

Biodiversity Management Plan

Augusta Street – Warehouse and Distribution
Centre

Augusta Street – Warehouse and Distribution Centre

SSD – 36138263

Construction Environmental Management Plan

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
Rev 01	28/10/2024	Draft issued to client for review	D McKone	R Johnson
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Acronyms and Definitions

Acronym / Term	Meaning
BDAR	Biodiversity Development Assessment Report for the proposed Augusta Street Warehouse and Distribution Centre in Huntingwood (Anne Clements & Associates, 6 August 2024)
BMP	Biodiversity Management Plan
CEMP	Construction Environmental Management Plan
CoC	Condition(s) of Consent
EIS	Environmental Impact Statement
Environmental Incident	An occurrence or set of circumstances that causes or threatens to cause material harm, and which may or may not be or cause a non-compliance
ESR	ESR Australia & New Zealand
Non-compliance	An occurrence, set of circumstances, or development that is a breach of the SSD 36138263 Development Consent
PCT	Plant community type
SSD	State significant development
The Development	Augusta Street – Warehouse and Distribution Centre
TEC	Threatened Ecological Community
VMP	Vegetation Management Plan for Conservation Areas associated with the proposed Augusta Street Warehouse and Distribution Centre in Huntingwood (Anne Clements & Associates, 5 August 2024)

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1. INTRODUCTION

1.1. Background

This Biodiversity Management Plan (BMP) has been prepared by Aspect Environmental Pty Ltd on behalf of ESR Australia & New Zealand (ESR) to support the State significant development (SSD 36138263) for the proposed Augusta Street Warehouse and Distribution Centre (the Development) at Augusta Street, Huntingwood (the Site).

This BMP has been prepared with reference to:

- The SSD 36138263 Development Consent and the included conditions of consent (CoC) dated 17 December 2024
- Response to Submissions Report (Urbis, 26 March 2024)
- Environmental Impact Statement (Urbis, 12 September 2023)
- Vegetation Management Plan for Conservation Areas associated with the proposed Augusta Street Warehouse and Distribution Centre in Huntingwood (Anne Clements & Associates, 5 August 2024) (VMP)
- Biodiversity Development Assessment Report (BDAR) for the proposed Augusta Street Warehouse and Distribution Centre in Huntingwood (Anne Clements & Associates, 6 August 2024) (BDAR)
- Proposed Temporary Crossing of Blacktown Creek SSD-36138263 Augusta Street Warehouse and Distribution Centre Augusta Street, Blacktown, NSW (Costin Roe, 26 July 2024).

This BMP describes how biodiversity management measures are to be implemented prior to and during the Development's construction, and documents how the relevant conditions of the Development Consent and the requirements of the BDAR have been and will be implemented.

1.2. Development Description

The Development seeks to construct and operate a modern industrial warehouse and distribution precinct which would be located at Augusta Street, Huntingwood East within the Blacktown local government area. The Site comprises multiple parcels of land and is legally described in Section 1.2 of the Construction Environmental Management Plan (CEMP).

The Site is located approximately 34km west of the Sydney CBD and approximately 3.3km south of the Blacktown commercial centre.

The Site comprises a total of 26.64ha of undeveloped industrial zoned land within the Western Sydney Employment Area. The Site is immediately adjacent to two main roads, the Great Western Highway and the M4, bordering the north and south of the Site respectively.

The Development involves:

- Site earthworks, including cutting and filling, required to deliver large-scale warehouse buildings.
- Construction and fit-out of four buildings (comprising 15 warehouse tenancies) including:

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- Warehouse Building 1, single level (maximum building height 16.80m)
- Warehouse Building 2, single level (maximum building height 16.80m)
- Warehouse Buildings 3 & 4, single level (maximum building height 16.80m)
- Warehouse Building 5, multi-level (maximum building height 34.84m).
- A total of 134,565m² of gross floor area will be provided in the above buildings, comprising:
 - Warehouse: 128,027m²
 - Office: 6,538m².
- Vehicle access to Warehouses 1-4 is via Augusta Street and Flushcombe Road. A new intersection providing access from the Great Western Highway will enable access to Warehouse 5.
- On site car parking provision of 951 spaces, including an overflow car parking area to satisfy Council's parking requirements, as well as forecast demand.
- Riparian planting and landscaping within the conservation areas and along the site boundaries.
- Business and building identification signage.
- Consolidation of the existing lots and subdivision into three Torrens title lots.

The Site has been predominantly cleared but is undeveloped, with scattered trees across the western and southern boundaries and in the north-eastern corner. Blacktown Creek runs north-south through the central part of the Site with riparian vegetation along this corridor.

The Development site is indicated by red outline on Figure 1-1 and the intended site layout for the Development is shown in Figure 1-2.

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Figure 1-1 Site context (EIS, Urbis, 12 September 2023)

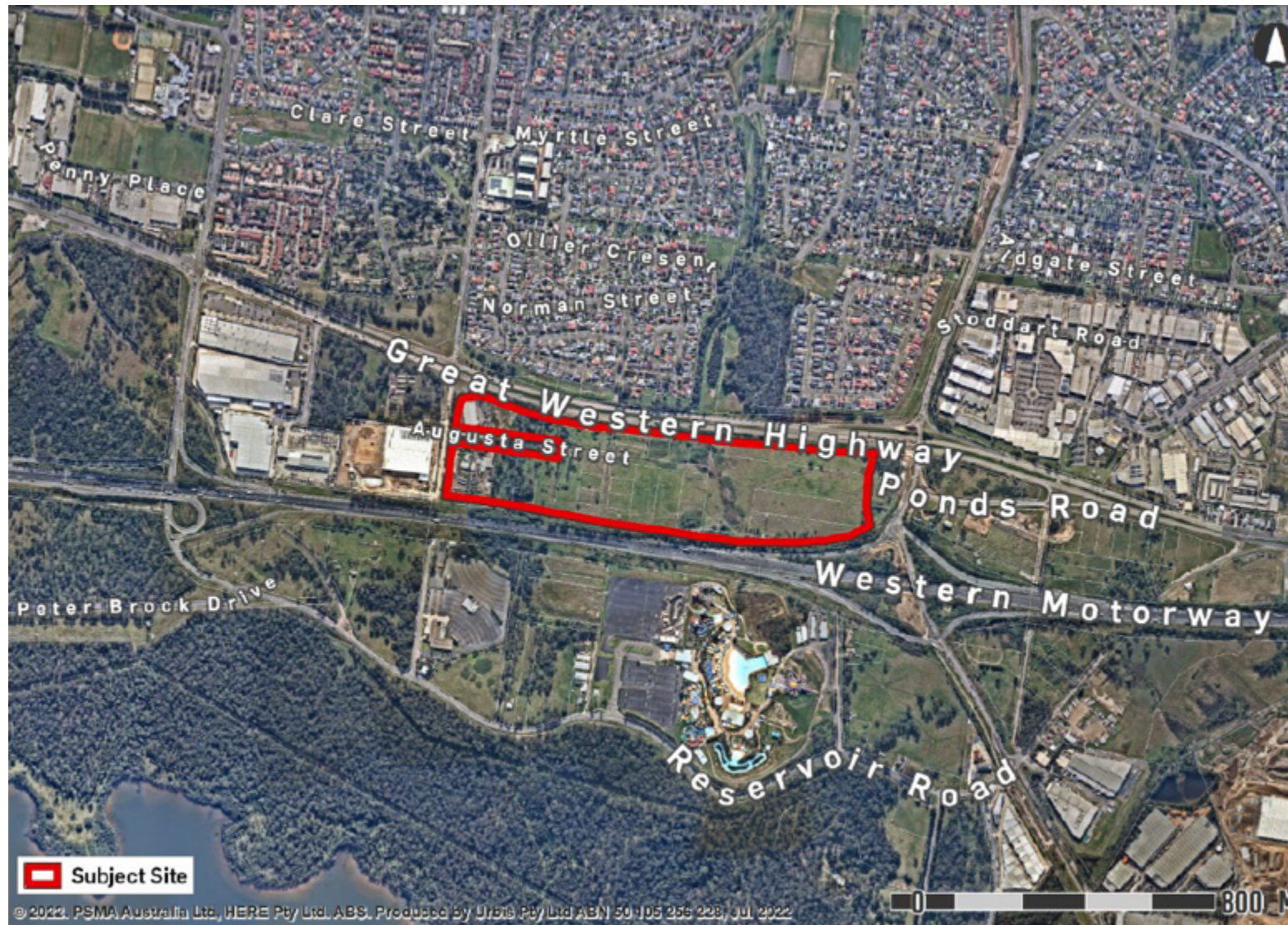


Figure 1-2 Site Layout (EIS, Urbis, 12 September 2023)



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1.3. Purpose of this Plan

The purpose of this plan is to describe how biodiversity management measures are to be implemented prior to and during the Development's construction and operation, in accordance with the conditions of Development Consent and the requirements of the BDAR (Anne Clements & Associates, 6 August 2024).

All ESR personnel, contractors and visitors are required to comply with the requirements of this BMP at all times.

Roles and responsibilities for environmental management during the construction of the Development are outlined in Section 3.2 of the CEMP.

1.4. Objectives and Targets

The objectives and targets of this BMP are summarised in Table 1-1.

