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CONSTRUCTION SOIL AND WATER MANAGEMENT PLAN

BIRZULIS REF:7576-CSWMP

LINDFIELD LEARNING VILLAGE AT ETON ROAD LINDFIELD NSW 2070

PREPARED BY: CAMERON AMRI
DATE: 19/10/2020
REVISION: **B**

DOCUMENT VERIFICATION

Project Title	Lindfield Learning Village
Document Title	Construction Soil and Water Management Plan Report
Project No.	7576
Description	Construction soil and water management plan
Client Contact	Hindmarsh

	Name	Signature
Prepared by	Cameron Amri	
Checked by	Michael Grogan	
Issued by	Michael Grogan	

REPORT DELIVERABLES

This report is to meet condition B18 of the SSD Conditions.

This report shall be referenced to meet condition B18.

Condition	Condition requirements	Document reference
B18	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:	
	be prepared by a suitably qualified expert, in consultation with Council;	Appendix A & Appendix B.
	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'.	Appendix C
	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 6.5 & Section 6
	detail all off-Site flows from the Site; and	Section 2.5 & Appendix B
	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 1-year ARI and 1 in 5-year ARI.	Appendix C & Section 5.4
	Measures to ensure that sediment and other materials are not tracked onto roadways by vehicles leaving the site.	Section 5.4

DOCUMENT HISTORY

Date	Revision	Issued to	Description
09/07/20	-A	Hindmarsh	For Approval
03/11/20	-B	Hindmarsh	For Approval

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1 EXECUTIVE SUMMARY

Birzulis Associates have been commissioned by Hindmarsh to prepare a Construction Soil and water Management Plan (CSWMP) for the proposed development at Lindfield Learning Village at Eton Road, Lindfield. This report addresses the site conditions and the management of such site conditions relevant to soil and water management in accordance with the requirements of the relevant Council DCP/SSD Guidelines.

The aim of this CSWMP is to address all risks associated with the water quality, erosion and sedimentation ensuring these are considered and managed effectively during construction. This report aims to deliver a best-practice control and procedures to minimise or avoid erosion/sedimentation impacts and potential impacts to water quality.

The CSWMP will address and satisfy the following objectives:

- Relevant environmental legislation as it applies to this project
- Summarise and address potential water quality impacts on the environment from the proposed works on the proposed site
- Document procedures to control these possible and foreseeable environmental impacts.
- Ensure and demonstrate compliance to relevant legislation
- Ensure there are no adverse environmental impacts to the waterways and surrounding environment as a result of the proposed works.
- Address and comply with water quality discharge requirements for the site.
- Prevent pollution of surface water by sedimentation and excessive erosion of the site.
- Ensure staff and relevant construction personnel and procedures and an understanding of what is required to maintain and implement the required water quality elements and controls.
- Document all controls and mitigation for a 1 in 100 year flood event at the site.

The general intent for the construction is a demolition of the existing buildings and construction of the new works. This is not a proposed staged construction.

The proposed development will require (but not limited to):

- Demolition of the existing structures and removal of waste.
- Removal of topsoil and vegetation.
- Civil works and stormwater drainage works.
- Construction of structures.
- Remediation of temporary works and construction of hardstand pavements
- Construction of landscaping works

1.1 PLANNING RELEVANCE, LEGISLATION & ACT

The following legislation and regulatory framework relating to construction soil and water management are outlined below.

Immediate SSD Planning Requirement to be satisfied:

- As stipulated in the State Significant Development Conditions of Consent. Condition B17 required prior to the commencement of construction.

Environmental Planning and Assessment Act 1979 & Environmental Planning & Assessment Regulation 2000.

This Act and regulation establishes a system of environmental planning and assessment of development proposals for the State. This project has been assessed and approved under Section 89E of the Environmental Planning and Assessment Act 1979.

Project Relevance; Approval process for a legal Consent to develop and considerations for such.

Protection of the Environment Operations Act 1997

This Act includes all the controls necessary to regulate pollution and reduce degradation of the environment, provides for licensing of scheduled development work, scheduled activities and for offences and prosecution under this Act.

Project Relevance; This Act is of high relevance to the Project as it provides for the issuing of environmental protection notices to control work and activities not covered by licences. Section 148 of the Act requires a pollution incident-causing or threatening material harm to the environment to be notified to the EPA and other authorities immediately.

Contaminated Land Management Act 1997

This Act provides for a process to investigate and remediate land that has been contaminated and presents a significant risk of harm to human health. Section 60 of the Act is a “Duty to Report Contamination”. This duty applied to owners of land and persons who become aware that their activities have contaminated the land.

