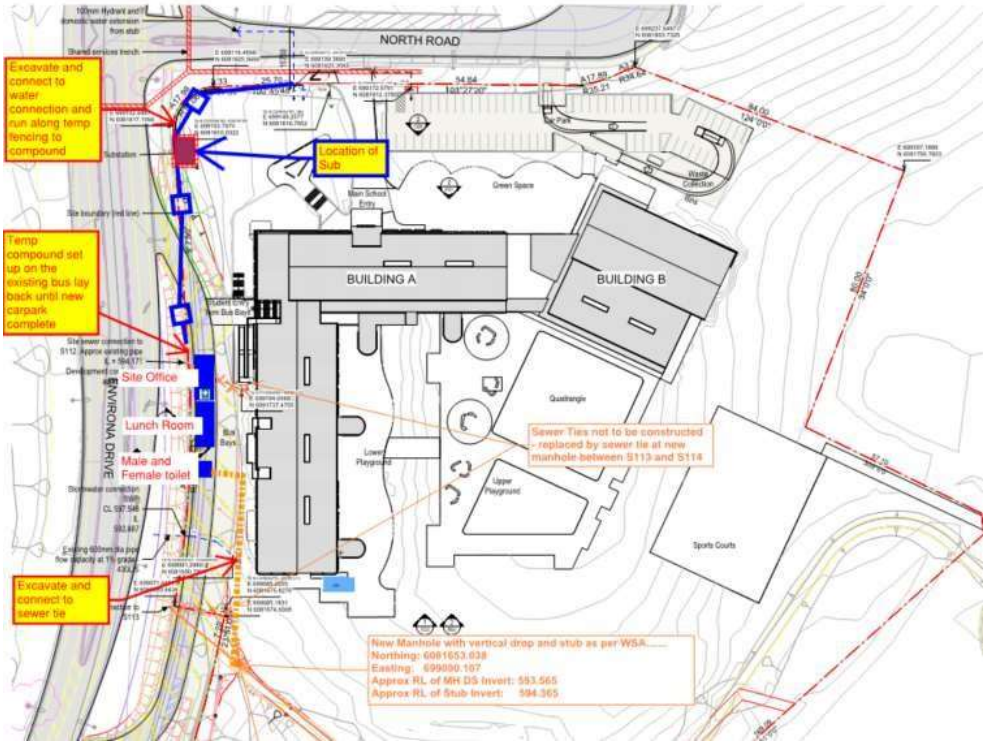


Stage 2

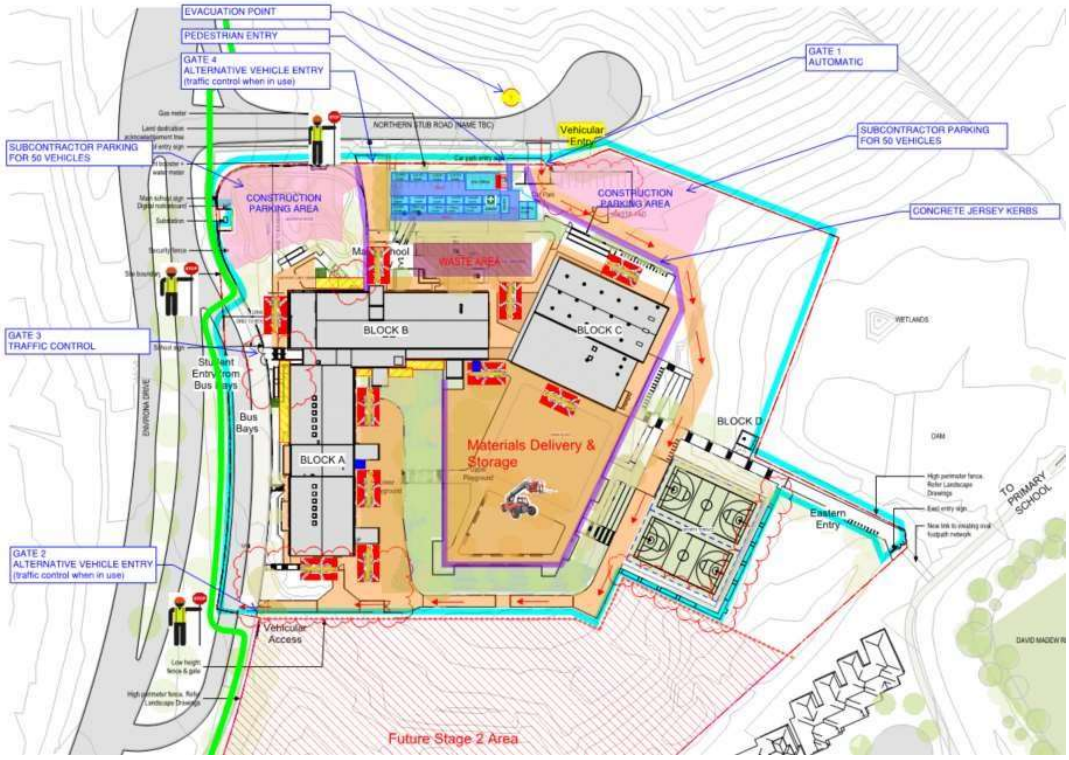


16.16 SITE SETUP – ACCOMMODATION AND AMENITIES MANAGEMENT

A site Layout Plan for stage 1 and 2 has been provided including site amenities. Stage 1 (Aug 22 – Sep 22)



Stage 2 (Sep / October 22 – project complete)



APPENDIX A – ENVIRONMENTAL AND SUSTAINABLITY POLICY

HINDMARSH
Leadership at work

Environment and Sustainability Policy

Hindmarsh operates with full appreciation and awareness that environmental protection and sustainability are principle to our ongoing success. Operations in terms of both construction and completion are compassionate to the environment, the local community and aim to support the ongoing sustainability of the environment.

Hindmarsh seeks to meet its own environmental needs and the needs and expectations of clients, stakeholders, employees and the community by:

- Setting and continually reviewing measureable environmental objectives and targets. Backed by ongoing monitoring, reporting and analysis supporting continual improvement. Complimented by ongoing feedback at all levels.
- Prevent pollution and unnecessary resource consumption by setting targets and maintaining systems and processes which facilitate the more efficient use of energy and material resources and improved waste management, waste avoidance, re-use and recycling.
- Seek to minimise construction related aspects and impacts including noise, vibration, groundwater, air quality, land contamination, amenity and heritage.
- Promote a shared sense of ownership and responsibility for optimal environmental performance from board through to employees and contractors whilst developing a culture of environmental respect and appreciation.
- Encourage and support environmental awareness through ongoing training and development of competencies particular to specific environmental impacts related to individual activities.
- Comply with all legal requirements including environmental Legislation, Regulations, Codes of Practice, Applicable Australian and other standards specific to Hindmarsh.
- Implement and maintain the Hindmarsh Management System and its Environmental elements to ensure all potential aspects and impacts are identified, evaluated and suitably eliminated or controlled.
- Foster and support continuous improvement at all levels including the identification of key environmental initiatives.

Compliance with this policy will be monitored, audited and continually reviewed so as to remain effective and aligned with all of our operations.