Table 1-1 Objectives and targets

Objectives	Target	Timeframe	Responsibility	Monitoring Method
Minimise impacts to native vegetation and potential habitats	Conservation areas documented and quantified	At all times	Contractor Environment Manager Contractor Project Manager	Daily Site Inspection Checklist Annual review of conservation areas
	No construction activity intrusion into conservation areas			
	No net loss of conservation area			
	Enhancement of vegetation community representation and value within conservation areas			
Manage non-native fauna predator populations	Reduction in sightings of non-native fauna predators and their impact to native fauna within the construction site	As required	Contractor Environment Manager	Daily Site Inspection Checklist Feral trapping to be undertaken across the site, with a focus on conservation areas and corridors and adjacent culverts Annual review of non-native fauna predator observations.

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Objectives	Target	Timeframe	Responsibility	Monitoring Method
Control weed occurrence on site	Reduction in weed occurrence	As required	Contractor Environment Manager	Daily Site Inspection Checklist Quarterly monitoring of weed proliferation and progressive implementation of weed action plan in accordance with the VMP

2. COMMUNITY AND STAKEHOLDER ENGAGEMENT

2.1. Consultation during Preparation of Plans

In accordance with SSD 36138263 Development Consent, consultation with stakeholders was not required during the development of this plan.

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3. LEGAL AND OTHER REQUIREMENTS

3.1. Legislation and Guidelines

The Development is to be constructed in accordance with applicable legislative instruments, permits, licences and guidelines as required. The instruments relevant to Biodiversity management across the Development are outlined in Table 3-1.

Table 3-1 Legislative and related instruments relevant to the Development

Legislation	Key Development Requirements	Activity/Aspect
<i>Environment Planning and Assessment Act 1979</i>	Established a system of environmental planning and assessment of proposed developments in NSW. The Development must comply with the SSD 36138263 Development Consent.	All
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Requirements in relation to protection and management of nationally and internationally important flora, fauna, ecological communities and heritage places.	Protection of threatened species and ecological environments considered to be matters of national environmental significance
<i>Biodiversity Conservation Act 2016</i>	Comply with conservation requirements for any identified threatened species.	Protection of threatened species and ecological environments, including communities and habitat.
<i>Pesticides Act 1999</i>	Provides regulatory framework for the commercial application of herbicides including training, record keeping and publication/notification requirements.	The definition of pesticides includes agricultural chemical products affecting plants, plant pests and pests, including chemicals used to attract pests for the purpose of destroying it. By definition herbicides are included as pesticides under the Act.
NSW Weed Control Handbook April 2018 NSW DPI Management Guide, 7 th Edition	A guide to weed control in non-crop, aquatic and bushland situations.	Land clearing/stockpile stabilisation works and conservation assets management

Where updated or revised versions of guidelines, protocols, standards or policies, or a replacement of them are available, the most recent version should be applied to implementation of this BMP.

3.2. Development Consent Conditions

The Development is to be constructed in accordance with SSD 36138263 Development Consent and in accordance with the documents referenced under CoC C3.

The conditions which apply to biodiversity management and where they have been addressed are identified in Table 3-2.

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Table 3-2 Relevant CoC and where the BMP addresses them

SSD 36138263 CoC	BMP Section
Prior to clearing for construction of the development, the Applicant must prepare a Biodiversity Management Plan (BMP) to the satisfaction of the Planning Secretary. The Biodiversity Management Plan must form part of the CEMP in accordance with condition C2. The Plan must include the following:	This Plan
(a) identification of trees to be protected during construction;	Table 4-2 includes management measures. Table 5-1 outlines the program for monitoring.
(b) measures to identify and protect areas of <i>Typha</i> and <i>Bolboschoenus caldwelli</i> during construction and operation for conservation restoration works in accordance with the Vegetation Management Plan prepared by Anne Clements & Associates Pty Ltd dated 5 August 2024;	Table 4-2 includes management measures. Table 5-1 outlines the program for monitoring.
B56 (c) details of measures to reduce non-native fauna predator populations (feral cats, rats and foxes) prior to construction that is to be undertaken by a suitably qualified fauna specialist in accordance with the recommendations in the Biodiversity Development Assessment Report (BDAR) prepared by Anne Clements & Associates Pty Ltd dated 6 August 2024;	Table 4-2 includes management measures.
(d) details of the sediment and erosion control measures to be implemented in accordance with the Proposed Temporary Crossing of Blacktown Creek Memo prepared by Costin Roe Pty Ltd dated 26 July 2024 to reduce the risk of weed movement downstream into Timbertop Reserve; and	Table 4-2 includes erosion and sediment control measures.
(e) mitigation and management measures recommended in the BDAR prepared by Anne Clements & Associates Pty Ltd dated 6 August 2024.	Table 4-2 includes management measures identified in the BDAR.
The Applicant must:	
B57 (a) not commence construction until the Biodiversity Management Plan is approved by the Planning Secretary; and	(a) Noted
(b) implement the most recent version of the Biodiversity Management Plan approved by the Planning Secretary.	(b) Noted

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SSD 36138263 CoC	BMP Section
The Applicant must: (a) implement suitable measures to manage pests, vermin and declared priority weeds on the site; and (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or priority weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in the surrounding area. <i>Note: For the purposes of this condition, priority weed has the same definition of the term in the Biosecurity Act 2015.</i>	(a) Table 4-2 details the management measures for the BMP. (b) Table 5-1 details the environmental monitoring for the BMP.
Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:	
(a) details of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 3 provides a list of the relevant statutory requirements required for the Development.
C1 (b) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Table 4-2 identifies biodiversity management measures.
(c) a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of the management measures set out pursuant to paragraph (c) above;	Table 5-1 outlines the program for monitoring.
(d) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Section 5.4 and Appendix K of the CEMP outline the Contingency Plan for the Development.

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SSD 36138263 CoC	BMP Section
(e) a program to investigate and implement ways to improve the environmental performance of the development over time;	Section 5 of the CEMP outlines the monitoring and review process.
(f) a protocol for managing and reporting any:	
(i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);	Section 2.3 of the CEMP outlines complaints management. Section 5 of the CEMP outlines the management and reporting of incidents and any non-compliances.
(ii) complaint;	
(iii) failure to comply with statutory requirements; and	
(g) a protocol for periodic review of the plan.	Section 5 of the CEMP outlines the protocol for periodic review.

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4. IMPLEMENTATION

4.1. Existing Environment

Information relating to the existing environment, aspects, impacts and risk associated with the Development is largely drawn from the BDAR (Anne Clements & Associates, 6 August 2024).

Within the BDAR, the Development is documented as having two component site areas. One Plant Community Type (PCT), PCT 3319 - Cumberland Shale Hills Woodland was recorded onsite. The remaining area was identified as being predominantly exotic vegetation or hardstand.

4.1.1. Threatened Ecological Communities

There are listed Threatened Ecological Communities (TECs) associated with the best match PCT 3319 Cumberland Shale Hills Woodland. Conservation areas have been placed across four distinct areas on site (Table 4-1 and Figure 4-1) to conserve and enhance the PCT 3319 within the Development site.

4.1.2. Threatened Species

Of the threatened species generated by the Biodiversity Assessment Method Calculator, there were:

- 23 predicted species considered to possibly utilise the site
- eight candidate species considered to possibly utilise the site.

None were recorded nor considered likely to occur onsite.

4.1.3. Avoid and Minimise Direct and Indirect Impacts

To avoid and minimise impacts on the native vegetation and potential habitats, the Development has been located in accordance with Huntingwood Precinct Development Control Plan with:

- employment lands on the historically cleared former farming land
- employment related carparking under the electricity easement
- conservation areas in the riparian corridors (Blacktown Creek in the east and the drainage swale in the west).

In addition, conservation areas are located:

- between the car parking in the electricity easement and the M4 motorway
- in the set back from the Great Western Highway.

The Development has been designed to achieve a conservation gain in the landscape strategy and comply with development controls. The Development includes approximately 8.5ha of Cumberland Plain Woodland related conservation landscaping with 5ha subject to the site specific VMP. Conservation Areas A to D are described in Table 4-1 and Figure 4-1.

Table 4-1 Development conservation areas.

