

Ginninderry Development

Construction Environmental Management Plan (CEMP) Framework

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Abbreviations

ACMs	Asbestos Containing Materials
ACT	Australian Capital Territory
ANZECC	The Australian and New Zealand Environment Conservation Council
AMP	Asbestos Management Plan
AQMP	Air Quality Management Plan
CEMP	Construction Environment Management Plan (interchangeable with EMP)
CMP	Contamination Management Plan
CWMS	Construction Work Method Statement
DA	Development Approval
DBH	Diameter at breast height
EPA	Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ESCP	Erosion and Sediment Control Plan
FMP	Fire Management Plan
GCC	Ginninderry Conservation Corridor (formerly West Belconnen Conservation Corridor)
HMP	Heritage Management Plan
НММР	Hazardous Materials Management Plan
ISO	International Organisation for Standardisation
KPI	Key Performance Indicators
MP	Management Plan
NEPM	National Environmental Protection Measures
NSW	New South Wales
NVMP	Noise and Vibration Management Plan
OHS	Occupational Health and Safety
OHSP	Occupational Health and Safety Plans
OHSW	Occupational Health and Safety and Welfare
PPE	Personal Protective Equipment
PTWL	Pink-tailed Worm-lizard
SRZ	Structural Root Zones
SMEC	Snowy Mountain Engineering Corporation
SWMS	Safe Work Method Statements
SWMP	Soil and Water Management Plan
VBMP	Vegetation and Biodiversity Management Plan
UFP	Unexpected Find Protocol
WHS	Work Health and Safety
WMP	Waste Management Plan

1. Introduction

1.1. Background

1.1.1. Project Overview

SMEC Australia Pty. Ltd. (SMEC) was commissioned by Riverview Projects (ACT) Pty. Ltd (Riverview) to prepare a Construction Environmental Management Plan (CEMP) Framework (the Framework) to assist contractors (the Contractor) in developing site-specific CEMPs for each stage of the Ginninderry urban development and associated works. It is mandatory that the site specific CEMPs apply the requirements outlined in Table 1 that are relevant to protecting the key environmental values present at each site. In this context, Riverview is acting on behalf of the Joint Venture between Riverview Developments and the ACT Government with respect to the section of land from the Ginninderry Development site that is located within the ACT and NSW.

The Ginninderry development is located at West Belconnen, ACT and in adjacent areas of the Yass Valley Council area, NSW (Figure 1). Associated works include any works within the Ginninderry Conservation Corridor located adjacent to the urban development area and extension to Ginninderra Drive and Drake Brockman Drive.

1.1.2. CEMP Framework Purpose

The purpose of this document is to provide an overarching CEMP Framework which will be used by the Contractor to develop the site-specific CEMPs for each stage of the development. The CEMP Framework forms the basis for the development of site-specific CEMPs and contains relevant information on aspects which will be incorporated into the document. The site-specific CEMPs, and any sub-plans of the site-specific CEMP, are required to adhere to relevant key requirements of the Program, outlined in Table 1, and the relevant sections of the overarching CEMP to ensure the protection of key environmental values and aspects at each site.

1.1.3. Commonwealth Approval

In July 2014, Riverview and the Commonwealth Government commenced a Strategic Assessment under Part 10 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The focus of the agreement is to assess the potential impacts from development of the West Belconnen project area on Matters of National Environmental Significance (MNES) protected under the EPBC Act. Attached to the approval, received in September 2017, are 20 Conditions, many of which need to be met before construction can commence on Stage 2 of the Estate Development Plan (EDP).

Approval Condition 10 requires the preparation of a Construction Environmental Management Plan as follows:

'Prior to the **commencement of construction** (in all areas other than the area marked as stage 1 in the Program, Figure 4), the **approval holder** must prepare a Construction Environmental Management Plan (CEMP) to mitigate impacts that may occur throughout the construction phase of the Program. The CEMP must include measures outlined in the Program. The plan must be prepared in consultation with the **Department** (regarding Protected Matters), NSW Office of Environment and Heritage (regarding NSW portion of the site), endorsed by the ACT Conservator (for both the ACT and NSW portion of the site) and approved by the ACT Minister for the Environment (ACT portion). The endorsed and approved plan or a later endorsed and approved plan must be implemented and made available to the public for the life of the Program.' The West Belconnen Strategic Assessment Program Report (A T Adams Consulting 2017; the Program Report) and the West Belconnen Strategic Assessment Report (Umwelt 2017) detail and assess the measures to be undertaken to manage potential impacts on MNES.