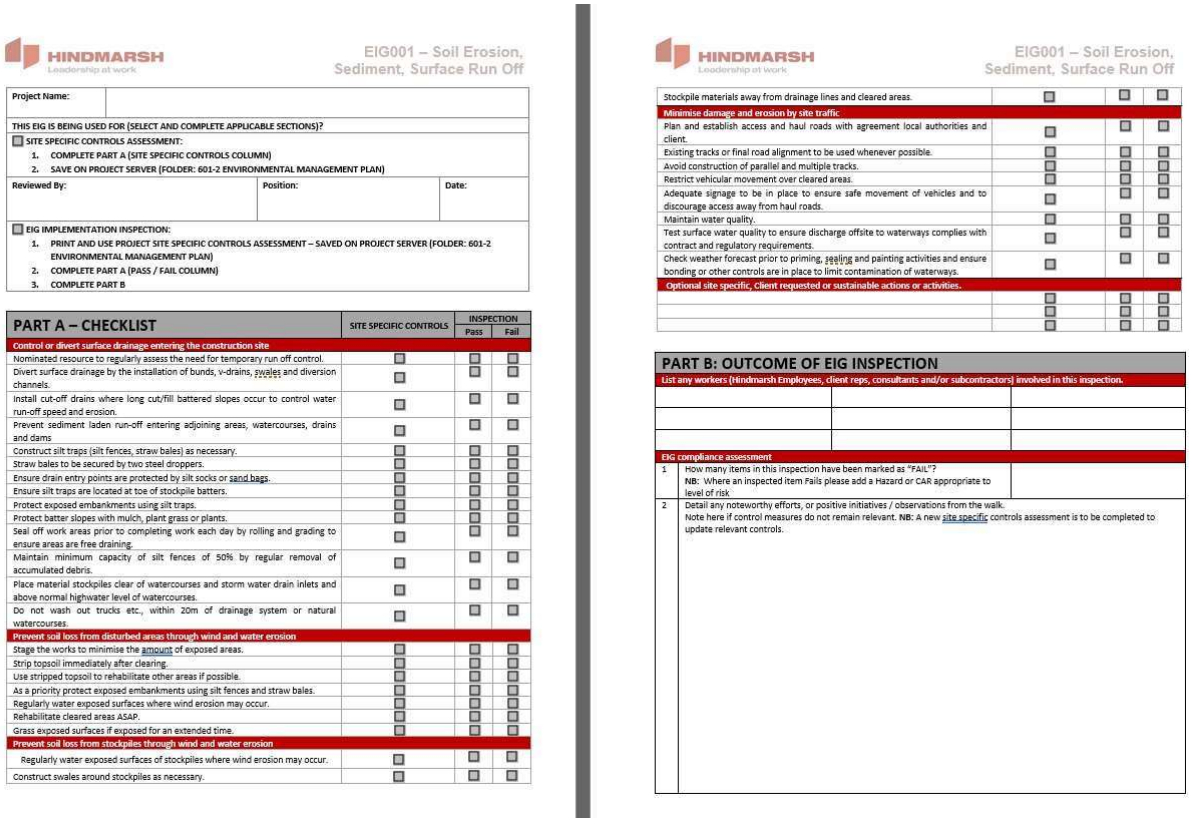
Rowan Hindmarsh
Chief Executive Officer

APPENDIX B – ENVIRONMENTAL FETAURES AND SOIL AND WATER MANAGEMENT

Document attached - Appendix B - 2022-07-10 Jerrabomberra SWMP M+G response, in conjunction with the below HCA systems.

HCA procedure and guide for Soil Erosion, Sediment, Surface Run Off is designated EIG001 and is available on Compass

HCA note that the PCA (principal certifying authority) for this project is no longer QPRC, but now BM+G. BM+G have reviewed the plan and accepted prior to issue of CC1 as part of the CEMP. Council was consulted and amendments made accordingly as per the conditions of consent.



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EIG001 – Soil Erosion, Sediment, Surface Run Off

Project Name:			
THIS EIG IS BEING USED FOR (SELECT AND COMPLETE APPLICABLE SECTIONS)?			
☐ **SITE SPECIFIC CONTROLS ASSESSMENT:** 1. COMPLETE PART A (SITE SPECIFIC CONTROLS COLUMN) 2. SAVE ON PROJECT SERVER (FOLDER: 601-2 ENVIRONMENTAL MANAGEMENT PLAN)			
Reviewed By:	**Position:**	**Date:**	
☐ **EIG IMPLEMENTATION INSPECTION:** 1. PRINT AND USE PROJECT SITE SPECIFIC CONTROLS ASSESSMENT – SAVED ON PROJECT SERVER (FOLDER: 601-2 ENVIRONMENTAL MANAGEMENT PLAN) 2. COMPLETE PART A (PASS / FAIL COLUMN) 3. COMPLETE PART B			

PART A – CHECKLIST	SITE SPECIFIC CONTROLS	INSPECTION	
		Pass	Fail
Control or divert surface drainage entering the construction site			
Nominated resource to regularly assess the need for temporary run off control.	☐	☐	☐
Divert surface drainage by the installation of bunds, v-drains, swales and diversion channels.	☐	☐	☐
Install cut-off drains where long cut/fill battered slopes occur to control water run-off speed and erosion.	☐	☐	☐
Prevent sediment laden run-off entering adjoining areas, watercourses, drains and dams	☐	☐	☐
Construct silt traps (silt fences, straw bales) as necessary.	☐	☐	☐
Straw bales to be secured by two steel droppers.	☐	☐	☐
Ensure drain entry points are protected by silt socks or sand bags.	☐	☐	☐
Ensure silt traps are located at toe of stockpile batters.	☐	☐	☐
Protect exposed embankments using silt traps.	☐	☐	☐
Protect batter slopes with mulch, plant grass or plants.	☐	☐	☐
Seal off work areas prior to completing work each day by rolling and grading to ensure areas are free draining.	☐	☐	☐
Maintain minimum capacity of silt fences of 50% by regular removal of accumulated debris.	☐	☐	☐
Place material stockpiles clear of watercourses and storm water drain inlets and above normal highwater level of watercourses.	☐	☐	☐
Do not wash out trucks etc., within 20m of drainage system or natural watercourses.	☐	☐	☐
Prevent soil loss from disturbed areas through wind and water erosion			
Stage the works to minimise the amount of exposed areas.	☐	☐	☐
Strip topsoil immediately after clearing.	☐	☐	☐
Use stripped topsoil to rehabilitate other areas if possible.	☐	☐	☐
As a priority protect exposed embankments using silt fences and straw bales.	☐	☐	☐
Regularly water exposed surfaces where wind erosion may occur.	☐	☐	☐
Rehabilitate cleared areas ASAP.	☐	☐	☐
Grass exposed surfaces if exposed for an extended time.	☐	☐	☐
Prevent soil loss from stockpiles through wind and water erosion			
Regularly water exposed surfaces of stockpiles where wind erosion may occur.	☐	☐	☐
Construct swales around stockpiles as necessary.	☐	☐	☐

HINDMARSH
Leadership at work

EIG001 – Soil Erosion, Sediment, Surface Run Off

Stockpile materials away from drainage lines and cleared areas.	☐	☐	☐
Minimise damage and erosion by site traffic			
Plan and establish access and haul roads with agreement local authorities and client.	☐	☐	☐
Existing tracks or final road alignment to be used whenever possible.	☐	☐	☐
Avoid construction of parallel and multiple tracks.	☐	☐	☐
Restrict vehicular movement over cleared areas.	☐	☐	☐
Adequate signage to be in place to ensure safe movement of vehicles and to discourage access away from haul roads.	☐	☐	☐
Maintain water quality.	☐	☐	☐
Test surface water quality to ensure discharge offsite to waterways complies with contract and regulatory requirements.	☐	☐	☐
Check weather forecast prior to priming, sealing and painting activities and ensure bonding or other controls are in place to limit contamination of waterways.	☐	☐	☐
Optional site specific, Client requested or sustainable actions or activities.			
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

PART B: OUTCOME OF EIG INSPECTION		
List any workers (Hindmarsh Employees, client reps, consultants and/or subcontractors) involved in this inspection.		
EIG compliance assessment		
1	How many items in this inspection have been marked as "FAIL"? **NB:** Where an inspected item Fails please add a Hazard or CAR appropriate to level of risk	
2	Detail any noteworthy efforts, or positive initiatives / observations from the walk. Note here if control measures do not remain relevant. **NB:** A new site specific controls assessment is to be completed to update relevant controls.	