Conservation Area	Area (ha)	Location	Vegetation Zone
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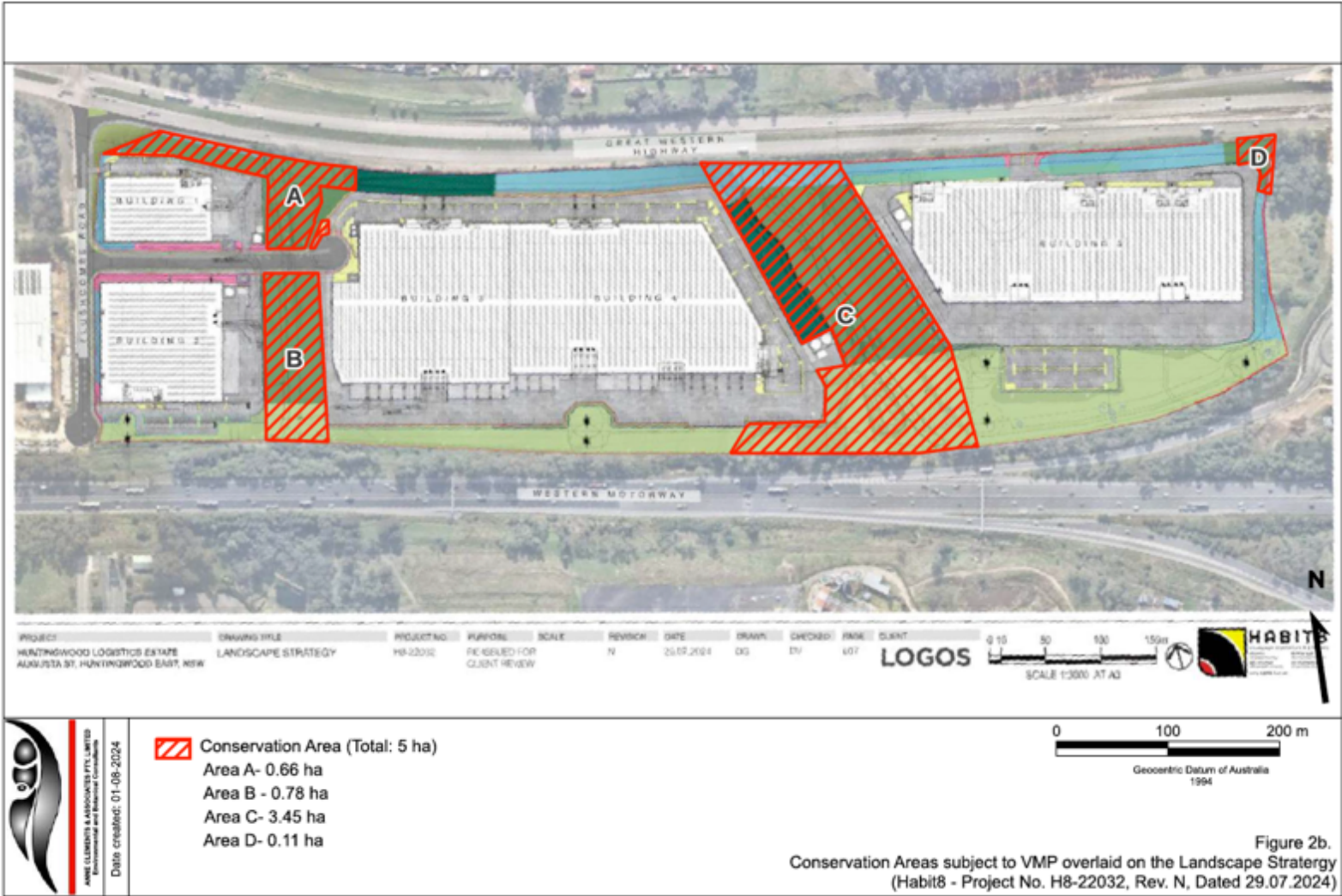
A	0.66	North of Augusta Street in a drainage swale within mapped 'Category 2' Riparian Corridor. Plus, Northwest extension, not within mapped 'Category 2' Riparian Corridor.	PCT 3319 – Poor PCT 3319 – Moderate
B	0.78	South of Augusta Street in a drainage swale within mapped 'Category 2' Riparian Corridor.	PCT 3319 – Poor
C	3.45	Along Blacktown Creek within mapped 'Category 2' Riparian Corridor.	Predominantly exotic vegetation or hardstand.
D	0.11	In the NE, part of a 4ha patch of CPW mainly on Transport NSW land.	PCT 3319 – Moderate
Total	5.00		

The Development, with its conservation landscaping, results in the ecological restoration of approximately 8.5ha, that is a 370% increase from 2.29ha of the existing native vegetation onsite.

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Figure 4-1 Conservation areas subject to VMP overlaid on the Masterplan (Anne Clements & Associates, 5 August 2023)



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4.1.4. Temporary Blacktown Creek Crossing

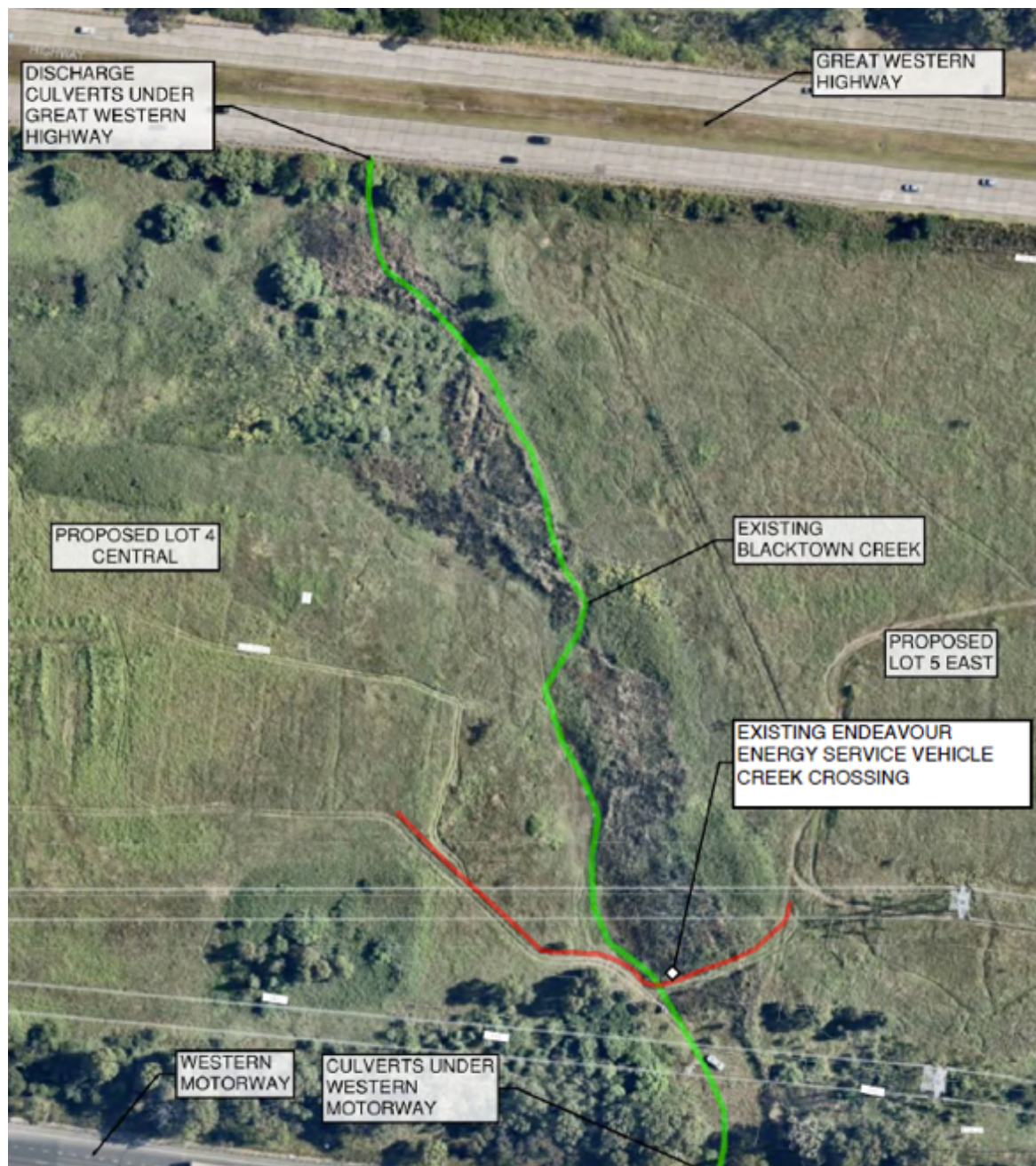
The only current access to and from the lot on the eastern side of Blacktown Creek (Figure 4-2) to the lot on the western side is via the existing creek crossing near the southern boundary of the Development site. No access is available from the Great Western Highway or the Western Motorway.

The BDAR identified that Blacktown Creek (1st order watercourse) is dominated by exotic weeds and the riparian zone of Blacktown Creek is treeless and swampy.

The existing Blacktown Creek will be rehabilitated and realigned under SSD 36138263.

Alterations would be required along Blacktown Creek during the development of the proposed Huntingwood Industrial estate.

Figure 4-2 Existing temporary Blacktown Creek crossing (Costin Roe, 26 July 2024)