Section 4 of the Program Report (A T Adams and Consulting 2017) specifies the minimum requirements for CEMPs for management of potential adverse impacts on Matters of National Environmental Significance. The Assessment Report (Umwelt 2017) includes confirmation of the measures required to be included in CEMPs in Section 5. Further, to ensure consistency with Commonwealth approval conditions, works undertaken within the Ginninderry Conservation Corridor must be undertaken in a manner consistent with the Ginninderry Conservation Corridor Reserve Management Plan (TRC Tourism 2018).

Table 1 shows the CEMP compliance requirements as specified in the Commonwealth Approval Conditions, the Program Report (A T Adams Consulting 2017) and the Strategic Assessment (Umwelt 2017) and where these are addressed in the CEMP Framework.

Table 1. Compliance Schedule

Reference	Issue	Requirement	CEMP Document Reference
Commonwealth Approval Conditions	CEMP Requirement CEMP Approval	Condition 10. Prior to the commencement of construction (in all areas other than the area marked as stage 1 in the Program, Figure 4), the approval holder must prepare a Construction Environmental Management Plan (CEMP) to mitigate impacts that may occur throughout the construction phase of the Program. The CEMP must include measures outlined in the Program. The plan must be prepared in consultation with the Department (regarding Protected Matters), NSW Office of Environment and Heritage (regarding NSW portion of the site), endorsed by the ACT Conservator (for both the ACT and NSW portion of the site) and approved by the ACT Minister for the Environment (ACT portion). The endorsed and approved plan or a later endorsed and approved plan must be implemented and made available to the public for the life of the Program.	This document provides a framework to inform preparation of site-specific CEMPs.
Program Report (A T Adams Consulting 2017) (s4.1) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 4.4.1)	Box – Gum Woodland	 Implementation of CEMPs that: Define clearing procedures and boundaries, including the retention of selected significant trees, clearing outside of threatened bird breeding seasons, and fauna rescue procedures. Implement weed management during construction. Enforce sediment and erosion controls to prevent site run-off during construction. 	Section 3.3.10 Section 3.3.10 / Section 3.3.3 Section 3.3.3
Program Report (A T Adams Consulting 2017) (s 4.2) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 4.5.5.4)	Pink-tailed Worm- lizard	 Implementation of CEMPs, particularly targeting Erosion and sediment controls; Water treatment standards before release; Flow controls; Pollution and waste management; and Avoidance of riparian habitat areas. 	Section 3.3.3 Section 3.3.3 Section 3.3.3 Section 3.3.3 Section 3.3.10 / Section 3.3.3

Reference	Issue	Requirement	CEMP Document Reference
Program Report (A T Adams Consulting 2017) (s 4.2.1) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 4.5.1)	Birds	 Mitigation actions during the construction phase implemented through CEMPs prepared prior to construction commencing in accordance with relevant guidelines: Definition of clearing procedures and boundaries that include the retention of trees; avoid with appropriate buffers threatened bird species nesting trees; clear outside of threatened bird species' breeding seasons, and outline faunal rescue procedures. Further mitigation measures that apply to the construction phase of implementation will limit the potential for disturbance to breeding birds through implementation of CEMPs that include measures to avoid clearing during threatened bird species' breeding times. As noted above, these CEMPS will be tailored to each location where works are adjacent to either retained habitat in the Ginninderry Conservation Corridor (GCC) or retained trees in urban open space. Recovery and beneficial use for the purpose of fauna habitat enhancement of fallen timber, including logs and tree sections containing hollows. Invasive species management. Sediment and erosion controls to prevent site run-off. 	Section 3.3.10 Section 3.3.10 Section 3.3.10 Section 3.3.3
Program Report (A T Adams Consulting 2017) (s 4.3) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 4.6)	Threatened Flora	 Implementation of CEMPs, particularly targeting: Prescriptions for pre-clearing surveys for listed species prior to the commencement of any construction activities such that further avoidance and mitigation measures can be incorporated where cost effective and practicable; Erosion and sediment controls; Water treatment standards before release; Flow controls; Pollution and waste management; Weed management; Appropriate definition of clearing boundaries; and Avoidance of the WBCC. 	Section 3.3.10 Section 3.3.3 Section 3.3.3 Section 3.3.3 Section 3.3.3 Section 3.3.10 / Section 3.3.3 Section 3.3.10 Section 3.3.10