Project Relevance; The relevance of this Act will be in the event that suspected or potentially contaminated ground is found during construction activities.

Commonwealth Environment Protection and Biodeversity Act 1999

The main purpose of this Act is to provide for the protection of the environment especially those aspects that are of national environmental importance and to promote ecological sustainable development. The Act binds the Crown. Do not take, use, keep or interfere with "nationally significant" cultural and natural resources, protected wildlife and protected plants without approval.

Project Relevance; This Act is of little relevance to this project as it has been determined not to trigger the provisions of the act.

Soil Conservation Act 1938

This Act makes for the provision for the conservation of soil resources, farm water resources and the mitigation of erosion. The Act is binding on the Crown; however, the Crown is not liable for prosecution. The Act provides for notification in the government gazette catchments where erosion is liable to cause degradation of rivers and lakes (i.e. protected land).

Project Relevance; This Act has low relevance as the site is not located within "protected land". Further, such notification has not been given to the owner of the land.

Water Management Act 2000 & Water Management (General) Regulation 2004

This Act and Regulation provide for the protection, conservation and ecologically sustainable development of water sources of the State and in particular to protect, enhance and restore water sources and their associated ecosystems.

Project Relevance; This Act has no direct relevance at this time to the construction work under this contract. The project approval does not trigger the provisions of this Act

Water Act 1912

This Act provides for licences to extract water for construction purposes either from surface or artesian sources. Should construction water be extracted from surface (other than sedimentation ponds) or artesian sources, a licence will be required.

Project Relevance; This Act has no relevance as it is not proposed that construction water will be obtained from surface (for example, creeks, lakes) or artesian sources.

Rivers and Forseshores Improvement Act, 1948

The Rivers and Foreshores Improvement Act, 1948, is administered by DIPNR for regulating operations involving excavation and fill within the immediate vicinity of coastal rivers, lakes and estuaries. Under this Act, a Part 3A Permit is required for the undertaking of works within 40 metres of the bed and banks of a watercourse. By late 2003, the Water Management Act 2000 (WMA) will have repealed the Rivers and Foreshores Improvement Act, 1948 (RFIA). When this occurs, activities that require a Permit under Part 3A Approvals under the RFIA will require Controlled Activity Approvals under the WMA

Project Relevance; Nil as not within 40m of the bed and banks of a watercourse.

National Parks and Wildlife Act, 1974

(1) The objects of this Act are as follows:

(a) the conservation of nature, including, but not limited to, the conservation of:

(i) habitat, ecosystems and ecosystem processes, and

(ii) biological diversity at the community, species and genetic levels, and

(iii) landforms of significance, including geological features and processes, and

(iv) landscapes and natural features of significance including wilderness and wild rivers,

(b) the conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including, but not limited to:

(i) places, objects and features of significance to Aboriginal people, and

(ii) places of social value to the people of New South Wales, and

(iii) places of historic, architectural or scientific significance,

(c) fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation,

(d) providing for the management of land reserved under this Act in accordance with the management principles applicable for each type of reservation

Project Relevance; relevant as the site falls directly to National Park.

2 EXISTING CONDITIONS

2.1 LOCATION

The site is located at 100 Eton Road, Lindfield NSW 2070. The current site is an existing educational facility with a combination of multi storey buildings and playing fields. The site is generally sparsely to medium vegetation with more dense vegetation at the interfaces with the National Park.

To the South, East and West of the site the boundary appends the National Park. To the North the site appends urban environments. The site falls at varying grades up to some significant grades near the National Park edge.