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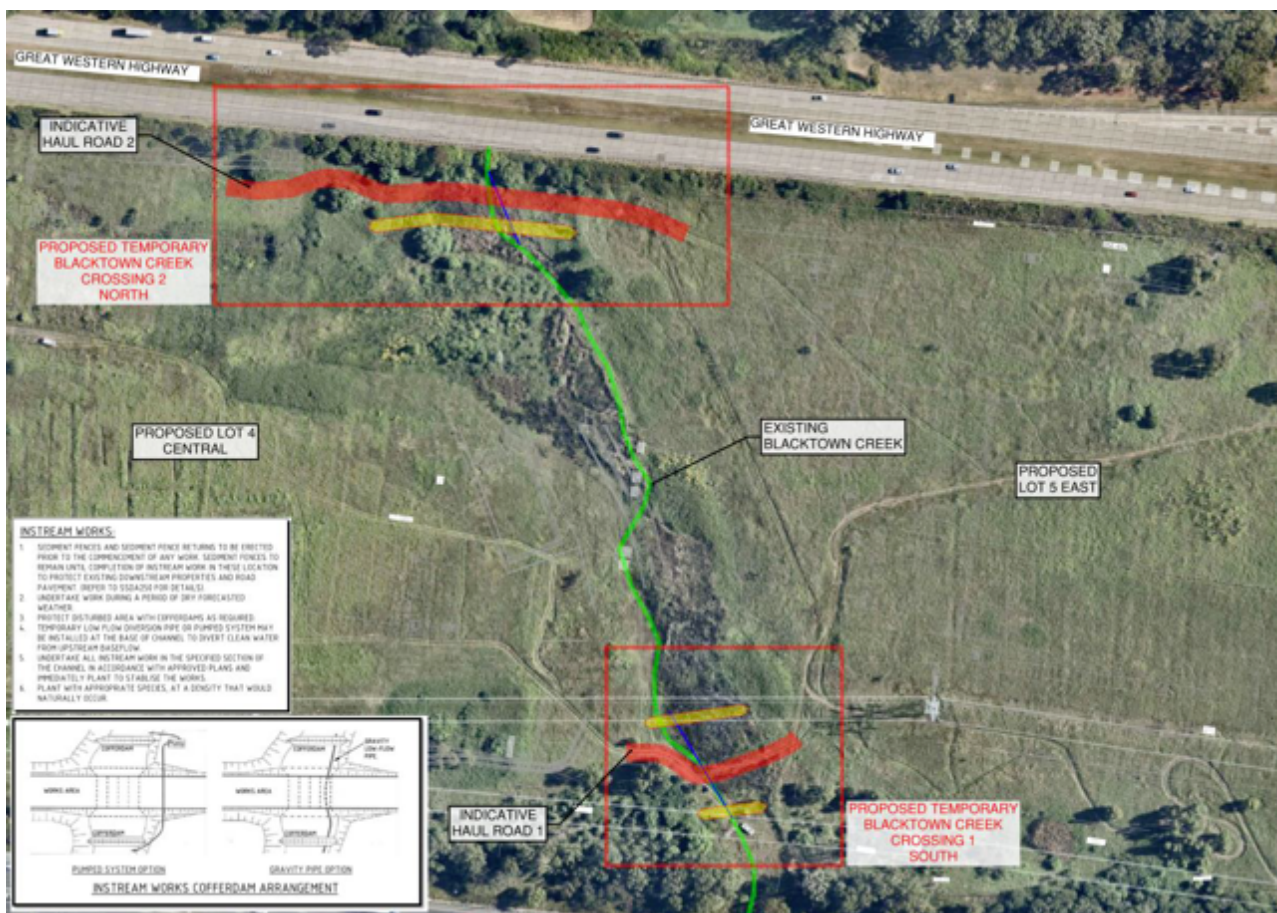
4.1.4.1. Proposed Temporary Creek Crossings

There are two proposed creek crossings, crossing number one (existing) and crossing number two (new) (see Figure 4-3).

Proposed temporary crossing number one, located near the Development's southern boundary, follows an existing maintenance track across the creek. This route crosses a proposed future wetland area and, therefore cannot remain in place throughout the lifetime of the construction works.

Proposed temporary crossing number two, is situated near the Development's northern boundary and follows a lesser worn track within an electricity easement. At present this option can remain in place throughout construction until the future intersection from proposed Lot 5 (west) with the Great Western Highway is constructed.

Figure 4-3 Proposed temporary creek crossings (Costin Roe, 26 July 2024)



The temporary haul road crossings will be made up of approximately 300mm thick road base. The Contractor Project Manager would be responsible for continuous maintenance of the temporary crossing throughout the construction period.

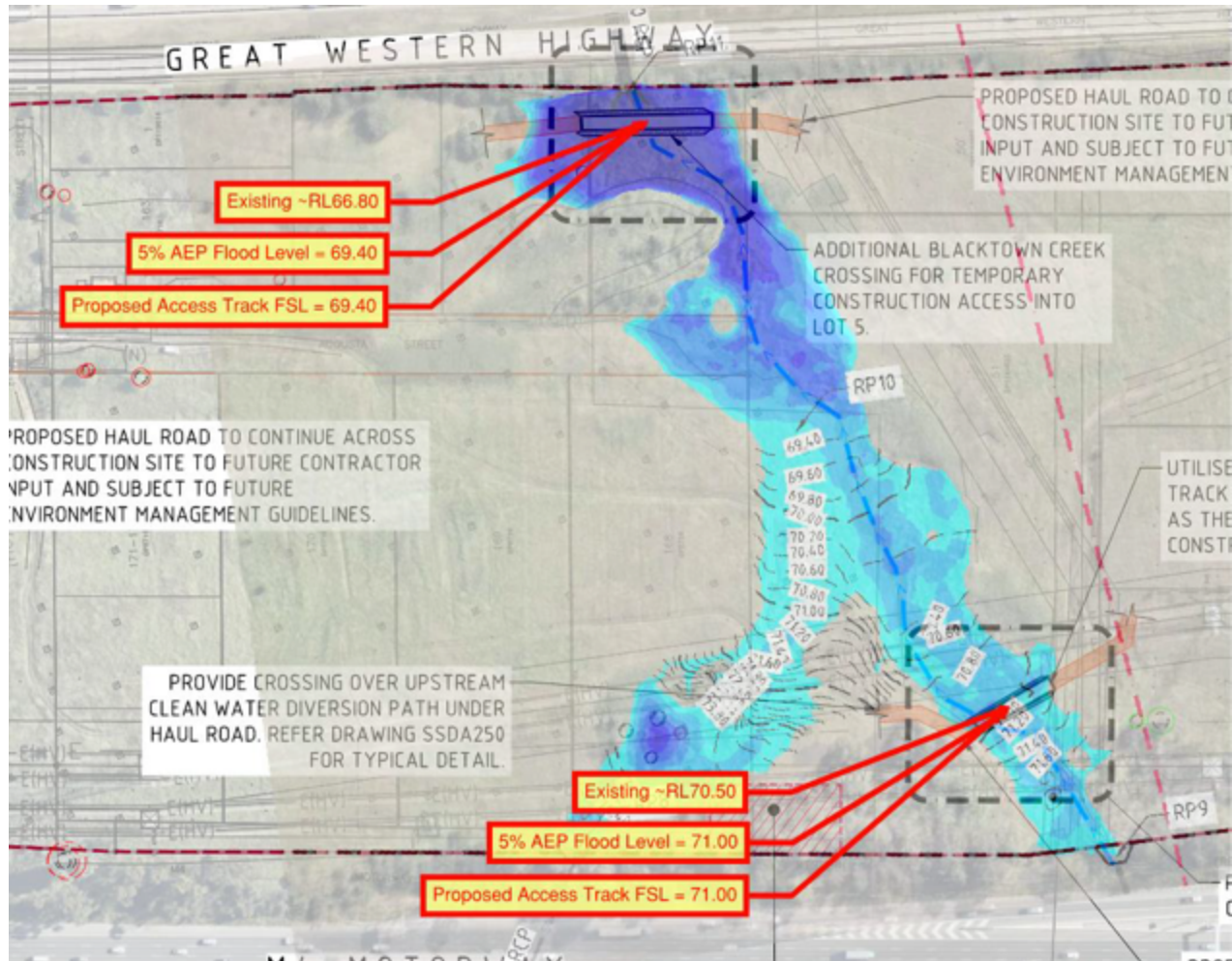
Temporary coffer dams were to be installed upstream and downstream of each creek crossing to assist in the retention of sediment and minimising the potential for downstream migration of weed species toward Timbertop Reserve. The cofferdams are to be sized to accommodate the 20% AEP storm event and the proposed temporary access track set at the 5% AEP storm event's estimate flood level (see Figure 4-4).

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Cofferdams are to be designed (Figure 4-5) to allow sufficient storage upstream to allow for sufficient discharge from cofferdam to downstream of the access track without upstream impact to the creek or existing infrastructure.

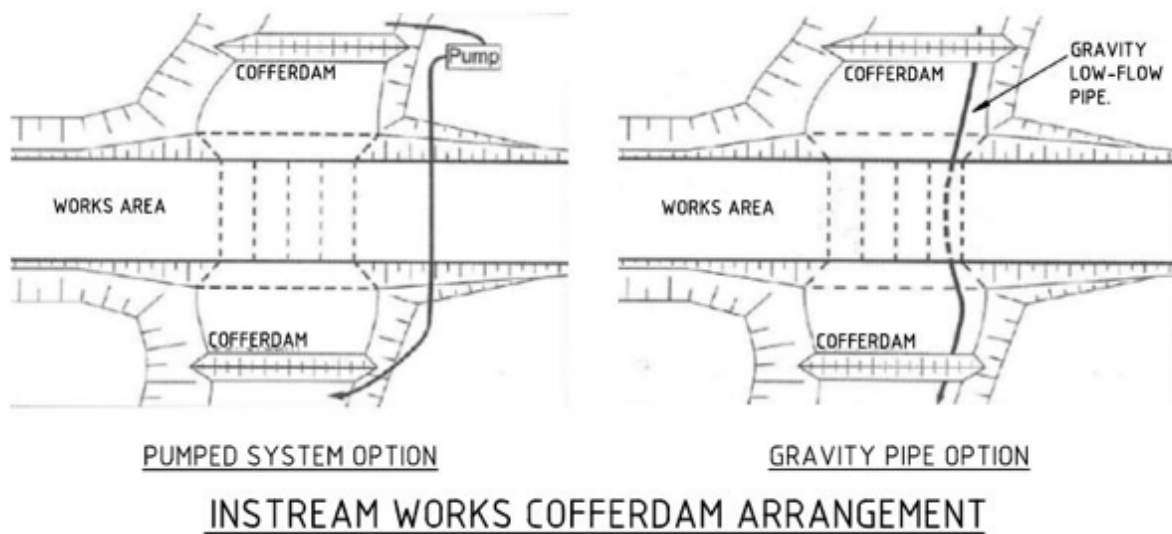
Figure 4-4 5% AEP flood levels overlay on to creek crossings (Costin Roe, 26 July 2024)



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Figure 4-5 Potential instream works cofferdam arrangements (Costin Roe, 26 July 2024)



4.2. Management Measures

Management measures to be implemented during construction of the Development to enable compliance with the SSD 36138263 Development Consent are documented in Table 4-2.