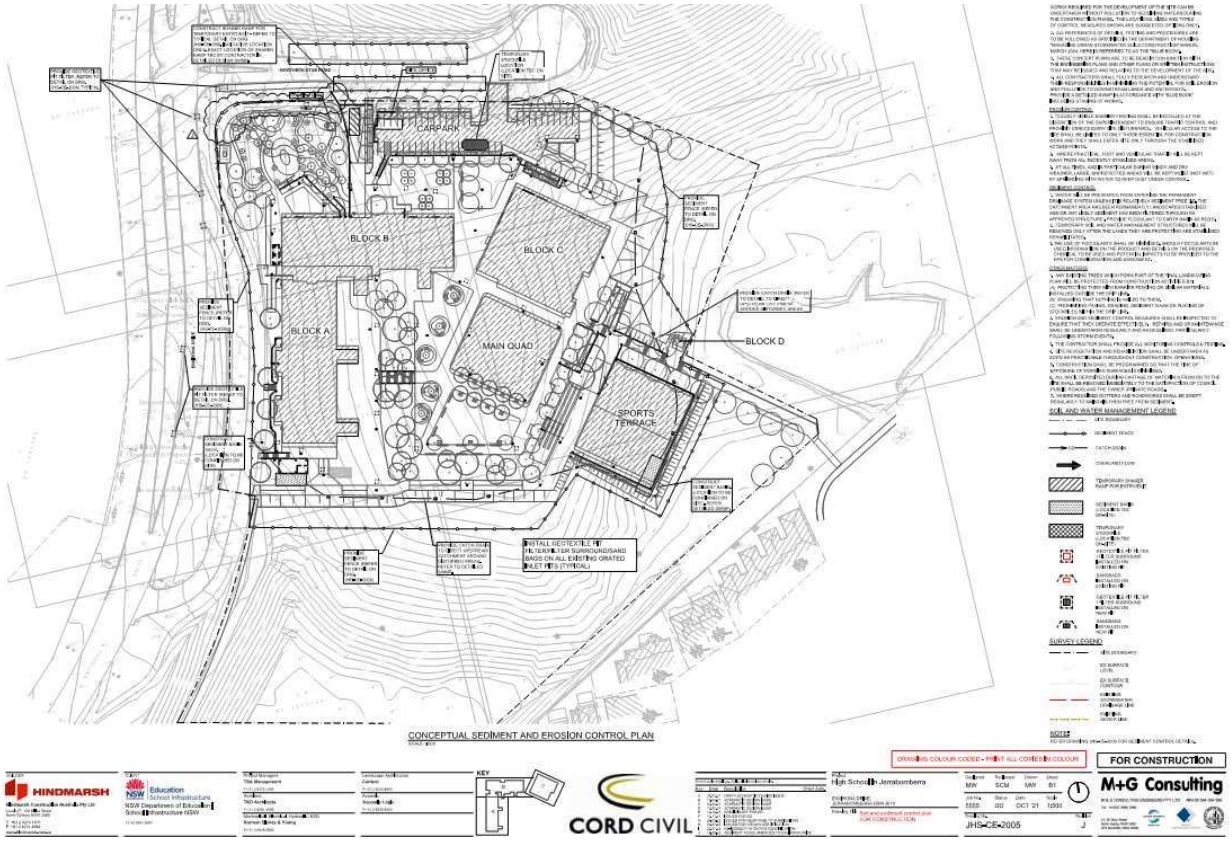
3	Based on the above, I give the EIG implementation the below rating (considering positive actions / behaviours noted above along with negative actions / behaviours noted in the inspection):			
	GREEN	BLUE	ORANGE	RED
	Nil issues	Some minor issues that were able to be rectified immediately	Some issues that require rectifying in the next 5 days	Some major issues identified that have been elevated to the Project Manager immediately

HCA Inspection completed by site team member (Cadets only to complete concurrently with another team member):			
NAME (PRINT)	SIGNATURE	POSITION	DATE

HCA Inspection accepted by (Project Manager):		
NAME (PRINT)	SIGNATURE	DATE

THIS INSPECTION FORM MUST BE UPLOADED AND ATTACHED TO AN SQE ACTIVITY (TYPE: ENVIRONMENTAL CHECK) FOR TODAY IN YOUR SITE DIARY

Soil and Erosion Control Plan JHS-CE-2005 – Accepted by civil contractor and implemented.



- HCA intend to treat water in sediment ponds with Flocculant and pup into stormwater on a as required basis.
- For 1:50 and 1:100 rain events the over flow of water from sediment ponds will be filtered through silt fencing located on the low side of stage 1 and shown on the above JHS-CE-2005.

Condition	Condition Requirement		Document / Sub-Plan Reference
B17	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;	Section A Page 1
	(b)	measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;	Section B Page 2
	(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';	Section C Page 2
	(d)	should stockpile remain within the proposed school site, an intrusive investigation should be undertaken to delineate the extent and quality of the stockpile (the recommendations of the Report on Limited Contamination Assessment, prepared by Douglas Partners and dated 16 September 2021 must be complied with);	Section D Page 2
	(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);	Section E Page 2
	(f)	detail all off-site flows from the site; and	Section F Page 2

	(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 and 1 in 100-year ARI.	Section G Page 2

M & G Consulting Engineers Pty Ltd (ABN 65 094 064 990)
Level 3, 50 Berry Street, North Sydney NSW 2060
PO Box 1656, North Sydney NSW 2059
T: (02) 8666 7888 Internet: www.mg.com.au

20th July 2022

Hindmarsh

Attention: Mr Nick Valois

By email:
< nick.valois@hindmarsh.com.au >

Dear Sir,

Re. New High School Jerrabomberra SSD Conditions - Construction Soil and Water Management
Our Ref. 5555

Introduction

As the site area of the proposed school site is greater than 2,500m², a conceptual Soil and Water Management Plan (SWMP), in accordance with NSW Landcom publication "Soils and Construction 4th Edition" ("Blue Book") has been prepared by M+G Consulting Engineers (M+G).

This conceptual plan is detailed on M+G our drawings: JHS-CE-2005 & JHS-CE-2006, attached.

In conjunction with Hindmarsh & M+G, the earthworks contactor will undertake and provide a Detailed SWMP, including detailed engineering drawings of the soil and water control measures in accordance with the "Blue Book".

Detailed Responses

Condition B17.