The site is shown below represented as Figure 2.1

Figure 2.1.1 – Total D.P. Envelope existing site satellite map

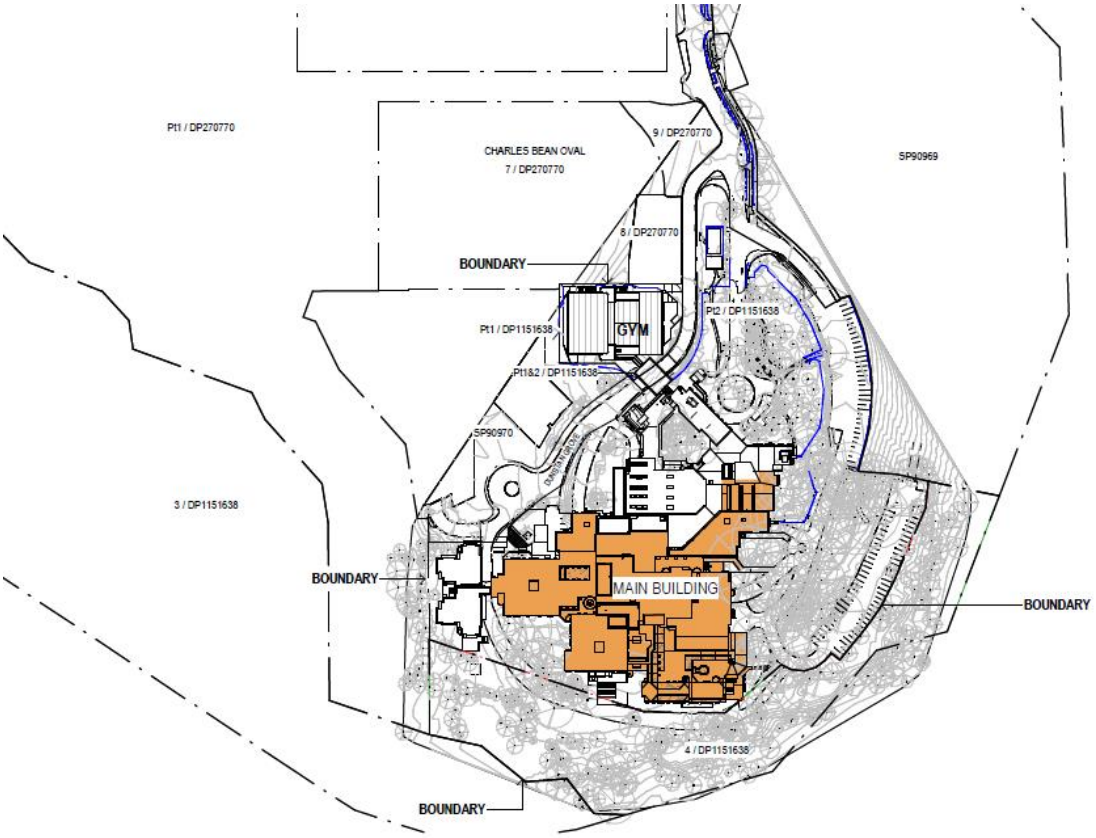

Figure 2.1.2 – Proposed Overall Site Plan

2.2 ACID SULFATE SOILS

A review of the Acid Sulfate Soil Maps of Ku-Ring-Gai LEP 2015 shows the rear portion (not proposed to be developed) to be in a Class 5 acid sulfate soil zone.

Figure 2.2.1 – Extract from K-ring-gai LEP 2015

A review of the review of the 'Acid Sulfate Soil Risk Map' prepared by the Department of Lands and water Conservation using eSPADE 2.1 also shown no known risk on the site. As such we consider this site to be unlikely affected by Acid Sulfate soils.