The identified management measures are consistent with those identified in the BDAR and reflect current accepted industry guidelines and practice.

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Table 4-2 BMP management measures

ID	Management Measure	Timing	Responsibility
Avoid and minimise			
BM1	Prepare induction/ toolbox program and its implementation for conservation awareness, access restrictions, and No-Go areas.	Prior to, during and post construction works	Contractor Environment Manager
BM2	Identify the conservation assets including soils, biomass, local native seed. Where practical stockpile this material to assist with the restoration of native ecosystems onsite (conservation area). The woody vegetation to be cleared in the development areas is to be harvested for re-use on the conservation areas (seeds and/or biomass).	Prior to and during construction works	Contractor Project Manager
BM3	Efficient reuse of conservation assets onsite by maximising use of biological active soil and plant material in the conservation areas for conserving and enhancing habitats onsite.	During construction works	Contractor Project Manager Contractor Environment Manager
BM4	Conservation assets such as topsoil, hollow tree to be stockpiled outside of conservation areas.	During construction works	Contractor Project Manager
BM5	Conservation assets and construction footprint, regularly inspected for priority weeds and treated in accordance with the NSW Weed Control Handbook (DPI 7 th Edition 2018).	During construction works	Contractor Environment Manager
BM6	Conserving and enhancing local native habitats onsite by cultivating and utilising local native tube stock on the Development.	Prior to, during and post-construction works	Contractor Project Manager Contractor Environment Manager
BM7	Landscaping - nurseries to be used for plant sourcing/ propagation must have cleanliness and hygiene protocols and procedures in place.	Prior to and during construction works.	Contractor Project Manager Contractor Environment Manager

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ID	Management Measure	Timing	Responsibility
Residual Impacts			
BM7	No-Go areas onsite to be surveyed and clearly identified utilising a barrier of orange mesh fence or similar. Regular inspection and maintenance of the barrier.	Prior to, during and post construction works	Contractor Environment Manager
BM8	Hygiene controls – any machinery that must enter conservation areas must be clean / free of dirt and will be inspected and photographed prior to entry.	Prior to, during and post construction works	Site Supervisor
BM9	Minimise the import of landscaping materials (topsoil mulch), where possible and practical use of conservation assets (site-won topsoil and mulch) within landscaped areas across the Development.	During construction works	Contractor Project Manager
BM10	Pre-clearance fauna survey and relocation of native fauna to areas of retained vegetation. Mark all trees within the construction footprint that could potentially be used by resident and migratory fauna as habitat (i.e. hollow-bearing trees). Mark up trees as follows (with spray paint on their trunks in a visible location): 'H' = Habitat Tree. If hollow-bearing or habitat trees are identified as requiring removal, the two-staged clearing process outlined in Appendix B is to be implemented and the clearing supervised by an ecologist. ○ = Ecologist has assessed the tree, and it is ready for removal. ○ = Ecologist has assessed the tree, and it requires pre-inspection immediately prior to, and during removal.	Prior to and during (as required) vegetation clearing	Contractor Environment Manager Ecologist and experienced wildlife spotter/catcher
BM11	Prior to and during earthworks implement an onsite live trapping pest control program (rats, cats, foxes). The program is to be conducted by a specialist fauna spotter/ catcher.	Prior to and during earthworks	Contractor Project Manager Contractor Environment Manager Ecologist and experienced wildlife spotter/catcher

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ID	Management Measure	Timing	Responsibility
	If any animal is injured, contact the relevant local wildlife rescue agency (e.g. WIRES) and/or local veterinary surgery as soon as practical. - WIRES: 1300 094 737 - Sydney Wildlife Rescue: 9413 4300 - West Blacktown Veterinary Clinic: 9621 4984 - Small Animal Specialist Western Sydney: 9061 6836. Until the animal can be cared for by a suitably qualified animal handler, if possible, minimise stress to the animal and reduce the risk of further injury by:		
BM12	- Handling fauna with care and as little as possible - Covering large animals with a towel or blanket and placing in a large cardboard box - Placing small animals in a cotton bag, tied at the top. Keeping the animal in a quiet, warm, ventilated and dark location. - In the case of arboreal or flying mammals, attempts will be made to relocate the den or nest under the supervision of the Project Ecologist. After capture, the animal(s) will be held by a trained wildlife carer for a period of no longer than two weeks until the roost or den can be relocated, either as an entire tree or part thereof.	As required	All personnel
BM13	Directional lighting is to be used where lighting is required in construction areas to avoid impact on conservation areas.	As required	Contractor Environment Manager
BM14	Keep Development site tidy for vermin control, placing all putrescent waste in an appropriate waste bin. Do not allow the waste bin to overflow, regular disposal of waste off site at an appropriate facility.	All times	All personal

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ID	Management Measure	Timing	Responsibility
Erosion and Sediment Control			
BM15	Erosion and sediment control measures such as silt fencing, coffer dams, or berms must be implemented and maintained to prevent sedimentation of streams and downstream migration of weeds. See Erosion and Sediment Control plan, Appendix B, CEMP.	Prior to and during construction until the area is stabilised	Contractor Project Manager Contractor Environment Manager
Temporary Blacktown Creek Crossing			
Refer to drawing SSDA200 (Appendix A Erosion and Sediment Control Plan, Engineering Notes (Drawing No. SSDA200) for proposed erosion and sediment control measures (Costin Roe, 26 July 2024),			
BM16	Sediment fences and sediment fence returns to be installed prior to the commencement of work. Sediment fences are to be maintained until the completion of instream works at the crossing.	Prior to and during instream works until removal of temporary crossings	Site Supervisor
BM17	Construction of cofferdams to occur during forecast dry weather.	As required	Contractor Project Manager
BM18	Temporary low-flow diversion pipe or pump system to be installed at the base of the channel to divert clean water from upstream. This will reduce the risk of weed seeds collected on vehicles being wash down stream.	Prior to and during instream works until removal of temporary crossings	Site Supervisor
BM19	Undertake all instream works at the creek crossing in accordance with approved plans.	Prior to and during instream works until removal of temporary crossings	Site Supervisor
BM20	All materials (road base, low flow transfer pipe/pump) will be removed during decommissioning of the creek crossing. Area should be stabilised in accordance with the VMP as soon as possible and practical following the removal of instream structures.	Removal of temporary crossing.	Contractor Project Manager

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4.3. Training and Awareness

All personnel including sub-contractors are required to attend a compulsory site induction that includes an environmental component, prior to commencement of works on site.

The following biodiversity specific information is to be included in the site induction:

- location and importance of threatened flora and fauna species (and habitat), and endangered ecological communities
- boundaries for vegetation clearing, access restrictions and “No-Go” zones
- procedure when encountering fauna (native, non-native and feral predatory)
- pesticide and herbicide application requirements, including training, record-keeping and communication.

Training and/or toolbox talks are to be undertaken including content on weed and threatened flora and fauna identification, feral predatory species, the appropriate guidelines and methods for removing weeds, preventing weed migration, driving vehicles in weed infested locations and the disposal of weed infested topsoil.

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5. MONITORING

5.1. Environmental Inspections

The Contract Project Manager or Environment Manager is to complete daily environmental inspections of the Development in accordance with Section 5.1 of the CEMP.

Any corrective actions identified are to be documented and their implementation recorded on-site to verify that they have been being actioned and closed out.

5.2. Environmental Monitoring

Environmental monitoring is to be undertaken to assist in the management of the following:

- Construction of the Development in accordance with environmental approvals
- Compliance with all relevant legislative requirements
- The risk of occurrence of potential environmental incidents
- Effectiveness of environmental controls
- Implementation of this plan.

Environmental monitoring requirements are summarised in Table 5-1.

Table 5-1 Summary of environmental monitoring

Monitoring Activity	Frequency/Timing	Responsibility
Inspect the delineation of “No-Go” areas, to ensure that the barrier is intact and clearly visible	Daily	Site Supervisor
Inspect “No-Go” areas, to verify that no material stockpiling, plant or equipment storage is located within a “No-Go” area	Daily	Site Supervisor
Inspect sediment control measures (sediment fencing) to verify all measures are intact and functioning properly, to avoid indirect impacts on adjoining areas	Weekly, or prior to predicted and post-significant rainfall events	Contractor Environment Manager Site Supervisor
Inspect cleared and disturbed areas, to identify the presence and status of established/establishing weeds	Weekly	Contractor Environment Manager
Inspect the Development site to verify if priority weeds, vermin and pest species are posing an environmental hazard, or have the potential to cause the loss of amenity in the surrounding area	Quarterly	Contractor Environment Manager
Inspect areas containing <i>Typha</i> (Figure 5-1) and <i>Bolboschoenus caldwelli</i> (Figure 5-2) to verify that barriers are intact and no activities (other than conservation works) are occurring in the immediate vicinity	Weekly	Contractor Environment Manager

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Figure 5-1 *Typha domingensis* (Narrow Leaved Cumbungi) (Weeds Australia.org.au)



Figure 5-2 *Bolboschoenus caldwellii* (PlantNET NSW)



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5.3. Environmental Auditing and Records

Environmental auditing is described in Section 5.3 of the CEMP. Audits would involve a review of all environmental documents, records and reports to verify compliance with the CEMP and this BMP.