(a) Be prepared by a suitably qualified expert, in consultation with Council;

The conceptual SWMP, as detailed on the above drawings, has been prepared by Simon Matthews, CPEng (Civil & Structural), NER, of M+G Consulting.

(b) measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;

It is proposed that cattle grids will be installed at exit points of the site; these grids will be inspected and maintained as required on a daily basis.

(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';

The conceptual SWMP detailed on the attached drawings provides conceptual details of the soil and water control measures in accordance with the "Blue Book". Detailed engineering drawings of the specific control measures including the locations of these control measures will be provided in the Detailed SWMP.

These control measures will include, but not be limited to, sediment fences, filters around stormwater pits, catch drains, check dams, level spreaders, protection to temporary earth stockpiles & sediment basins (if required).

(d) should stockpile remain within the proposed school site, an intrusive investigation should be undertaken to delineate the extent and quality of the stockpile (the recommendations of the Report on Limited Contamination Assessment, prepared by Douglas Partners and dated 16 September 2021 must be complied with);

If any earth piles are required to remain with the site, an intrusive investigation should be undertaken to delineate the extent and quality of the stockpile and the recommendations of the Report on Limited Contamination Assessment, prepared by Douglas Partners and dated 16 September 2021, will be complied with.

(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);

This will include, prior to major rainfall events, a requirement that all potentially high-risk areas of soil erosion such as soil stockpiles, steep disturbed slopes etc. are covered with geotechnical material to reduce potential soil erosion. Sediment traps and check dams etc. will be inspected and maintained if required prior to the storm events.

All erosion and sediment control measures will be required to be regularly inspected, particularly after wet weather events, and should be repaired and/or maintained to ensure their required functionality. Site works will not recommence until all required erosion and sediment control measures have been inspected and maintained after wet-weather events.

(f) detail all off-site flows from the site.

The present pre-construction off-site flows are via overland flow. During the initial construction stages the off-site flows will also entirely be by overland flow.

Prior to overlands flows flowing off-site they will pass through sediment control devices to ensure that the sediments contained in these flows is trapped and retained by these devices and the discharged waters are free of suspended sediment. These sediment control devices include, check dams, sediment fences and sediment basins. The Detailed SWMP will include the detailed design of these devices, in accordance with the relevant sections of the "Blue Book".

As the stormwater drainage system is progressively installed some of the off-site flows will be via this stormwater drainage system. Prior to these overland flows entering the stormwater drainage pits, sediments will be removed and trapped by geotextile filters or the like around the drainage pits

All these control devices will be required to be maintained and inspected, including the removal of sediment, especially after large rainfall events as part of a monitoring/maintenance programme that will be included in the Detailed SWMP to ensure that the treated discharge water does not contain more than 50 mg/L of suspended solids ("Blue Book" chapter 6.3.3 (d)) and the downstream catchment is not adversely affected by the construction stage of the development.

(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 and 1 in 100-year ARI.

The sediment control devices will be sized to accommodate the design water flows from small (1 in 5-year ARI) and large sized events (1 in 100-year ARI) in accordance with the "Blue Book" Chapter 5. These measures will include, but not be limited to, check dams in drainage channels, stabilized banks to channels and energy dissipators and will be detailed in the Detailed SWMP.

In particular the detailed design including the sizing of the sediment basins takes into account the soil properties of the site and expected weather conditions. These basins are designed to operate in a manner that producers near-clear water discharge (i.e.

total suspended concentrations nor exceeding 50mg/L), especially following period of light rainfall.

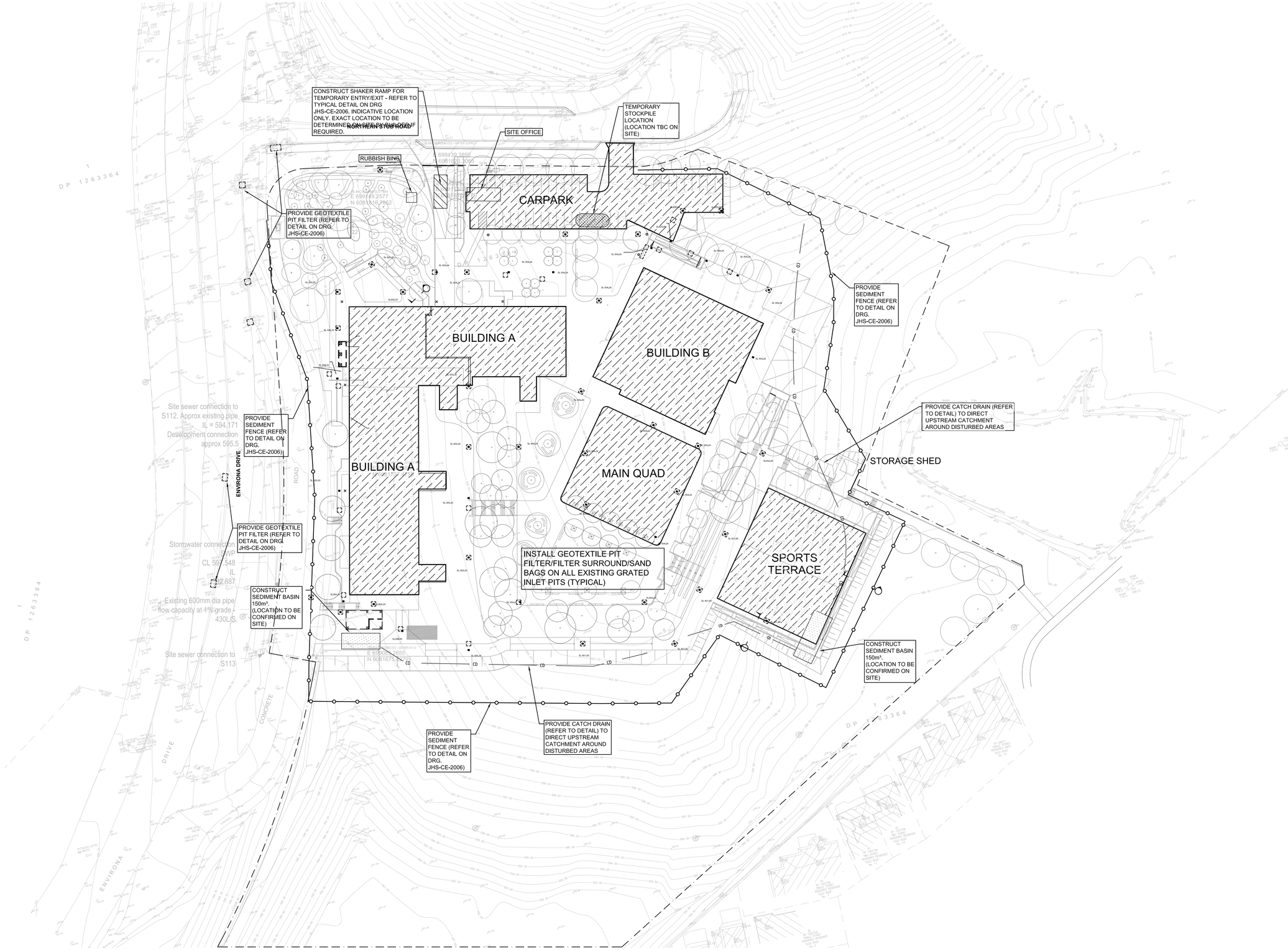
These basins are designed in accordance with Chapter 6 of the "Blue Book" as specified in the Detailed SWMP. Chemical flocculation maybe required to achieve the water quality objectives (50 mg/L suspended solids). If the site soil types are clayey or dispersive soils they may require flocculation to achieve this water quality requirement.