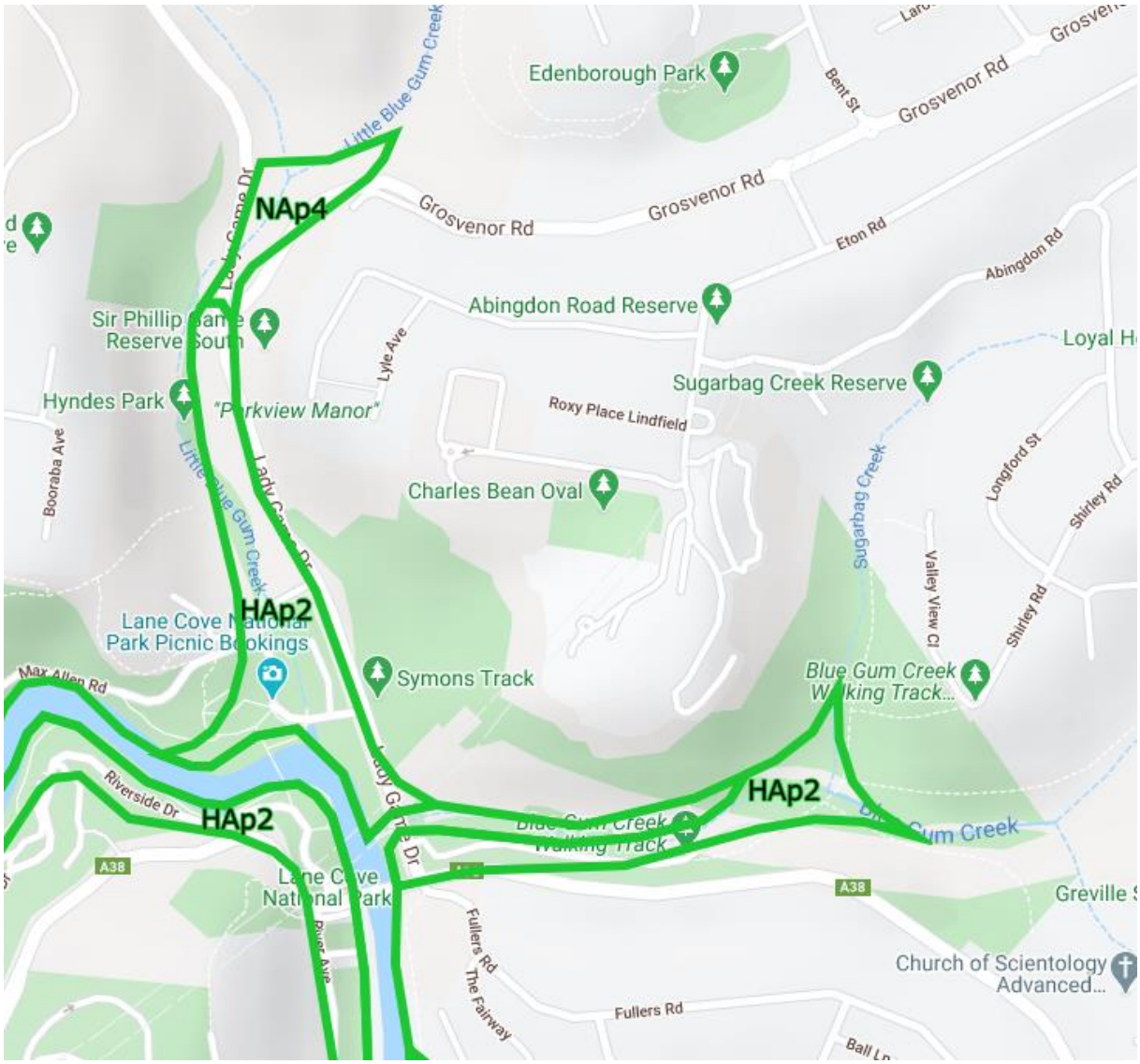

Figure 2.2.2 – Extract from eSPADE

Acid sulfate soil planning maps are indicative and on-site observations and testing should also be used to identify acid sulfate soils. The below shall be used to use visual guidance for more specific onsite assessment.

Potential acid sulfate soil indicators:

- Presence of mangroves, reeds, rushes, salt marsh or swamp vegetation etc
- Sulfurous (rotten egg gas) smell after rain, following a dry spell or when the soils are disturbed • Marine or estuarine sediments

- Soils can be described as unripe muds/sediments (soft, buttery, blue grey or dark greenish grey) which can include sands and gravels
- Milky blue/green water
- Shell fragments in the soil • Waterlogged, scalded or back swamp areas
- Land below 5m AHD elevation

Actual acid sulfate soil indicators:

- Any jarosite (a pale yellow mineral deposit) or iron oxide (rusty) colouring
- Extensive iron stains on any drain surfaces, or iron stained drain water and ochre deposits
- Corrosion of concrete and/or steel structures
- Surface or ground water on or draining from the site with a pH < 5.5, or of an unusually clear or milky green
- Sulfurous (rotten egg gas) smell when soils are disturbed

The site is in and within 500m of a known class 5 acid sulfate soil area it should be noted that should these soils be located that they shall be dealt with in accordance with geotechnical advice from the geotechnical engineer.

Class 5 Acid sulfate soils are not typically found in Class 5 areas. Areas classified as Class 5 are located within 500 metres on adjacent class 1, 2, 3 or 4 lands. Works in a class 5 area that are likely to lower the water table below 1 metre AHD on adjacent class 1, 2, 3 or 4 land may encounter acid sulfate soils.

As the site is within 500m of a mapped acid sulfate soil area and there is cutting of soil proposed there is a risk acid sulfate soils may be encountered. We recommend further testing be undertaken in areas where soil levels are proposed to be reduced by 1m.

The referenced Acid Sulfate Soil Management Plan is the reference to manage the acid sulfate soil particularly for investigation, handling, treatment, and management of such soils.

The Acid Sulfate Soil Management Plan is attached to the back of this report. Section 5 of that report itemised the management procedures required to manage Acid Sulfate soil after it is identified.

Section 5.2 to 5.8 are attached in Appendix A is they specifically relate to mitigation and management of Acid Sulfate Soils for this site.