Reference	Issue	Requirement	CEMP Document Reference
Program Report (A T Adams Consulting 2017) (s 4.2.2) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 4.5.2 and 4.5.3)	Fish and Amphibians	 Implementation of CEMPs to be prepared prior to construction commencing, in accordance with relevant guidelines. CEMPs will target among other environmental values: Erosion and sediment controls; Water treatment standards before release in the Murrumbidgee River or Ginninderra Creek; Flow controls; Pollution and waste management; and Avoidance of riparian habitat areas. 	Section 3.3.3 Section 3.3.3 Section 3.3.3 Section 3.3.4 / Section 3.3.5 Section 3.3.10
Program Report (A T Adams Consulting 2017) (s 4.2.3) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 4.5.4)	Golden Sun Moth	 CEMPs implemented during the construction phase of the Ginninderra Drive extension, which include the following measures that are specific to Golden Sun Moth: Erosion and sediment control Fencing to ensure avoidance of retained areas of habitat Flow controls; and Weed management actions such as vehicle hygiene standards to ensure the control of the spread of weeds. Result of targeted measures in the CEMP and GCC Reserve Management Plan (RMP) for retained areas to avoid dispersal of Chilean needle-grass and control it where practicable. 	Section 3.3.3 Section 3.3.10 Section 3.3.3 Section 3.3.10 / Section 3.3.3 Section 3.3.10
Program Report (A T Adams Consulting 2017) (s 7.0) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 2.0)	General	 CEMPs implemented under the Program must ensure that the following are implemented: Waste management procedures Worker and public health and safety policies Traffic and access controls Monitoring and compliance strategies Appropriate surface remediation post-construction; and Buffer zones around sensitive values. 	Section 3.3.3Section 4.3 Section 3.3.7 Section 5 Section 3.3.10 / Section 3.3.3 Section 3.3.10 and Section 3.3.9

Reference	Issue	Requirement	CEMP Document Reference
Program Report (A T Adams Consulting 2017) (s 3.6.2) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 6.0)	General	The CEMPs will be prepared in accordance with ACT Government guidelines in addition to any specific requirements of the WBCC RMP for mitigation of indirect impacts from adjacent development. CEMPs will be prepared prior to construction commencing and be maintained until after construction and remediation activities have been finalised.	This document complies with ACT requirement and is intended to provide a framework to inform preparation of site-specific CEMPs that will comply with these requirements.
Program Report (A T Adams Consulting 2017) (s 5.0) <i>And</i> Strategic Assessment Report (Umwelt 2017) (s 4.3.2)	Pre-construction activities	CEMPs will also be prepared to guide pre-construction activities such as geotechnical sampling and ensuring direct and indirect impacts to sensitive areas are avoided. The primary risks during these activities are from uncontrolled vehicle access and discharge of sediment laden water from the drilling process or as runoff from excavated soil. Best practice measures to manage the potential effects from these activities will be incorporated into the CEMPs.	This CEMP framework will guide the development of site-specific CEMPs for all components of the proposed works including pre- construction activities. Section 3.3.3
Ginninderry Conservation Corridor Reserve Management Plan (2018- 2023)	General	Apply best practice sediment and erosion controls to construction and infrastructure in the Reserve.	Section 3.3.3

1.2. Area of Application

This CEMP must be referenced when preparing CEMPs for all earthworks, excavation, demolition or construction works activities within the project boundary presented in Figure 1. The project boundary includes the Gininnderry Conservation Corridor, the Ginninderry Development area, the proposed Ginninderra Drive Extension and the proposed Drake Brockman Drive Extension.

1.3. Project Staging

The proposed Ginninderry Development would be undertaken in a staged approach over approximately 30-40 years. This CEMP Framework will be used by the relevant Contractors to guide development separate site and stage -specific CEMPs informed by the relevant requirements for each stage of development or component of associated works.

1.4. Consultation

Development of this CEMP Framework must be developed according to the consultation procedures specified in the Commonwealth Approval conditions. The following agencies have been consulted in the development of this document:

- Commonwealth Department of Environment and Energy
- ACT Conservator of Flora and Fauna
- NSW Office of Environment and Heritage.