We trust this assist and please do not hesitate to contact myself if any further advice or clarification is required.

Yours faithfully
M+G Consulting

Simon Matthews

Attached - M+G drawings JHS-CE-2005 & 2006



SEDIMENT AND EROSION CONTROL PLAN

SCALE 1:500

SOIL AND WATER MANAGEMENT NOTES

INTRODUCTORY NOTES

1. THIS IS A CONCEPTUAL SOIL AND WATER MANAGEMENT PLAN (SWMP). IT IS INTENDED TO INDCIATE THAT THE CIVIL WORKS REQUIRED FOR THE DEVELOPMENT OF THE SITE CAN BE UNDERTAKEN WITHOUT POLLUTION TO RECEIVING WATERS DURING THE CONSTRUCTION PHASE. THE LOCATIONS, SIZES AND TYPES OF CONTROL MEASURES SHOWN ARE SUGGESTED OPTIONS ONLY.
2. ALL REFERENCES OF DETAILS, TESTING AND PROCEDURES ARE TO BE FOLLOWED AS SPECIFIED IN THE DEPARTMENT OF HOUSING "MANAGING URBAN STORMWATER SOILS CONSTRUCTION" MANUAL, MARCH 2004, HERE IN REFERRED TO AS THE "BLUE BOOK".
3. THESE CONCEPT PLANS ARE TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS AND OTHER PLANS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO THE DEVELOPMENT OF THE SITE.
4. ALL CONTRACTORS SHALL FULLY RESEARCH AND UNDERSTAND THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSTREAM LANDS AND WATERWAYS. PROVIDE A DETAILED SWMP IN ACCORDANCE WITH "BLUE BOOK" INCLUDING STAGING OF WORKS.

EROSION CONTROL

1. CLEARLY VISIBLE BARRIER FENCING SHALL BE INSTALLED AT THE DISCRETION OF THE SUPERINTENDENT TO ENSURE TRAFFIC CONTROL AND PROHIBIT UNNECESSARY SITE DISTURBANCE. VEHICULAR ACCESS TO THE SITE SHALL BE LIMITED TO ONLY THOSE ESSENTIAL FOR CONSTRUCTION WORK AND THEY SHALL ENTER SITE ONLY THROUGH THE STABILISED ACCESS POINTS.
2. WHERE PRACTICAL, FOOT AND VEHICULAR TRAFFIC WILL BE KEPT AWAY FROM ALL RECENTLY STABLISED AREAS.
3. AT ALL TIMES, AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.

SEDIMENT CONTROL

1. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE (I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED/STABLISED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE). PROVIDE FLOCULANT TO EARTH BASIN AS REQ'D.
2. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED/ REHABILITATED.
3. THE USE OF FOCCULANTS SHALL BE MINIMISED. SHOULD FOCCULANTS BE USED INFORMATION ON THE PRODUCT AND DETAILS ON THE PROPOSED CHEMICAL TO BE USED AND POTENTIAL IMPACTS TO BE PROVIDED TO THE EPA FOR CONSIDERATION AND ASSESMENT.

OTHER MATTERS

1. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
(A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE.
(B) ENSURING THAT NOTHING IS NAILED TO THEM.
(C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.
3. THE CONTRACTOR SHALL PROVIDE ALL MONITORING CONTROLS & TESTING.
4. SITE REVEGETATION AND REHABILIATION SHALL BE UNDERTAKEN AS SOON AS PRACTICABLE THROUGHOUT CONSTRUCTION OPERATIONS.
5. CONSTRUCTION SHALL BE PROGRAMMED SO THAT THE TIME OF EXPOSURE OF WORKING SURFACES IS MINIMISED.
6. ALL SPOIL DEPOSITED DURING CARTAGE OF MATERIALS FROM OR TO THE SITE SHALL BE REMOVED IMMEDIATELY TO THE SATISFACTION OF COUNCIL (PUBLIC ROADS) AND THE OWNER (PRIVATE ROADS).
7. WHERE REQUIRED GUTTERS AND ROADWORKS SHALL BE SWEPT REGULARLY TO MAINTAIN THEM FREE FROM SEDIMENT.

SOIL AND WATER MANAGEMENT LEGEND

- SITE BOUNDARY
- SEDIMENT FENCE
- CD — CATCH DRAIN
- OVERLAND FLOW
- TEMPORARY SHAKER RAMP FOR ENTRY/EXIT
- SEDIMENT BASIN (LOCATION TBC ON-SITE)
- TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)
- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON EXISTING PIT
- SANDBAGS INSTALLED ON EXISTING PIT
- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON NEW PIT
- SANDBAGS INSTALLED ON NEW PIT

SURVEY LEGEND

- SITE BOUNDARY
- 595.00 — EX SURFACE LEVEL
- 595.00 — EX SURFACE CONTOUR
- EXISTING STORMWATER DRAINAGE LINE
- EXISTING SEWER LINE

NOTE:

REFER DRAWING JHS-CE-2006 FOR SEDIMENT CONTROL DETAILS.

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

FOR CONSTRUCTION

BUILDER
HINDMARSH
Hindmarsh Construction Australia Pty Ltd
Level 27, 100 Miller Street
North Sydney NSW 2060
T +61 2 9274 1100
F +61 2 6274 8898
www.hindmarsh.com.au

CLIENT
NSW GOVERNMENT Education School Infrastructure
NSW Department of Education | School Infrastructure NSW
T+ 02 9561 8287

Project Managers
TSA Management
T+ 61 2 9276 1400

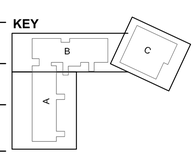
Architect
TKD Architects
T+ 61 2 9281 4399

Mechanical, Electrical, Hydraulic, ESD
Norman Disney & Young
T+ 61 2 9928 6800

Landscape Architecture
Context
T+ 61 2 8244 8900

Acoustic
Acoustic Logic
T+ 61 2 8339 8000

KEY



Do not scale drawings. Verify all dimensions on site.