2.3 GROUND WATER PROTECTION

Generally possible sources of ground water contamination can be linked to:

- Industrial effluent and manufacturing wastes
- Leaking underground storage tanks and pipelines (not stormwater/rainwater)
- Landfill stockpiles or contaminated soil producing leachate ‘
- Intensive agricultural fertiliser and pesticide use or waste generation
- Contamination from septic tanks and from sewerage and wastewater lagoons
- Mining industry processes and wastes
- Contamination from wells
- Urban stormwater
- Atmospheric fallout
- Inter-aquifer contamination by alteration of flow
- Chemical storage

Dewatering is considered in the EP Act as the process of removal of any water that accumulates in earthwork excavations or below ground structures at or below the existing water table as a result of intersecting aquifers, seepage of soil water/groundwater or storm events

As there is no below ground excavation planned and the noted level of the water table, the anticipated dewatering would be in draining footings and construction areas after rain events.

As part of due diligence of ground water protection, a review of the EIS was undertaken to determine if there was contaminated soil which may be exposed during the works and as such potentially contaminate ground water.

The following is an extract from the EIS Section 5.4 prepared by URBIS dated 8 June 2017

“As the proposed development does not involve excavation or construction, based on the assessment and the perceived potential for contamination, widespread investigation of the contamination conditions is not considered to be required at this stage. However, we would recommend an investigation of any unpaved areas where children could potentially come into regular contact with soil (e.g. play areas associated with the kindergarten).

2.4 TEMPORARY EROSION AND SEDIMENT CONTROL BASINS

The requirement for sediment basins is carried out using a RUSLE calculation.

There is no requirement for sediment basin/s for this project based on the relatively minimal new development area.

2.5 EXISTING STORMWATER DISCHARGE POINTS

The existing site has a functioning stormwater system using pits and pipes draining water downhill and discharging out of headwalls type outlets to the bottom of the site. There is moderate to significant fall in the site and no significant issues with erosion at discharge points when inspected by us.

3 GENERAL INSTRUCTIONS

This SWMP shall be read in conjunction with the latest engineering plans which have the Sediment and Erosion Control Plan and details, any other reports or design drawings and or any written instructions that concern themselves with water management of the site during construction and during the operational phase of the site.

The Principle Contractor shall ensure that all soil and water management works recommendations are incorporated in works and undertaken in accordance with the Blue Book. We have incorporated key requirements of The Blue Book into this document and the Sediment and Erosion Control Plan and details.

4 LAND DISTURBANCE CONDITIONS

Where practical, the soil erosion onsite will be as recommended below so the hazard will be as low as reasonably possible.

Land Use	Scope	Remarks
Construction areas	Disturbance to be no greater than within 5m from the edge of any essential construction activity shown on the plans	Barrier fencing and sediment fencing or similar fencing to be used so all workers can clearly identify these zones were appropriate.
Access areas	Maximum 6m in width	Site manager to define the zones onsite and all workers to clearly be able to identify these zones
Remaining Lands	Fenced off	Identified by barrier fencing

5 ASPECTS, IMPACTS AND RISKS

5.1 STORMWATER QUANTITY

Normally the removal of existing stormwater elements during construction increases the surface flow volumes and velocities on a site. This can then increase movement of debris silt and scouring of water channels. This project does not proposed to remove existing working stormwater and as such is relatively neutral with stormwater quantity development for the construction process.

The proposed stormwater design for the site generally reuses the existing functioning system and in a few cases redirects the existing system to biological treatment and or rainwater tanks.

5.2 STORMWATER QUALITY

Bulk earth works, vegetation clearing activities during construction phases, if not managed adequately, can lead to increased soil displacement. This element is considered adequately managed in the Sediment and Erosion Control Plan and relevant details.

The stormwater quality during construction will be managed using the existing adequately functioning stormwater system, (which is 95% proposed to remain intact), sediment and erosion control devices and energy dissipation upgrades to discharge points.

5.3 FLOODING

Construction works can sometimes generate additional site runoff contributing to flooding of adjacent or downstream sites during significant rainfall events or in the absence of relevant flood protection measures such as temporary water containment.

Council has confirmed that the site is not affected by the 1% AEP flood and hence has no flood controls applicable.

The current soil is relatively impervious and as such will eventually generate runoff not significantly different to the current site conditions.

The site also has its existing functioning stormwater system which will collect roof and surface water and discharge at the base of the site. The site has moderate to significant grades.

As such we do not see a significant risk of this development resulting in downstream flooding and we are satisfied that material stockpiles will be safe from significant migration during this event subject to specified Sediment and Erosion Control being used and maintained.

5.4 GENERAL MANAGEMENT AND WET WEATHER EVENT MANAGEMENT

As noted above the site is unaffected by flooding up to the 100 year even based on the site levels. This will be further safe guarded by the raised site levels as per the approval.

There is a risk during large rain events that water runoff will result in sediment washing off site and or damage to the sediment and erosion control systems in place.