1.5. Distribution

This CEMP Framework must be made available to all Contractors to inform the development of sitespecific CEMPs for all stages of development or components of associated works. This CEMP will be included in the site-specific induction process to ensure that all workers are provided this information. Key personnel will be on boarded into the CEMP process as described in Section 4.4. The CEMP will be made publicly available via the Ginninderry website, as per approval condition 10.

1.6. Revisions

This Framework and the management processes described in the document will be subject to a process of periodic review. For each development stage, information on the site-specific constraints and management measures would need to be reviewed and integrated. If any aspects or impacts are discovered that are not addressed in this CEMP Framework, they will be assessed on a risk basis and this may trigger an update to this document. Requirements of the site-specific CEMPs in relation to changes of the CEMP Framework are detailed in Section 5.5.

Should this review process identify any issues or items within the Framework that are either redundant or in need of updating, it is the responsibility of the Principal's Representative to revise the documents. The revised document will then be issued to Riverview Projects (ACT) Pty. Ltd for certification of the changes to the CEMP Framework such as:

- Editorial changes such as staff and agency/authority name changes
- Changes that do not increase the magnitude of impacts on the environment when considered individually or cumulatively
- Changes that do not compromise the ability of the project to meet approval or legislative requirements.

Substantive changes would need to be approved by the ACT Government Conservator of Flora and Fauna. Where impacts on Matters of National Environmental Significance may occur, consultation with the Department of Environment and Energy would be warranted.



Location: X:\Projects\3002638 Ginninderry Offset Managment Plan\GIS\MXD\CEMP\Figure 1 Belconnen Conservation Corridor.mxd

1.7. Legislative Framework

This CEMP Framework is prepared in accordance with ACT Government guidelines for Environmental Management Plans (ACT Government, 2013). This CEMP has been prepared in accordance with, or with reference to, the requirements of relevant Commonwealth legislation, state legislation and guidelines endorsed by Environment Protection Authorities (EPA) of ACT and NSW, as described in Table 2. Site-specific CEMPs must be prepared with reference to the applicable legislation.

The legal frameworks and guidelines applicable to CEMPs may be subject to change over time. It is the responsibility of the Contractor to ensure that site-specific CEMPs are prepared in compliance with the current legislation and guidelines in the relevant jurisdiction.

Specification	Commonwealth Legislation	NSW Legislation	ACT Legislation	
Environmental Planning Approvals	 Commonwealth Environment Protection and Biodiversity Conservation Act 1999 	 NSW Environmental Planning and Assessment Act 1979 NSW Environmental Planning and Assessment Regulation 2021 	 ACT Planning and Development Act 2007 	
Biodiversity/ Ecology	 Commonwealth Environment Protection and Biodiversity Conservation Act 1999 	 NSW National Parks and Wildlife Act 1974 NSW Biodiversity Conservation Act 2016 NSW Fisheries Management Act 1994 NSW Biosecurity Act 2015 	ACT Nature Conservation Act 2014	
Heritage	 Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984 	 NSW Heritage Act 1977 NSW National Parks and Wildlife Act 1974 NSW National Parks & Wildlife Regulation 2009 	• ACT Heritage Act 2004	
Tree Management	N/A	 NSW Biodiversity Conservation Act 2016 Yass Valley Council Local Environmental Plan 2013 	ACT Tree Protection Act 2005	
Construction Environmental Management	N/A	 NSW Protection of the Environment Operations Act 1997 NSW Protection of the Environment Operations (General) Regulation 2009 NSW Protection of the Environment Amendment Act 2011 	 ACT Environment Protection Act 1997 ACT Environment Protection Regulation 2005 	