Rev	Date	Description	Chkd	Auth.
A	24.03.21	DRAFT SCHEMATIC DESIGN ISSUE		
B	16.04.21	SCHEMATIC DESIGN ISSUE		
C	07.05.21	SCHEMATIC DESIGN ISSUE		
D	12.05.21	SCHEMATIC DESIGN ISSUE		
E	15.10.21	PRELIMINARY FOR DD		
F	12.11.21	ISSUED FOR DD		
G	24.03.22	ISSUED FOR RESPONSE TO SUBMISSIONS		
H	01.07.22	ISSUED FOR CROWN CERTIFICATION		

Project
High School in Jerrabomberra

ENVIRONA DRIVE,
JERRABOMBERRA NSW 2619

Drawing Title
SEDIMENT & EROSION CONTROL PLAN

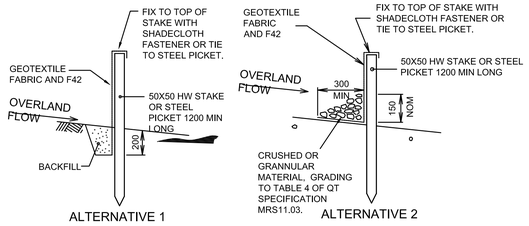
Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1

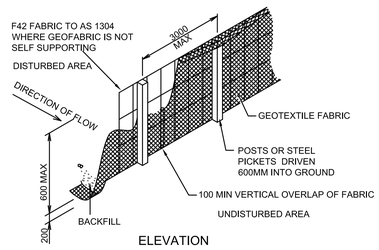
Job No.	Status	Date	Scale
5555	DD	OCT '21	1:500

Drawing No. JHS-CE-2005

Revision H

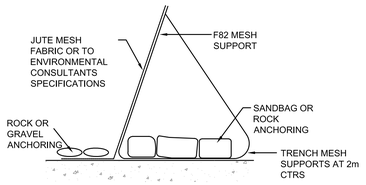
M+G Consulting
M & G CONSULTING ENGINEERS PTY LTD ABN 65 094 064 990
Tel: +61 (0)2 8866 7888
L3, 50 Barry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)





SEDIMENT FENCE

NOT TO SCALE

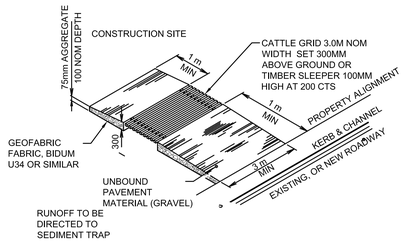


ALTERNATIVE SEDIMENT FENCE

NOT TO SCALE

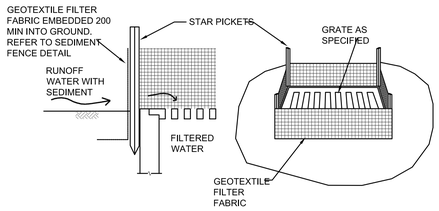
ALTERNATIVE SEDIMENT FENCE NOTES

1. INSTALL THIS TYPE OF SEDIMENT FENCE WHEN USE OF SUPPORT POSTS IS NOT DESIRABLE OR NOT POSSIBLE. SUCH CONDITIONS MIGHT APPLY, FOR EXAMPLE, WHERE APPROVAL IS GRANTED FROM THE APPROPRIATE AUTHORITIES TO PLACE THESE FENCES IN HIGHLY SENSITIVE ESTUARINE AREAS.
2. USE BENT TRENCH MESH TO SUPPORT THE F82 WELDED MESH FACING AS SHOWN ON THE DRAWING ABOVE. ATTACH THE JUTE MESH TO THE WELDED MESH FACING USING UV-RESISTANT CABLE TIES.
3. STABILISE THE WHOLE STRUCTURE WITH SANDBAG OR ROCK ANCHORING OVER THE TRENCH MESH AND THE LEADING EDGE OF THE JUTE MESH. THE ANCHORING SHOULD BE SUFFICIENTLY LARGE TO ENSURE STABILITY OF THE STRUCTURE IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.



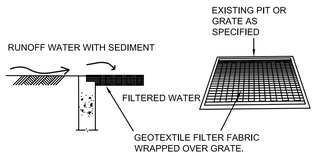
TEMPORARY CONSTRUCTION VEHICLE ENTRY/EXIT SEDIMENT TRAP

NOT TO SCALE



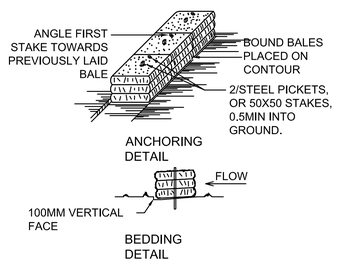
GEOTEXTILE PIT FILTER 1

NOT TO SCALE



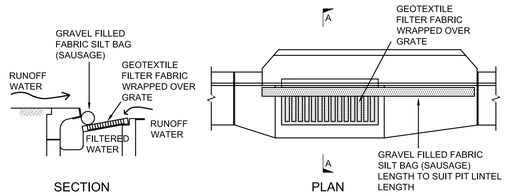
GEOTEXTILE PIT FILTER 2

NOT TO SCALE



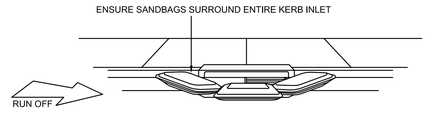
STRAW BALE BANK SEDIMENT CONTROL

NOT TO SCALE



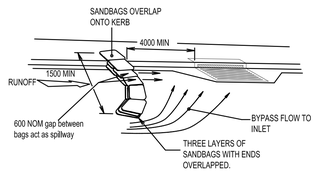
KERB INLET SEDIMENT TRAP

NOT TO SCALE



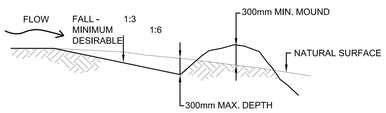
SANDBAG KERB INLET SEDIMENT TRAP

NOT TO SCALE



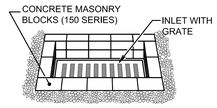
ON GRADE KERB INLET SEDIMENT TRAP

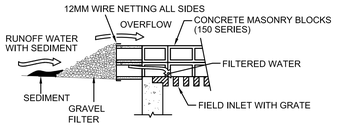
NOT TO SCALE



CATCH DRAIN

NOT TO SCALE





FIELD INLET SEDIMENT TRAP

NOT TO SCALE

BUILDER
HINDMARSH
Hindmarsh Construction Australia Pty Ltd
Level 27, 100 Miller Street
North Sydney NSW 2060
T +61 2 9274 1100
F +61 2 6274 8898
www.hindmarsh.com.au

CLIENT
NSW GOVERNMENT Education School Infrastructure
NSW Department of Education | School Infrastructure NSW
T+ 02 9561 8287

Project Managers
TSA Management
T+ 61 2 9276 1400

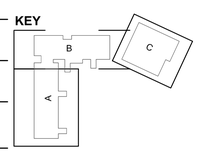
Architect
TKD Architects
T+ 61 2 9281 4399

Mechanical, Electrical, Hydraulic, ESD
Norman Disney & Young
T+ 61 2 9928 6800

Landscape Architecture
Context
T+ 61 2 8244 8900

Acoustic
Acoustic Logic
T+ 61 2 8339 8000

KEY



Do not scale drawings. Verify all dimensions on site.