The following mitigation measures will be implemented for the following scenarios

General Management

- forecast for heavy rain and make decisions on the following accordingly.
- storage of hazardous materials and equipment away from flow paths and known drainage channel
- layout of site compound facilities to take into consideration of the flow paths which are shown on the sediment and erosion control plans and the civil drawings.
- ensure evacuation routes are kept clear during high risk periods based on weather and storm forecasts.
- ensure loose materials, fuel, chemicals and equipment can either be secured or removed during a flood event if required
- equipment shall be covered as required if runoff from equipment can be hazardous or create sediment or oil displacement.
- No greater than 2500m² or soil should be being disturbed at any one time. Ground should be stabalised/sealed prior to disturbing soil greater than 2500m².
- Allow for vehicle washdown during wet weather to ensure sediment is not tracked on roadways leaving when leaving the site. This will be achieved by a hose connection where the vehicle exists are from the site. Surround this and or other wash down areas with sediment fence or bunding and maintain as required. Shaker grates should be located where and vehicles (which have been driving on soil) leave the site.

1-year ARI

- Brief personnel at prestart
- Review of all current ERSED controls and ensure ESCP is still current
- Stormwater would be managed using the following controls
    - o Sediment fencing
    - o Diversion bunds / swales
    - o Coir logs/ sandbags/ silt socks

• Upstream stormwater runoff is expected to bypass the site using the swale system proposed. Other runoff will be minimum given the moderate infiltration rate and be handled by the ESCP.

• High risk soil and erosion activities such as earthworks will not be undertaken immediately before high rainfall.

5 Year ARI

• Implement as above for the 1-year ARI event

• Ensure all plant and equipment are removed from areas of concentrated flow

• Sedimentation basins maximum capacities will be maintained where practically possible

100 Year ARI

• Implement as above for the 1-year ARI event

• Remove all plant and equipment from site areas where there is potential for inundation

• Perimeter controls are not expected to be breached.

• Flow will be directed to the street for the existing buildings in place prior to commencement of the stage 2 works. There will always be a site connection to the street for site water to be drained based on the stage 1 system or the existing system which is to remain prior to commencement of stage 2 works.

6 CONSTRUCTION IMPACTS

6.1 EROSION CONTROL

Erosion control is primary to an erosion and sediment control strategy. This can be achieved through:

- Limiting the area of disturbance and only disturbing what is required. Also limiting the time period of disturbance.
- Integrating elements that reduce or control the volume of water moving over surfaces. This includes, diversion through swales and table drains, and piped or lined channels to stabilised outlets.
- Measures the slow the velocity of water over exposed surfaces within the construction area such as hay bail barriers, introducing roughness, flow check measures, textiles, binding compounds or exposed surface protections. Binding products and surface protection can be spray on stabilisers, mulches, blankets, temporary vegetation and permanent progressive landscape construction.

The above is achieved using the correct implementation of the Erosion and Sediment Control Plan shown on the engineering drawings and any other recommendations in this report.

To achieve the requirements of not concentrating water flows which can lead to transportation of sediment off site it is recommended the swales on the stormwater design drawings be constructed as soon as practicable to divert upstream water around the site.

6.2 SEDIMENT MANAGEMENT

This is secondary to erosion control in minimising water pollution as a result of construction. Where required sediment basins are generally located at the low points of site discharges.

Requirements for sediment control basins are in accordance with Section 6.3.2.d of the Managing Urban Stormwater: Soils and Construction (the Blue Book). The soil loss from the catchment is led than that required for a sediment basin and as such one is not required.

6.3 STOCKPILE STABILISATION

As there is significant volumes of fill being proposed for the site it is foreseeable that material stockpiles will be required. Stockpiles within the site which will be in effect for more than 10 days should be stabalised. As per the Erosion and Sediment Control Plan all stockpiles are to have sediment fences on the downstream slopes and generally should be located a minimum of 5m from

overland flow swales. If unused for 10 days then stockpiles shall also be stabalised in accordance with the below relative to the relevant material in the stockpile:

- Coarse grained stockpiles
  - Downstream perimeter rock armouring.
- Less coarse grained stockpiles
  - Polymer binder application
  - Application of hydro-seed or hydromulch.

6.4 HAZARDOUS MATERIALS

Hazardous material will be addressed in accordance with the Construction Waste Management Sub-Plan (CWMSP) prepared by others.

Reference should be made to the HAZMAT survey relevant for this site to locate any existing hazardous materials.