Table 2. Relevant Legislation and Regulations

Specification	Commonwealth Legislation	NSW Legislation	ACT Legislation
		 NSW Protection of the Environment Amendment Act 2014 NSW Dangerous Goods (Road and Rail Transport) Act 2008 NSW Department of Environment and Climate Change (2009) Interim Construction Noise Guideline NSW Government (2004) Soils and Construction Volume 1 – Managing Urban Stormwater (4th Edition) 	
Contaminated Land	 Commonwealth National Environment Protection Measures (Implementation) Act 1998 Commonwealth National Environmental Protection Measure (Assessment of Site Contamination) 1999 (amended 2013) Commonwealth National Environmental Protection Measure (Movement of Controlled Waste between States and Territories) 2004 	 NSW Contaminated Land Management Act 1997 NSW Environmentally Hazardous Chemicals Act 1985 NSW Pesticides Act 1999 NSW Protection of the Environment Amendment Act 2014 NSW Office of Environment and Heritage (2011) Guidelines for Consultants Reporting on Contaminated Sites NSW Environment Protection Authority (1995) Sampling Design Guidelines NSW Department of Environment and Conservation (2006) Guidelines for the NSW Site Auditor Scheme (2nd Edition) 	 ACT Environment Protection Act 1997 ACT Environment Protection Policy 2009 ACT Contaminated Sites Environment Protection Policy 2017
Water	 ANZECC National Water Quality Management Strategy 2000 ANZECC Guidelines for Fresh and Marine Water Quality 2000 	 NSW Water Act 1912 NSW Water Management Act 2000 NSW Office of Environment and Heritage (2001) Guidelines for Erosion & 	 ACT Environment Protection Act 1997 ACT Water Resources Act 2007

Specification	Commonwealth Legislation	NSW Legislation	ACT Legislation	
		Sediment Control on Building Sites NSW Government (2004) Soils and Construction Volume 1 – Managing Urban Stormwater (4 th Edition)		
Air Quality	 Commonwealth Ozone Protection Act 1989 Commonwealth Ozone Protection and Synthetic Greenhouse Gas Legislation Amendment Act 2003 Commonwealth National Environmental Protection Measure (Ambient Air Quality) 2003 Commonwealth National Environmental Protection Measure (Diesel Vehicle Emissions) 2001 Commonwealth National Environmental Protection Measure (Diesel Vehicle Emissions) 2001 Commonwealth National Environmental Protection Measure (National Pollutant Inventory) 2008 Commonwealth National Environmental Protection Measure (Air Toxics Measure) 2004 Commonwealth National Greenhouse and Energy Reporting Act 2007 Commonwealth National Greenhouse and Energy Reporting Act 2007 Commonwealth National Greenhouse and Energy Reporting Regulations 2008 	 NSW Protection of the Environment Operations (Clean Air) Regulation 201 	ACT Environment Protection Act 1997	
Waste	 Commonwealth National Environmental Protection Measure (Used Packaging Materials) 1998 National Government Waste Reduction and Purchasing Guidelines 1995 	 NSW Protection of the Environment Operations (Waste) Regulation 2005 NSW Waste Avoidance and Resource Recovery Act 2001 NSW EPA (2014) Waste Classification Guideline 	 ACT Environment Protection Act 1997 Environment ACT (2000) ACT's Environmental Standards: Assessment and Classification of Liquid and Non-Liquid Wastes ACT NOWaste (2016) Waste and Recycle 	

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Specification	Commonwealth Legislation	NSW Legislation	ACT Legislation
	 National Packaging Covenant 1996 National Packaging Covenant-Action Plan 2010-2015 Commonwealth National Waste Policy 2009 Commonwealth National Pollutant Inventory 2012-2013 		Management Code for the ACT
Dangerous Substances	 NOHSC: 2002 (2005) Code of Practice for the Safe Removal of Asbestos, 2nd Edition NOHSC: 2018 (2005) Code of Practice for the Management and Control of Asbestos in Workplaces 	 NSW Work Health and Safety Act and Regulations, 2011 NSW Work Health and Safety Act (2011) NSW Work Health and Safety Regulation (2011) 	 ACT Work Health and Safety Act and Regulations, 2011 ACT Dangerous Substances Act 2004 ACT Work Health and Safety Regulation 2011 (amended 2017) ACT Work Health and Safety (Asbestos) Amendment Regulation 2014 ACT Work Health and Safety (How to Manage and Control Asbestos in the Workplace Code of Practice) 2014 ACT Work Health and Safety (How to Safely Remove Asbestos Code of Practice) approval 2014

1.8. Limitation and Exclusions

This CEMP Framework has been developed with reference to the relevant legislation and regulations governing such works in a manner consistent with the normal level of care and expertise exercised by members of the environmental assessment profession.

The CEMP Framework is strictly limited to the management of general environmental issues identified or anticipated to be associated with the proposed development works. This CEMP Framework relates only to the objectives stated and does not relate to any other work undertaken for the Principal's Representative. This CEMP Framework is not a substitute for a site-specific CEMP and does not provide detailed Safe Work Method Statements (SWMS), Occupational Health and Safety Plans (OHSP) or Construction Work Method Statements (CWMS).