Environmental and procedural aspects to be covered by the audit may include:

- implementation and effectiveness of management measures detailed in this BMP
- adherence to reporting procedures
- complaint and incident management
- compliance with legislative requirements.

The environmental records that need to be maintained are:

- complaints
- incident, non-conformance and corrective action reporting
- communications with stakeholders
- environmental monitoring
- waste classification and disposal management
- CEMP audit documentation.

Records of auditing and reporting are to be maintained on site.

5.4. Contingency Management Plan

If inspections, monitoring and/or auditing indicate that the biodiversity management measures listed in this BMP are not effective in managing environmental impacts from the Development, the biodiversity management measures detailed in the Contingency Management Plan are to be implemented. The implementation of this Plan will allow the Development team to reduce ongoing impacts to levels below relevant impact assessment criteria as quickly as possible.

The consolidated Contingency Management Plan is included as Appendix K of the CEMP.

5.5. Non-Compliance and Actions

A non-compliance is defined in SSD 36138263 Development Consent as an:

occurrence, set of circumstances or development that is in breach of this consent.

Potential non-compliances with the CoC and this plan will be managed in accordance with Section 5.5 of the CEMP. This includes the reporting, investigation and notification of non-compliances.

5.6. Environmental Incidents

An environmental incident is defined in SSD 36138263 Development Consent as an:

occurrence or set of circumstances that causes or threatens to cause material harm, and which may or may not be or cause a non-compliance.

Environmental incidents can be identified by anyone and are to be reported to the ESR Representative immediately.

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Potential or actual environmental incidents will be management in accordance with Section 5.6.1 of the CEMP.

Section 5.6.2 of the CEMP details the response to environmental emergencies for the Development. Emergency contact details are also provided.

In the event of an environmental incident or emergency related to the implementation of this CAQMP, the responses detailed in the CEMP are to be implemented

5.7. Environmental Reporting

The reporting of environmental performance during construction is to be undertaken as required by the SSD 36138263 Development Consent. Environmental reporting requirements for the Development are documented in Section 5.7 of the CEMP and reports relevant to this BMP are listed in Table 5-2.

Table 5-2 Environmental Reporting

Report	Timing/Frequency	Responsibility	CoC
Environmental monitoring in accordance with Objective 9 of Table 3 of the VMP	Month 1, Month 3, Month 6, Month 12, then until the area is self-sustaining	Contractor Environment Manager	CoC B58 and B60
Environmental inspection and progress reports	Ongoing to the Contractor Project Manager	Contractor Environment Manager	NA
Non-Compliance Report	As required, following identification of a non-compliance	Contractor Project Manager	CoC C12
Incident Report	Within 30 days of the date on which the incident occurred	Contractor Project Manager	CoC C11

5.8. BMP Review and Revision Program

This BMP is to be reviewed in accordance with Section 5.8 of the CEMP. The Development will bi-annually review the adequacy of the environmental management measures within the CEMP and sub-plans (including this BMP) as well as the effectiveness of their implementation to determine whether they are still applicable to the activities being carried out on site. This review is to be undertaken by the Contractor Environment Manager in consultation with the Contract Project Manager and ESR Representative.

CoC C8 also states that all strategies, plans and programs required under the SSD 36138263 Development Consent would be reviewed and the Planning Secretary notified of the review within three months of:

- the submission of an incident report under CoC C11;
- the approval of any modification of the conditions of this consent; or
- the issue of a direction of the Planning Secretary under CoC A2(b) which requires a review.

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As per CoC C9, where documents are revised under the above reviews, the revised documents would be sent to the Planning Secretary for approval within six weeks of the review.

All employees and contractors are to be informed of any revisions to the BMP during toolbox talks.

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6. REFERENCES

SSD 36138263 Planning Secretary's Environmental Assessment Requirements dated November 2023.

Urbis (September 2023) Environmental Impact Statement – Augusta Street Warehouse & Distribution Centre

Urbis (August 2023) Consultation Outcomes Report – Augusta Street Warehouse & Distribution Centre

Anne Clements & Associates (5 August 2024) Vegetation Management Plan for Conservation Areas associated with the proposed Augusta Street Warehouse and Distribution Centre in Huntingwood

Anne Clements & Associates (6 August 2024) Biodiversity Development Assessment Report for the proposed Augusta Street Warehouse and Distribution Centre in Huntingwood

NSW DPI Management Guide (April 2018) NSW Weed Control Handbook, 7th Edition

Costin Roe (26 July 2024) Proposed Temporary Crossing of Blacktown Creek SSD-36138263 Augusta Street Warehouse and Distribution Centre Augusta Street, Blacktown, NSW

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Appendix A Erosion and Sediment Control Plan, Engineering Notes (Drawing No. SSDA200)

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TABLE 1 – STABILISATION REQUIREMENTS AND TREATMENT METHODS

DURING CONSTRUCTION – TEMPORARY STABILISATION (DURING PERIODS OF INACTIVITY OR WHEN WORKS ARE ON HOLD)			
LANDS	STABILISATION REQUIREMENT	TREATMENT METHODS - PRODUCTS	REMARKS
ALL LANDS	C-FACTOR = 0.15 (50% EQUIVALENT GROUND COVER ⁱⁱ)	APPLIES AFTER 20 WORKING DAYS OF INACTIVITY (EVEN THOUGH WORKS MIGHT CONTINUE LATER)	SLOE BINDER (IE VITAL P47/STONEWALL OR EQUIVALENT ⁱⁱⁱ) - RE-APPLY/MAINTAIN AS NECESSARY APPROX EVERY 3-4 MONTHS WITHOUT SUITABLE VEGETATION COVER) TO ENSURE THE REQUIRED COVER IS PROVIDED.
		GEOTEXTILE, JUTE MATTING, BLACK PLASTIC OR EQUIVALENT ⁱⁱⁱ	- COVER ALL EXPOSED SOILS. - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PROVIDED
REFER TO THE DRAIN SPECIFICATIONS DETAILLED ON THE PLAN FOR SPECIFIC LANDS/STABILISATION REQUIREMENTS. EXAMPLE TREATMENT METHODS ARE SHOWN BELOW.			
WATERWAYS, DRAINAGE LINES AND CONCENTRATED FLOW AREAS	C-FACTOR = 0.05 (70% GRASS COVER OR EQUIVALENT GROUND COVER ⁱⁱ)	TEMPORARY LINING MATTING: - GEOTEXTILE (IE BIOD42), OR EQUIVALENT ⁱⁱⁱ)	- COMPLETE ANY SUBSOIL TREATMENT BEFORE LAYING THE MATTING. - INSTALL MATTING IN ACCORDANCE WITH SD-5-7. - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PROVIDED
		JUTE MESH, SEEDING AND SOIL BINDER (IE VITAL P47/STONEWALL OR EQUIVALENT ⁱⁱⁱ)	- COMPLETE SUBSOIL TREATMENT (IE GYPSUM LIGHTLY REPEATED INTO SUBGRADE AT A RATE OF 5 TONNES/ha) - PLACE TOPSOIL TO A DEPTH OF AT LEAST 75mm. - COMPLETE ANY FERTILISATION AND SEEDING BEFORE LAYING THE MATTING. - INSTALL MATTING IN ACCORDANCE WITH SD-5-7. - SPRAY ALL SURFACES WITH VITAL P47/STONEWALL OR EQUIVALENT ⁱⁱⁱ) - VITAL DILUTION RATE = 1L / m ² OF DILUTED VITAL MIXTURE. - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PERMANENTLY MAINTAINED
		JUTE MATTING (350gsm) AND SEEDING OR EQUIVALENT ⁱⁱⁱ)	- COMPLETE SUBSOIL TREATMENT (IE GYPSUM LIGHTLY REPEATED INTO SUBGRADE AT A RATE OF 5 TONNES/ha) - PLACE TOPSOIL TO A DEPTH OF AT LEAST 75mm. - COMPLETE ANY FERTILISATION AND SEEDING BEFORE LAYING THE MATTING. - INSTALL MATTING IN ACCORDANCE WITH SD-5-7. - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PERMANENTLY MAINTAINED
		TUBE REINFORCEMENT MATTING (IE GYPSUM LIGHTLY REPEATED INTO SUBGRADE AT A RATE OF 5 TONNES/ha) - PLACE TOPSOIL TO A DEPTH OF AT LEAST 75mm. - COMPLETE ANY FERTILISATION AND SEEDING BEFORE LAYING THE MATTING. - INSTALL MATTING IN ACCORDANCE WITH SD-5-7. - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PERMANENTLY MAINTAINED	- COMPLETE SUBSOIL TREATMENT (IE GYPSUM LIGHTLY REPEATED INTO SUBGRADE AT A RATE OF 5 TONNES/ha) - PLACE TOPSOIL TO A DEPTH OF AT LEAST 75mm. - COMPLETE ANY FERTILISATION AND SEEDING BEFORE LAYING THE MATTING. - INSTALL MATTING IN ACCORDANCE WITH SD-5-7. - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PERMANENTLY MAINTAINED
		ROCK LINING - HIGH FLOWS	- COMPLETE SUBSOIL TREATMENT (IE GYPSUM LIGHTLY REPEATED INTO SUBGRADE AT A RATE OF 5 TONNES/ha) - INSTALL GEOTEXTILE UNDERLAY (IF SPECIFIED) IN ACCORDANCE WITH SD-5-7 - INSTALL ROCK ARMOURING TO THE DEPTH AND SIZE AS SPECIFIED ON THE PLAN
STOCKPILES	C-FACTOR = 0.10 (60% GRASS COVER OR EQUIVALENT GROUND COVER ⁱⁱ)	APPLIES AFTER 10 WORKING DAYS FROM COMPLETION OF FORMATION	SEEDING AND SOIL BINDER (IE VITAL P47/STONEWALL OR EQUIVALENT ⁱⁱⁱ) - VITAL DILUTION RATE = 1L / m ² OF DILUTED VITAL MIXTURE - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PERMANENTLY MAINTAINED
GENERAL SURFACES	C-FACTOR = 0.10 / 0.05 (60% / 70% GRASS COVER OR EQUIVALENT GROUND COVER ⁱⁱ)	APPLIES AFTER 10 WORKING DAYS FROM COMPLETION OF FORMATION AND APPLIES WITHIN FURTHER 60 DAYS	REFER TO SD-7-1 - COMPLETE SUBSOIL TREATMENT (IE GYPSUM LIGHTLY REPEATED INTO SUBGRADE AT A RATE OF 5 TONNES/ha) - PLACE TOPSOIL TREATED TOPSOIL TO A DEPTH OF AT LEAST 75mm. - APPLY ANY FERTILISERS REQUIRED. - APPLY ANY SEED TO ALL SURFACES - SPRAY ALL SURFACES WITH VITAL P47/STONEWALL OR EQUIVALENT ⁱⁱⁱ) - VITAL DILUTION RATE = 1L / m ² OF DILUTED VITAL MIXTURE - RE-APPLY/MAINTAIN AS NECESSARY TO ENSURE THE REQUIRED COVER IS PERMANENTLY MAINTAINED
[i] - EQUIVALENT COVER/PRODUCT MUST ACHIEVE THE EQUIVALENT C-FACTOR WITH PROVEN RESEARCH/DOCUMENTATION TO VERIFY THIS STANDARD DRAWINGS REFERENCED CAN BE LOCATED IN THE SOILS & CONSTRUCTION MANAGING URBAN STORMWATER - VOLUME 1 BOOK BY LANDCOM. ALTERNATIVE DETAILS MAY BE Sought IN CONSULTATION WITH THE ENGINEER			