6.5 MANAGEMENT MEASURES INCLUDING STABALISATION

6.5.1 Topsoil management

As part of works topsoil is to be stripped and stockpiled for use later in the project. Topsoil stockpiles shall be treated as per the requirements of stockpiles noted above. The stockpile locations are noted on the Sediment and Erosion Control plan over the area of the proposed mini soccer field.

6.5.2 Wind Erosion Management

At a minimum, exposed areas will be watered regularly to minimise dust and water carts to be readily available as this is an ongoing process. Additional watering may be required on windy days.

6.5.3 Site Drainage

As noted above, the swales are to be constructed as soon as practicable and treated in accordance with the above. This will prevent external catchment runoff penetrating the site. A bentonite impregnated geotextile liner will be used (Bentofix or equivalent) in unsealed sections of the working areas. This will form a suitable barrier to prevent contaminants from working areas entering the ground water or contaminating the soil of the site.

6.5.4 Revegetation Earthworks

Areas where earthworks have been completed are to be stabalised within ten days in accordance with the above recommendations. All erosion and sediment control are to remain in-place until stabilisation or revegetation is established. All stabalised areas are to be free of vehicle traffic to prevent disturbance.

Stabalisation of earthworks include, but are not limited to the following:

- Mulch covers
- Latex tape sprays
- Bitumen emulsion sprays
- Tarp cover
- Grass seeding

For areas stabalised with seeding, regular watering is required until an effective ground cover has been established. Re-seeding may be required in areas if inadequate coverage.

6.5.5 Maintenance Controls

Erosion and sediment control measures should be inspected and maintained regularly, generally weekly and within 24 hours of each significant rainfall event. The site supervisor should be responsible for this to be undertaken. It is recommended the daily inspection be recorded including the following relevant information:

- Condition of each element noted on the Erosion and Sediment Control Plan
- Any maintenance requirements of each element
- Volume of sediment removed and if the location of the element is appropriate. Disposal method of site trapped sediment.
- Condition of site entry and gravel rip/rap
- Condition of stockpile protection if relevant
- Site stormwater disposal location conditions
- Drains checked to ensure adequate site runoff and for signs of erosion
- Any sediment erosion control linings
- Condition of revegetation works if relevant.

It is recommended these are recorded and issued to the Principles Authorised Person weekly as part of reporting procedures.

6.5.6 Auditing

Auditing of the above and importing of soil material and controlled fill shall be monitored and tracked in accordance with the CEMP.

6.5.7 Responsibility

The CEMP stipulates the Construction Manager supported by the Superintendent (or in this case the Principles Authorised Person) be responsible for project's environmental objectives, including on ground implementation of the SWMS and Erosion and Sediment Control Plan. We interpret this as follows:

- To ensure all works noted above are undertaken as instructed and in accordance with the Blue Book (Managing Urban Stormwater – Soils and Construction, Landcom 2004.

- All sub-contractors are made aware of their responsibilities in this area and made accountable.
- Checks are completed in accordance with the above Maintenance Controls (6.5.5)

6.5.8 Complaints Handling

If a Construction Soil and Water Management environmental complaint is received during construction, the complaints management process outlined in Section 8 of the SINSW Community Communication Strategy.

Complaints during construction relating to Construction Soil and Water Management will be referred directly to the EHS Manager (Environment) and/or Construction Manager. If they are on site at the time an entry in 'Consultation Manager', the project consultation database, will be made to ensure appropriate action and monitoring. A response would be required to 'close out' the complaint, and the resolution would be recorded in Consultation Manager.

All communications and complaints management will be implemented and managed in accordance with Section 8 of the SINSW Community Communication Strategy.

In addition to this, any complaint received by the principle contractor in relation to Construction Soil & Water Management is to be forwarded onto the client project manager and managed through the SINSW community communication strategy.

7 REFERENCES

Environmental Impact Statement report by URBIS reference SA6386_EIS_FINAL dated 8 June 2017.

Flood Report by EWFW Pty Ltd dated 17 April 2020

Stormwater Quality Report by EWFW Pty Ltd dated 17 April 2020

Ku-ring-gai Council LEP 2015 – Acid Sulfate Soil Maps

Landcom (2004) Managing Urban Stormwater: Soils and Construction known as the Blue Book

SINSW Community Communication Strategy – Lindfield Learning Village dated October 2018

8 APPENDIX A – CV of Engineer

CAMERON AMRI
SENIOR CIVIL & STRUCTURAL ENGINEER

Bachelor of Engineering in Civil Engineering
University of Technology Sydney

Professional memberships

Member of the Institution of Engineers, Australia
Chartered Professional Engineer (CPEng)
Registered on the National Engineering Register (NER)
Registered Professional Engineer of Queensland

Experience
Since completing his degree in 2007, Cameron has worked as a civil structural engineer for MLH, Kneebone & Beretta, E2 Design and for Birzulis Associates Pty Ltd.