2. Environmental Factors and Receptors

2.1. Potential Receptors

The potential receptors that may be impacted because of the proposed development and site reshaping works include the following:

- Staff working on site
- Workers conducting earthwork/excavation/demolition works
- Adjoining businesses
- Residents in nearby properties/premises or in earlier developed stages.
- Murrumbidgee River, Ginninderra Creek and Gooromon Ponds Creek are the major water bodies adjacent to the site.
- Ecological receptors:
- The Ginninderry Conservation Corridor
- Pink-tailed Worm-lizard habitat
- Golden Sun Moth habitat
- Threatened bird habitat, including Little Eagle nesting habitat
- Box gum woodland and natural temperate grassland.

2.2. Environmental Factors

The proposed development works have the potential to result in deterioration of the adjoining environment and adverse impacts on the health of on-site staff and members of the public in the surrounding community. Table 3 provides a summary of environmental factors considered to have the potential to be impacted or have significant impacts on receptors as a result of the proposed activities.

Factor	Objectives	Requirements
Noise		
Noise and Vibration	Protect the amenity of nearby residents from noise/vibration impacts resulting from activities associated with the proposed/ existing development by ensuring that noise/vibration levels meet statutory requirements and acceptable standards.	Section 3.3.1 and Table 9
Air Quality		
Dust and particulates	Ensure that particulate/dust emissions, both individually and cumulatively, meet appropriate criteria and do not cause an environmental or human health problem.	Section 3.3.2 and Table 10
Vehicle emissions	Ensure that vehicle emissions meet appropriate criteria and do not cause an environmental or human health problem.	Section 3.3.2 and Table 10
Soil and Water		
Erosion and sediment controls	Ensure that best practice erosion and sediment controls are applied to ensure construction sites are stabilised and runoff is managed.	Section 3.3.3 and Table 11

Table 3. Environmental factors

Factor	Objectives	Requirements	
Surface water quality	Maintain the quality of surface water to ensure that the quality of water running off into the Gininnderry Conservation Corridor, Ginninderra Creek and the Murrumbidgee River is maintained. Specifically, existing and potential uses, including ecosystem maintenance, are protected.	Section 3.3.3 and Table 11	
Spoil Management	Ensure spoil and stockpiles are appropriately managed to meet requirements.	Section 3.3.3 and Table 11	
Waste			
Solid/liquid waste	Ensure that wastes are contained and isolated from land, ground and surface water surrounds and treatment or collection does not result in long-term impacts on the natural environment.	Section 3.3.4 and Table 12	
Hazardous Materials Manag	ement		
Hazardous Materials	Ensure that hazardous materials are identified and managed to ensure that appropriate protocols are followed to ensure that there are no adverse impacts on people or the environment.	Section 3.3.5 and Table 13	
Dangerous Goods	Ensure that use and storage of dangerous goods are consistent with appropriate standards to ensure that there are no adverse impacts on people or the environment	Section 3.3.5 and Table 13	
Contamination			
Unexpected finds	Ensure that sites are appropriately assessed prior to construction and that unexpected contamination finds are managed to avoid impacts on the environment	Section 3.3.6 and Table 14	
Spills and discharges during construction	Ensure that spills and discharges are contained and managed to avoid impacts on the environment.	Section 3.3.6 and Table 14	
Traffic			
Vehicle movement on site	Ensure that vehicle movements on site do not damage existing infrastructure and avoid impacts on the environment.	Section 3.3.7 and Table 16	
Traffic impacts	Ensure that vehicle access to the site does not have significant adverse impacts on other road users	Section 3.3.7 and Table 16	
Fire			
Fire and bushfire	Ensure that activities are managed to avoid any unintended ignition and appropriate management of bushfire risk.	Section 3.3.8 and Table 17	