TABLE 2 – LIMITATIONS TO ACCESS DURING CONSTRUCTION

LAND USE	LIMITATION	REMARKS
CONSTRUCTION AREAS	LIMITED TO 5 (PREFERABLE 2) METRES FROM THE EDGE OF ANY ESSENTIAL CONSTRUCTION ACTIVITY AS SHOWN ON ENGINEERING PLANS.	ALL SITE WORKERS SHOULD CLEARLY RECOGNISE THESE AREAS THAT WHERE APPROPRIATE, ARE OBTAINED WITH BARRIER FENCING (UP/SLOPE) AND SEDIMENT FENCE (DOWNSLOPE) OR SIMILAR MATERIALS.
ACCESS CORRIDORS	LIMITED TO A MAXIMUM WIDTH OF 7 METERS	THE SITE MANAGER WILL DETERMINE AND MARK THE LOCATION OF THESE ZONES ON SITE. THEY CAN VARY IN POSITION SO AS TO BEST CONSERVE EXISTING VEGETATION AND PROTECT DOWNSTREAM AREAS WILL BEING CONSIDERATE OF THE NEEDS OF EFFICIENT WORKS ACTIVITIES. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE BOUNDARIES.
REMAINING LANDS, INCLUDING REVEGETATION AREA	ENTRY PROHIBITED EXCEPT FOR ESSENTIAL MANAGEMENT WORKS	THINNING OF GROWTH MIGHT BE NECESSARY, FOR EXAMPLE, FOR FIRE REDUCTION OR WEED REMOVAL.

EROSION CONTROL NOTES

ALL SEDIMENT CONTROL WORK INCLUDING DIVERSION BANKS, CATCH DRAINS, V-DRAINS AND SEDIMENT FENCES SHALL BE COMPLETED IN ACCORDANCE WITH THE STAGED PLANS PRESENTED AND SHALL FACILITATE A STAGED CONSTRUCTION METHODOLOGY.

1. ALL EROSION & SEDIMENT CONTROLS SHALL BE COMPLETED IN ACCORDANCE WITH THE SOILS AND CONSTRUCTION MANAGING URBAN STORMWATER – THE BLUE BOOK BY LANDCOM.
2. SEDIMENT FENCES AND SEDIMENT FENCE RETURNS SHALL BE ERECTED CONVEX TO THE CONTIGUOUS POND WATER.
3. STRAW BALE BARRIERS & GEOTEXTILE FENCES OR SEDIMENT FANONES ARE TO BE CONSTRUCTED TO TOP OF BATTER PRIOR TO REMOVAL OF TOP SOIL.
4. ALL TEMPORARY EARTH BARRIERS, DIVERSIONS AND SEDIMENT BASIN EMBANKMENTS ARE TO BE BUILT TO A MINIMUM OF 200mm ABOVE THE FINISHED GROUND LEVEL. COVER AS MUCH AS POSSIBLE WITH TOPSOIL TO PREVENT EROSION OF EXPOSED SURFACES. THEY HAVE BEEN FORMED AFTER TO TABLE FOR APPROVED STABILISATION METHODS.
5. CLEAN OR NON-SITE WATER IS TO BE DIVERTED AWAY FROM DISTURBED GROUND AND INTO THE DRAINAGE SYSTEM OVER STABLE SURFACES.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROVIDING ONGOING ADJUSTMENT TO EROSION CONTROL MEASURES AS REQUIRED DURING CONSTRUCTION.
7. ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS OF 5mm OR GREATER WITHIN A 24-HOUR PERIOD FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE, APPROVED LOCATION.
8. THE SITE IS TO BE INSPECTED FOLLOWING A RAINFALL EVENT OF 5mm OR GREATER WITHIN A 24-HOUR PERIOD FOR EVIDENCE OF EROSION AND RESPOND WITH INCREASED CONTROL, IF REQUIRED.
9. ALL FINAL EROSION PREVENTION MEASURES INCLUDING THE ESTABLISHMENT OF GRASSING ARE TO BE MAINTAINED UNTIL THE END OF THE DEFECTS LIABILITY PERIOD.
10. ALL EARTHWORKS AREAS SHALL BE ROLLED ON A REGULAR BASIS TO SEAL THE EARTHWORKS.
11. ALL FILL AREAS ARE TO BE LEFT WITH A BUND AT THE TOP OF THE SLOPE AT THE END OF EACH DAY'S EARTHWORKS TO DIRECT WATER TO A STABLE OUTLET OVER THE BATTER OR INTERNALLY TOWARDS SEDIMENT CONTROL. THE HEIGHT OF THE BUND SHALL BE A MINIMUM OF 200mm.
12. ALL SLOPES ARE TO BE SEEDED AND HYDROMULCHED WITHIN 10 DAYS OF COMPLETION OF EARTHWORKS.
13. AFTER PERMANENT STABILISATION OF THE SITE IS COMPLETE (IE BY TOPSOILING, PAVING ETC.) AND THE SITE IS OPENED TO BE STABLE IN THE OPINION OF A SUITABLE QUALIFIED PERSON ALL TEMPORARY WORK SUCH AS SEDIMENT FENCE, DIVERSION DRAINS ETC SHALL BE REMOVED.
14. ALL STOCKPILES ARE TO BE SUITABLY COVERED AND STABILIZED TO THE SATISFACTION OF THE SITE MANAGER TO PREVENT WIND AND WATER EROSION.
15. ANY AREA THAT IS NOT APPROVED BY THE CONTRACT ADMINISTRATOR FOR CLEANING OR DISTURBANCE BY THE CONTRACTOR'S ACTIVITIES SHALL BE CLEARLY MARKED AND SIGN POSTED, FENCED OFF OR OTHERWISE APPROPRIATELY PROTECTED AGAINST ANY SUCH DISTURBANCE.
16. ALL STOCKPILE SITES SHALL BE SITUATED IN AREAS INDICATED ON THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN OR APPROVED FOR-SITE USE BY THE SITE MANAGER. A 6m BUFFER ZONE SHALL EXIST BETWEEN STOCKPILE SITES AND ANY STREAM OR FLOW PATH. ALL STOCKPILES SHALL BE ADEQUATELY PROTECTED FROM EROSION AND CONTAMINATION OF THE SURROUNDING AREA BY USE OF THE MEASURES IN THE APPROVED ESDP.
17. ACCESS AND EXIT AREAS SHALL INCLUDE TRUCK SHAKER GRID OR OTHER METHODS APPROVED BY THE SITE MANAGER FOR THE REMOVAL OF SOIL MATERIAL FROM MOTOR VEHICLES.
18. THE CONTRACTOR IS TO ENSURE RUNOFF FROM ALL AREAS WHERE THE NATURAL DRAINAGE OF THE SITE IS NOT MAINTAINED. ALL STOCKPILES SHOULD BE DESIGNED TO STABLE AREAS OR DIRECTED TO NATURAL WATERCOURSES.
19. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SLOPES, CROWN AND DRAINS ON ALL EXCAVATIONS AND EMBANKMENTS TO ENSURE SATISFACTORY DRAINAGE AT ALL TIMES. WATER SHALL NOT BE ALLOWED TO POND ON THE WORKS UNLESS SUCH PONDING IS PART OF AN APPROVED ESDP / SWMP.