A selection of projects Cameron has been involved in:

Aged Care
- HammondGrove, Hammondville
- Scalabrini Village Bexley
- Scalabrini Village Drummoyne
- Scalabrini Village Austral
- Scalabrini Village Chipping Norton
- Scalabrini Village Griffith
- Scalabrini Village Yoogali

Religious
- Our Lady of Mount Carmel
- Catholic Parish of Mary Immaculate

Education
- Thomas Reddall High School
- Westmead Public School
- Springwood High School
- Chifley Campus
- Parramatta West Public School
- Blacktown Tafe
- Wiley Park Girls High School
- Chester Hill High School
- Doonside High School
- Westfield Sports High
- Ingleburn High School
- Wenona School, North Sydney
- Granville Public School
- Bellevue Hill Public School
- Riverstone High School
- Mount Annan Public School
- Matthew Pearce Primary School
- Mount Druitt Tafe
- NirimbaTafe

9 APPENDIX B – Evidence of Consultation with Council

Post Approval Consultation Record

Identified Party to Consult:	Ku-ring-gai Council
Consultation type:	Phone and email correspondence
When is consultation required?	During the Design phase, prior to construction
Why	Condition Number B18 and Condition requiring consultation with Council requiring the report be prepared in Consultation with Council.
When was consultation scheduled/held	Email correspondence with project representative 8 October 2020. Phone correspondence 16 September 2020
When was consultation held	As per the above.
Identify persons and positions who were involved	Brian O'Connell from Ku-ring-gai Council
Provide the details of the consultation	Phone conversation with the above and the author of this report and email confirming council stipulations.
What specific matters were discussed?	Biological control, Construction Soil and Water Management Plan, OSD requirement.
What matters were resolved?	All. Council has advised us that OSD is not required, they have no specific requests for the CSWMP Council allows for the use of OceanProtect and or Spel biological treatment devices should they be used. Ku-ring-gai Council MISIC link should be used for compliance to treatment train requirements. OSD is not required but principles of Water Sensitive Urban Design is required.
What matters are unresolved?	Nil
Any remaining points of disagreement?	Nil regarding this report's scope.
How will SINSW address matters not resolved?	NIL to resolve.

Cameron Amri

From: Brian O'Connell <boconnell@kmc.nsw.gov.au>
Sent: Thursday, 8 October 2020 4:49 PM
To: Cameron Amri
Cc: Jim Turner
Subject: RE: Lindfield Learning Village - Stage 2

Cameron,

In response to your emails.

There is a lot of detail to go through, and I am not sure if Council has the resources to provide as detailed a response as you would like. Especially regarding the construction of the proposed stormwater and civil works onsite and on Councils land. I would like to refer these plans to other departments within Council (landscape and ecology) for comment, but our officers do not have the time to review such documents in detail outside of DA assessment.
I have tried to respond to your questions below as best I can.

Please see my responses to your enquiries below in blue.

Also, can you advise what needs to go to traffic committee?

Regards

Brian O'Connell | Team Leader Engineering Assessment | Ku-ring-gai Council
P: 9424 0891
E: boconnell@kmc.nsw.gov.au | www.kmc.nsw.gov.au

From: Cameron Amri <camri@birzulisassociates.com>
Sent: Wednesday, 16 September 2020 1:17 PM
To: Brian O'Connell <boconnell@kmc.nsw.gov.au>
Subject: Lindfield Learning Village - Stage 2

Hi Brian,

Thank you for taking my call. I hope this email goes through as it's a touch large. I'll be preparing a Construction Soil and Water Management Plan for this site.

There isn't a silly amount of soil area to be exposed for these works given the majority of works are internal to the existing buildings.

My rough intent for this report is to:

1. Review relevant legislation, and any soil areas noted as being contaminated with the geotechnical report.
   Not for Council to comment.
2. Check Acid Sulfate area with the LEP
   Not for Council to comment.
3. Review geotechnical reports for contamination and any ground water contamination mitigation that may be required
   Not for Council to comment.
4. I don't see the need for temporary sedimentation basins given the size of the works and that they do not drain to a central area.
   Not for Council to comment.
5. Confirm existing stormwater discharges

10 Appendix C –Erosion and Sediment Control design drawings

Drawings prepared by Birzulis Associates Pty Ltd. The latest version of each of these documents and this report should be used at all stages during the construction.

Attach latest version of Sediment and Erosion Control drawing project number: 7576 drawing: SE01 Issue: 1