Factor	Objectives	Requirements
Heritage		
Heritage	Ensure that known heritage items are protected and heritage approvals are met.	Section 3.3.9 and Table 18
Unexpected finds	Ensure that unknown heritage items disturbed during works are identified and managed appropriately.	Section 3.3.9 and Table 18
Vegetation and Biodiversity		
Flora and endangered ecological communities	Ensure that works do not have any non- approved adverse impacts on non-approved threatened flora or threatened ecological communities. Specifically, controls are required to manage potential impacts on the following threatened communities: • Box – gum woodland • Natural temperate grassland	Section 3.3.10 and Table 19
Fauna	Ensure that works do not have adverse impacts on threatened fauna ecological communities, except where approved. Specifically, as specified in the Program Report, required controls for the protection of the following fauna are required: • Pink-tailed Worm-lizard • Golden Sun Moth • threatened birds • threatened fish and amphibians Ensure appropriate management protocols for fauna impacted by works. Ensure that rocks removed from the development site are retained and used for habitat creation within the Pink-tailed Worm- lizard management zone.	Section 3.3.10 and Table 19
Tree Management	Ensure that trees to be retained are appropriately protected. Ensure that large woody debris is retained and used for habitat creation within woodland areas	Section 3.3.10 and Table 19
Weeds and pathogen hygiene	Ensure that weeds and soil pathogens are not introduced or spread.	Section 3.3.10 and Table 19

2.3. Environmental Risk Register

The Contractor must develop a site-specific environmental risk register for each site-specific CEMP. The Environmental Risk Analysis would be undertaken in accordance with the principles of the Australian and New Zealand standard AS/NZS ISO 31000: 2009 Risk Management – Principles and Guidelines, comprising:

- Ranking the risk of each identified potential impact by identifying the consequences of the impact and the likelihood of each impact occurring
- Considering the probable effectiveness of the proposed mitigation measures to determine the likely residual risk of each impact.

The following tables present indicative likelihood and consequence criteria (Table 4 and Table 5), an indicative risk rating framework (Table 6), and an example risk register template (Table 7). The risk register should include risk ratings before and after applicable management controls are applied.

Probability (likeliho	ood)	Description (1)	Description (2)	Description (3)
Almost certain (5))	Common /Frequent Occurrence	Can be expected to occur 75% – 99%	More than 1 event per month
Likely (4)	.)	Is known to occur or "It has happened regularly"	Can quite commonly occur 50% - 75%	More than 1 event per year
Possible (3))	Could occur or "I've heard of it happening"	May occasionally occur 25% - 50%	1 event per 1 to 10 years
Unlikely (2)	.)	Not likely to occur very often	May infrequently occur 10% - 25%	1 event per 10 to 100 years
Rare (1)	.)	Conceivable but only in exceptional circumstances	May occur in exceptional circumstances 0% - 10%	Less than 1 event per 100

Table 4. Likelihood criteria

Table 5. Consequence criteria relevant to environment and h	heritage
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Consequence (impact)		Description
Negligible	(1)	Short term environmental damage
Minor	(2)	Limited but medium term environmental damage
Moderate	(3)	Major but recoverable environmental damage
Major	(4)	Heavy environmental damage, costly restoration
Substantial	(5)	Permanent widespread environmental damage

Table 6. Risk Rating Framework

		Consequence					
		Negligible (1)	Minor (2)	Moderate (3)	Major (4)	Substantial (5)	
	Almost certain (5)	Moderate (5)	High (10)	Very High (15)	Extreme (20)	Extreme (25)	
Likelihood	Likely (4)	Low (4)	Moderate (8)	High (12)	Very High (16)	Extreme (20)	
	Possible (3)	Low (3)	Moderate (6)	Moderate (9)	High (12)	Very High (15)	
	Unlikely (2)	Low (2)	Low (4)	Moderate (6)	Moderate (8)	High (10)	
	Rare (1)	Low (1)	Low (2)	Low (3)	Low (4)	Moderate (5)	

Table 7. Example Environmental Risk Register Template

Construction aspect (Significant Environmental Hazard)	Potential Environmental Impact (risk)	Likelihood (before management)	Consequence (before management)	Initial Risk Rating	Environmental Management Measure	Likelihood (after management)	Consequence (after management)	Residual Risk Rating

3. Management Procedures

3.1. General Controls

3.1.1. Site Access

Site-specific CEMPs must include details of site access controls. The Contractor must control access to the site. Only authorised persons will be allowed on site.

3.1.2. General Unexpected Finds Procedure

CEMPs must include a general unexpected finds protocol defining procedures to be followed in the event of unexpected finds being recorded. At minimum, the protocol shall include:

- 1. Unexpected find detected, including but not limited to potential:
 - Contamination (including ASS PASS Asbestos if applicable)
 - Heritage
 - Human remains
 - Threatened flora, fauna or ecological communties
- 2. Stop Work
- 3. Refer and follow to specific Unexpected Finds Protocol (if available):
 - Contamination (Contamination Unexpected Finds Protocol requirement, Section 3.3.6)
 - Heritage (Heritage Unexpected Finds Protocol requirement, Section 3.3.9 and Appendix
 B)
 - Ecology (Ecology Unexpected Finds Protocol requirement, Section 3.3.10)
- 4. Refer any other finds to the appropriate authority or experts and follow procedures as advised
- 5. Recommence works only once advised by the relevant experts and/ or authorities.