Rev	Date	Description	Chkd	Auth.
A	24.03.21	DRAFT SCHEMATIC DESIGN ISSUE		
B	16.04.21	SCHEMATIC DESIGN		
C	07.05.21	SCHEMATIC DESIGN		
D	11.05.21	SCHEMATIC DESIGN		
E	15.10.21	PRELIMINARY FOR DD		
F	12.11.21	ISSUED FOR DD		
G	24.03.22	ISSUED FOR RESPONSE TO SUBMISSIONS		
H	01.07.22	ISSUED FOR CROWN CERTIFICATION		

Project
High School in Jerrabomberra

ENVIRONA DRIVE,
JERRABOMBERRA NSW 2619

Drawing Title
SEDIMENT & EROSION CONTROL DETAILS

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1

Job No.	Status	Date	Scale
5555	DD	OCT '21	AS NOTED AT B1

Drawing No. JHS-CE-2006

Revision H

FOR CONSTRUCTION

M+G Consulting
M & G CONSULTING ENGINEERS PTY LTD ABN 65 094 064 990
Tel: +61 (0)2 8866 7888
L3, 50 Berry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)
CONSULT AUSTRALIA Member Firm
Member of AUSTRALIAN STEEL INSTITUTE
ACEC

Consultation Report			
SSD-24461956 - B17: Construction Soil and Water Management Sub-Plan			
	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;		
Date	**Description**	**Content**	**Action**
2/08/2022	Online meeting held with QPRC, TSA, Hindmarsh, M+G, TKD	Soil and Water Management Sub-Plan was discussed	Hindmarsh to provide statement on use of flocculants to QPRC
3/08/2022	Email outgoing (Hindmarsh to QPRC)	Statement on use of flocculants	
8/08/2022	Email incoming (QPRC to Hindmarsh)	Comments from QPRC soil team	Comments to be reviewed by civil engineer and incorporated into SWMSP
18/08/2022	Email outgoing (Hindmarsh to QPRC)	Response letter from Civil Engineer to received comments	

Emily Morrow

Subject:	New High School in Jerrabomberra: QPRC Consultation required to satisfy SSD Conditions of Consent
Location:	Microsoft Teams Meeting
Start:	Tue 2/08/2022 1:00 PM
End:	Tue 2/08/2022 1:30 PM
Recurrence:	(none)
Meeting Status:	Accepted
Organizer:	Robert McKnight

Hi Derek,

As part of the SSD process and issue of the Crown Certificate for the New High School in Jerrabomberra, there are a number of Plans and Design items we need to meet with council to discuss.

We can forward relevant documentation through prior to the arranged meeting if required.

- B17 – Construction Soil and Water Management Sub-Plan – consultation required
- B26 – Stormwater connection design – approval required
- B27 – Public Domain Works – consultation required to confirm the design meets the requirements of Council

If this time / date does not fit within your calendar please can you provide an alternate time when you are available to discuss.

Cheers

Robert

Microsoft Teams meeting

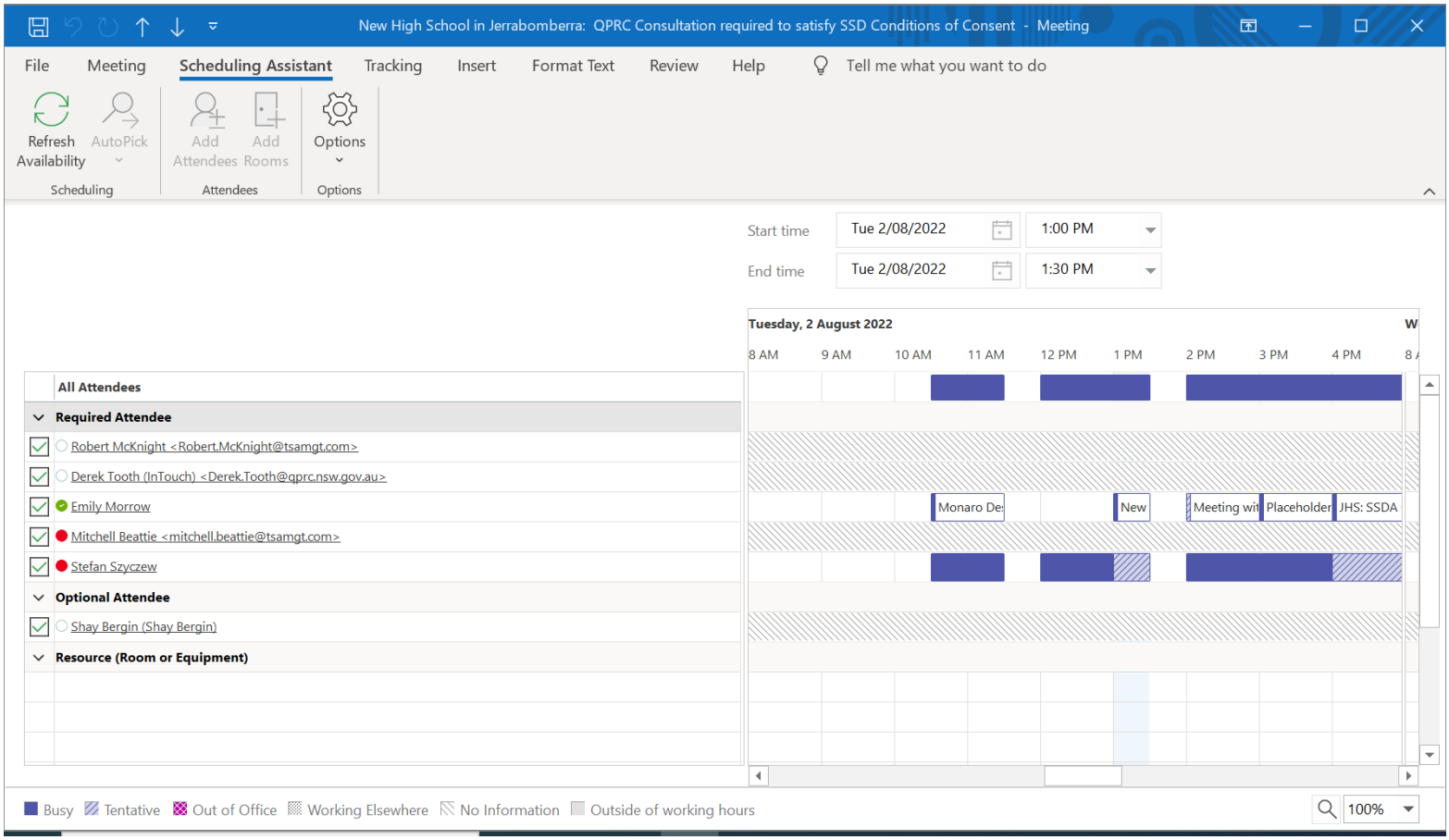
Join on your computer or mobile app
Click here to join the meeting

Meeting ID: 430 525 498 793
Passcode: FXbz6A
Download Teams | Join on the web

Or call in (audio only)
+61 2 8318 0088,,35587394# Australia, Sydney
Phone Conference ID: 355 873 94#
Find a local number | Reset PIN

02/08/2022 - Evidence of Online Meeting

Learn More | Meeting options



Evidence of Consultation

Emily Morrow

From: Emily Morrow
Sent: Thursday, 18 August 2022 12:43 PM
To: 'Derek Tooth'
Cc: Stefan Szyczew (Stefan.Szyczew@hindmarsh.com.au); Nick Valois
Subject: RE: JHS: SSD Condition B17 - CSWMSP
Attachments: 2022-08-18 Jerra School- Council SWMP comments.pdf

Hi Derek,

Please see attached letter from our civil engineer in response to below comments received from the soil team.

Thanks,
Emily

HINDMARSH

Emily Morrow
Design Manager
M 0436 911 399

F 02 6247 8898
Level 27, 100 Miller St, North Sydney NSW 2060 Australia
emily.morrow@hindmarsh.com.au
www.hindmarsh.com.au

From: Derek Tooth <Derek.Tooth@qprc.nsw.gov.au>
Sent: Monday, 8 August 2022 3:02 PM
To: Emily Morrow <Emily.Morrow@hindmarsh.com.au>
Subject: Fwd: JHS: SSD Condition B17 - CSWMSP

Hi Emily
Comments from our soil team.