DUST CONTROL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE DUST CONTROL MEASURES ARE APPLIED AND MAINTAINED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES REQUIREMENTS.
2. THE APPLICATION OF LIQUID BASED DUST SUPPRESSION MEASURES MUST BE SUCH THAT SEDIMENT LAIDEN RUNOFF RESULTING FROM SUCH MEASURES DOES NOT CREATE A TRAFFIC OR ENVIRONMENTAL HAZARD (EG TYPICAL SEDIMENT CONTROL).
3. DUST GENERATION ASSOCIATED WITH WIND EROSION TO BE CONTROLLED USING WATER TRUCKS. DUST SUPPRESSING FOG, MIST GENERATORS, SEALANT PLACED OVER THE SOIL SURFACE ROUNDOFFING OR RE-VEGETATION.
4. THE FOLLOWING ACTIVITIES SHALL BE ADOPTED, IF NECESSARY, TO MANAGE DUST CONTROL ON SITE:
 - LIMITING THE AREA OF SOIL DISTURBANCE AT ANY GIVEN TIME
 - REPAVING TOPSOIL AFTER COMPLETION OF EARTHWORKS.
 - PROGRAMMING WORK TO MINIMISE THE LIFE OF STOCKPILES.
 - TEMPORARILY STABILISING LONG-TERM STOCKPILES.
 - GRAVELLING UNSEALED ACCESS AND HAUL ROADS.
 - MINIMISING TRAFFIC MOVEMENT ON EXPOSED SURFACES.
 - LIMITING VEHICULAR TRAFFIC TO 15km/h.
 - RETAINING EXISTING VEGETATION AS WIND BREAKS.
 - UTILISING A WATER CART WITH PORTABLE WATER ONLY.
5. OIL, LAMP OIL GAS CONDENSATE OR ANY CONTAMINATED LEACHATE IS NOT TO BE USED FOR DUST SUPPRESSION.

INSTREAM WORKS:

1. SEDIMENT FENCES AND SEDIMENT FENCE RETURNS TO BE ERECTED PRIOR TO THE COMPLETION OF ANY WORK. SEDIMENT FENCES TO BE INSTALLED TO THE BASE OF CHANNEL TO DIVERT CLEAN WATER FROM UPSTREAM BASEFLOW.
2. UNDERAKE WORK DURING A PERIOD OF DRY FORECASTED WEATHER.
3. PROTECT DISTURBED AREA WITH COFFERDAMS AS REQUIRED.
4. TEMPORARY LOW FLOW DIVERSION PIPE OR PUMPED SYSTEM MAY BE INSTALLED AT THE BASE OF CHANNEL TO DIVERT CLEAN WATER FROM UPSTREAM BASEFLOW.
5. UNDERAKE ALL INSTREAM WORK IN THE SPECIFIED SECTION OF THE CHANNEL IN ACCORDANCE WITH APPROVED PLANS AND IMMEDIATELY PLANT TO STABILISE THE WORKS.
6. PLANT WITH APPROPRIATE SPECIES, AT A DENSITY THAT WOULD NATURALLY OCCUR.

SITE STABILITY NOTE:

LAND DISTURBANCE & LAND FILLING ACTIVITIES MUST BE UNDER TAKEN IN A PHASED MANNER, IMPACTING A MAXIMUM AREA OF 65% AT ANY ONE TIME PER CONSTRUCTION PHASE.

DISTURBED AREAS MUST BE STABILIZED TO A C-FACTOR OF 0.05 PRIOR TO THE COMPLETION OF ANY OTHER WORKS PER CONDITION B4.1b). REFER TO TABLE 1 ABOVE FOR APPROVED STABILISATION METHODS

INSPECTION & MAINTENANCE NOTES:

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ADEQUATE INSPECTIONS AND MAINTENANCE ARE CARRIED OUT DURING SITE WORKS, DAILY AND WEEKLY. INSPECTION CHECKLISTS HAVE BEEN PROVIDED IN THE COSTIN ROE SOIL AND WATER MANAGEMENT PLAN (SWMP)

13904-03-03D.PDF DATED 23/07/23.

AS NOTED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ADEQUATE MAINTENANCE OF EROSION & SEDIMENT CONTROL MEASURES ARE UNDERTAKEN DURING THE WORKS PERIOD. DAMAGED, DISLOADED OR FAULTY ESDP MEASURES ARE TO BE IMMEDIATELY RECTIFIED AND THE SURROUNDING AREA IS TO BE REVEGETATED AS PER NOTES ON THIS DRAWING, THE SWMP AND THE LANDCOM BLUE BOOK.

SOIL & WATER MANAGEMENT PLAN NOTE:

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SOIL AND WATER MANAGEMENT PLAN BY COSTIN ROE CONSULTING, REF 13904-03-03D.PDF

SEDIMENT CONTROL BASIN NOTES

1. TYPE D BASIN IS REQUIRED.
2. VOLUME OF THE BASINS SHALL BE AS DETERMINED ON DRAWING. NOMINAL POND LOCATIONS AND NOMINAL DIMENSIONS.
3. SEDIMENT BUILD UP TO NOT EXCEED 33% TOTAL CAPACITY OF BASIN.
4. DEWATERING OF BASIN TO BE PERFORMED TO THE BOTTOM OF THE SEDIMENT SETTLING ZONE FOLLOWING ACHIEVEMENT OF 4000 s.
5. FOLLOWING DEWATERING PER NOTE 4, WATER LEVEL TO BE MAINTAINED AT 20% CAPACITY AFTER A FOUR DAY SETTLING PERIOD FOLLOWING A STORM EVENT SUCH THAT THE BASIN HAS SUFFICIENT CAPACITY TO CONTAIN RUNOFF AND SEDIMENT FROM SUBSEQUENT RAINFALL EVENTS.
6. WATER TO BE DROPPED WITH GYPSUM TO ACCELERATE SETTLEMENT OF SUSPENDED SOLIDS AS REQUIRED.
7. GYPSUM DOSAGE RATE TO BE APPLIED AT APPROX 32kg PER 100 CUBIC METRE OF COLLECTED RUNOFF.
8. THE USE OF ALUM OR ANOTHER ALTERNATIVE AS A FLOCCULANT IS TO BE USED ONLY FOLLOWING CONSULTATION WITH DISCHARGE FROM PONDING IS PERMISSIBLE WHEN THE WATER PH IS 6.5-9.5 AND IS CLARIFIED TO AT OR BELOW A TSS OF 50mg/L.
9. CLARIFICATION WOULD GENERALLY BE ACHIEVED IN 36-72 HOURS WITH THE USE OF GYPSUM PLUS NO VISIBLE OIL OR GREASE. CORRELATION TESTS MUST BE UNDERTAKEN ON SITE TO ENSURE THIS IS ACHIEVED.
10. DEWATERING SHALL BE DONE IN SUCH A MANNER AS TO REMOVE THE CLEAN WATER (BEING WATER WITHIN THE ADOPTED CRITERIA) WITHOUT REMOVING OR DISTURBING THE SEDIMENT THAT HAS SETTLED. THE PUMP INTAKE PIPE IS NOT TO REST ON THE SETTLED SEDIMENT LAYER.
11. IF WATER EXCEEDS TSS OF 50mg/L DURING DEWATERING, PUMPING IS TO CEASE. RECORDS ARE TO BE KEPT ON-SITE AT ALL TIMES OF ALL MEASUREMENT PRIOR TO, DURING AND AFTER DISCHARGE. RECORDS TO BE MADE AVAILABLE TO CONSULT OFFICERS UPON REQUEST.
12. PROVIDE SECURITY FENCE TO BASIN FOR SAFETY.

SEDIMENTATION BASIN NOTE:

REFER TO SEDIMENT & EROSION CONTROL NOTES.

FOR SEDIMENT AND EROSION CONTROL DETAILS, REFER TO THE LANDCOM BLUE BOOK AND EXTRACTS ON DRAWING SSDA20.

SEDIMENTATION BASIN SIZING BASED ON RECOMMENDATIONS OF SOILS AND SEDIMENTATION, MANAGING URBAN STORMWATER THE BLUE BOOK. CAPACITY BASED ON 100mm ANNUAL DEPTH OF 0.5% PERCENTILE INTENSITY (0.2mm) IN THE UPERPOOL CATCHMENT AREA.

- NOTES:
1. ASSUME TYPE D SOIL (CLAY/SILT/CLAY)
 2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)
 3. REFER TO DRAWING SSDA20 FOR SEDIMENTATION BASIN CALCULATIONS

ISSUED FOR STATE GOVERNMENT DEVELOPMENT APPLICATION	03/03/23	E
ISSUED FOR INFORMATION	06/03/23	D
REVISED AS CLARIFIED	08/03/23	C
ISSUED FOR INFORMATION	20/03/23	B
ISSUED FOR INFORMATION	06/03/23	A
APPROVED	DATE	ISSUE

ARCHITECT

PICE ARCHITECTS

CLIENT

LOGOS

PROPOSED WAREHOUSE DISTRIBUTION

AUGUSTA STREET, HUNTINGWOOD EAST, NSW 2718

DESIGNED BY

20 DATE 22

CHECKED BY

17 DATE 22

SCALE

1:500

CONTRACT NO.

13904-03-SSDA20

COSTIN ROE CONSULTING

FOR SS&DA

CRCCIVIL & STRUCTURAL ENGINEERS

PROPOSED BUILDING

EROSION & SEDIMENT CONTROL ENGINEERING NOTES

DRAWING NO.

CO13904-03-SSDA200

ISSUE

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