Sent from my iPhone

Derek Tooth (he/him)
Service Manager - Contracts and Projects

Queanbeyan-Palerang Regional Council
Tel: (02) 6285 6117 **Mob:** 0408 430 739
Web: www.qprc.nsw.gov.au
Mail: PO Box 90 Queanbeyan NSW 2620

Begin forwarded message:

From: Natasha Abbott <Natasha.Abbott@qprc.nsw.gov.au>
Date: 8 August 2022 at 10:13:10 am AEST
To: Derek Tooth <Derek.Tooth@qprc.nsw.gov.au>
Cc: Andrew Palmer <andrew.palmer@qprc.nsw.gov.au>, Eli Ramsland <Eli.Ramsland@qprc.nsw.gov.au>
Subject: RE: JHS: SSD Condition B17 - CSWMSP

Morning All,

Our Comments on High School CSWM

1. The sed fences on the boundary run downhill, so should have returns on them to collect sediment, or it will all collect in the bottom corner and overflow onto Environa Drive.
2. This is a concept plan so need to see the detailed SWMP before we can comment much further.
3. However, we need to ensure the sediment basins are properly constructed. We recently had another sediment basin collapse just up the road from this site, because it had no emergency spillway.
4. The EPA will be the ARA for this site, as it is a NSW Govt job.

From: Derek Tooth <

From: Emily Morrow <Emily.Morrow@hindmarsh.com.au>
Sent: Wednesday, 3 August 2022 4:58 PM
To: Derek Tooth <Derek.Tooth@qprc.nsw.gov.au>
Cc: Stefan Szyczew <Stefan.Szyczew@hindmarsh.com.au>; Mitchell Beattie <mitchell.beattie@tsamgt.com>; Robert McKnight <Robert.McKnight@tsamgt.com>
Subject: JHS: SSD Condition B17 - CSWMSP

Hi Derek,

Further to our meeting yesterday and pursuant to the following SSD Condition:

B17: Construction Soil and Water Management Sub-Plan (CSWMSP):
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;*
(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) *should stockpile remain within the proposed school site, an intrusive investigation should be undertaken to delineate the extent and quality of the stockpile (the recommendations of the Report on Limited Contamination Assessment, prepared by Douglas Partners and dated 16 September 2021 must be complied with);*
(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 and 1 in 100-year ARI.*

Please see attached the CSWMSP as discussed yesterday and subsequent statement on use flocculants.

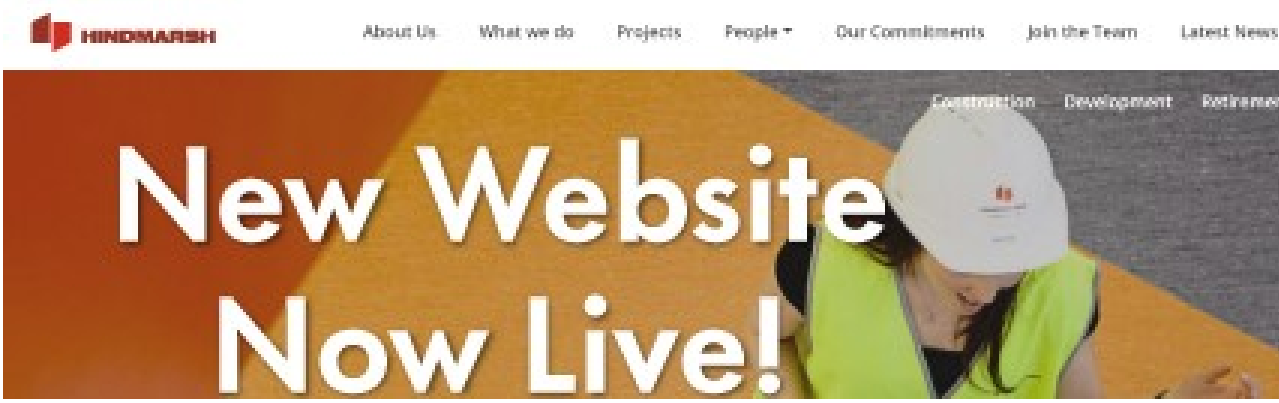
Please provide confirmation of consultation undertaken at your soonest convenience.

Thanks,
Emily

HINDMARSH

Emily Morrow
Design Manager
M 0436 911 399

F 02 6247 8898
Level 27, 100 Miller St, North Sydney NSW 2060 Australia
emily.morrow@hindmarsh.com.au
www.hindmarsh.com.au



Statement on use of flocculants

M & G Consulting Engineers Pty Ltd (ABN 65 094 064 990)
Level 3, 50 Berry Street, North Sydney NSW 2060
PO Box 1656, North Sydney NSW 2059
T: (02) 8666 7888 Internet: www.mg.com.au

3rd August 2022

Hindmarsh

By email:
< emily.morrow@hindmarsh.com.au >

Attention: Ms Emily Morrow

Dear Madame,

Re. New High School Jerrabomberra – Temporary sediment basins use of flocculants
Our Ref. 5555

To ensure that the discharging waters from the site meet the requirements Water Quality requirements in terms of suspended solids, temporary sediment basins will be sized and detail documented in the Detailed Soil & Water Management Plan (SWMP).

These sediment basins will be sized so that the use of flocculants will not be require or use of flocculants is minimised.

The use of flocculants will be in accordance with "Landcom's Soils & Construction-Managing Urban Stormwater", the "Blue Book" Section 6 and "Best Practice Erosion & Sediment Control, Book 2 – Appendix B" IECA Australasia.

Should flocculants be used to treat the water captured onsite, information on the product and details on the proposed chemicals to be used and potential impacts will be provided to the EPA for consideration and assessment.

We trust this meets your requirements and please do not hesitate to contact ourselves if you require any further advice or clarification.

Yours faithfully
M+G Consulting

Simon Matthews

Response to QPRC Soil team comments

M & G Consulting Engineers Pty Ltd (ABN 65 094 064 990)
Level 3, 50 Berry Street, North Sydney NSW 2060
PO Box 1656, North Sydney NSW 2059
T: (02) 8666 7888 Internet: www.mg.com.au

18th August 2022

Hindmarsh

By email:
< nick.valois@hindmarsh.com.au >

Attention: Mr Nick Valois

Dear Sir,

Re. New High School Jerrabomberra – Construction Soil and Water Management
Our Ref. 5555

In reply to Council's comments:

1. The sed fences on the boundary run downhill, so should have returns on them to collect sediment, or it will all collect in the bottom corner and overflow onto Environa Drive.
   We have amended the extent of the sediment fence adjoining Environa Drive, as above. Amended drawing JHS-CE-2005 rev J, attached.
2. This is a concept plan so need to see the detailed SWMP before we can comment much further. (note only)
   Noted.
3. However, we need to ensure the sediment basins are properly constructed. We recently had another sediment basin collapse just up the road from this site, because it had no emergency spillway.
   The sediment basin(s) will be fully designed and detailed in the detailed SWMP in accordance with the "Blue Book" and will include an emergency spillway for each basin.
4. The EPA will be the ARA for this site, as it is an NSW Govt job.
   Noted.

We trust this meets your requirements and please do not hesitate to contact ourselves if you require further clarification.

Yours faithfully
M+G Consulting

Simon Matthews
CPEng, NER No. 836676

Attached – Drawing JHS-CE-2005 rev J