3.1.3. Operation Time

Site-specific CEMPs must define operation times which are compliant with the Interim Construction Noise Guideline (NSW Government 2009) unless otherwise approved. Based on these guidelines, unless otherwise approved or specified by any other condition (including tender conditions), construction work would be:

- Restricted to between the hours of 7:00 am and 6:00 pm Monday to Friday;
- Restricted to between the hours of 8:00 am and 1:00 pm Saturday; and
- Not to be undertaken on Sundays or Public Holidays.

Additional restrictions may apply for high noise impact activities as specified in Section 3.3.1.

No restrictions on working hours will apply in the event of responding to an emergency such as a contaminant spill, flood, fire, etc. In the event of an emergency, the response will be guided by the CEMP incident response procedures. Relevant Agencies and Services will be notified of the incident, and any directions provided by the authorities will be followed.

3.1.4. Licencing

Site-specific CEMPs must ensure that all operations are undertaken in accordance with licencing and approvals, such as an Environmental Protection Licence, including Environmental Authorisations, under the *Protection of the Environment Operations Act 1997* (NSW) or the *Environment Protection Act 1997* (ACT). All site personnel must be aware of their responsibility to ensure that work is undertaken in compliance with all licences.

3.1.5. Incidents and Emergency Response

Pollution Incident

Site-specific CEMPS must include details regarding the duty to notify ACT/NSW EPA of actual or threatened environmental harm under *Environment Protection Act 1997 (ACT)* or the *Protection of Environment Operations Act 1997* (NSW). The relevant legislation must be included in all site-specific CEMPs and site environmental induction as follows:

- ACT: *Environment Protection Act 1997 (ACT) Part 3 Section 22 and* Section 23 (1) Subject to subsection (2), this section applies to a person conducting an activity who becomes aware that the activity has caused, is causing or is likely to cause serious or material environmental harm from pollution (an environmental situation).
- NSW: Protection of Environment Operations Act 1997 (NSW) Part 5.7 Section 148

The following people have a duty to notify of a pollution incident occurring in the course of activity that causes or threatens material harm to the environment to the relevant authority:

- The person carrying on the activity
- An employee or agent engaged in carrying on the activity
- An employer carrying on the activity
- The occupier of the premises where the incident occurs.

Notification must be given immediately and without delay, after the person becomes aware of the incident. The Principal's Representative will be notified of any pollution incidents. The approval holder should be notified of non-compliance.

Emergency Response

Each site-specific CEMPs must include contacts for responding to emergencies at the beginning of document and be consistent with the Incident Response procedures as outlined in thein the legislation above. The contact details for the responsible project personnel must also be presented at the start of site-specific CEMPs.

Site-specific CEMPs must specify that works cannot resume until the factors causing the incident have been adequately controlled, preferably, following modification of procedures to prevent recurrence of the environmental incident.

3.1.6. Environmental Inductions

Environmental Induction

Site-specific CEMPs must require all personnel (including Sub-Contractors) to attend a compulsory site induction that includes an environmental component prior to commencement on-site. This is done to ensure all personnel involved in the project are aware of the requirements of site-specific CEMPs and to ensure the implementation of environmental management measures. Inducted personnel will sign the site induction register acknowledging receipt and understanding of the site-specific CEMP.

The environmental component of the site induction will include, but not be limited to, an overview of:

- Relevant details of the site-specific CEMP including purpose and objectives
- Key environmental issues, including local MNES
- Approval for the work
- Specific environmental management requirements and responsibilities
- Key mitigation measures for the control of environmental issues
- Incident response and reporting requirements
- Information relating to the location of environmental constraints
- Actions regarding unexpected finds of culturally significant items

- Site-specific threatened flora and fauna as identified in the Section 3.3.1 of the Strategic Assessment Report and Section 4.0 of the Program Report
- A record of all inductions will be maintained and kept on-site. Amendments to the induction wil be made at any time in response to work modifications or amendments to the site-specific CEMP, CEMP Framework or related documentation.

Pre-Start and Toolbox Meetings

Site-specific CEMPs must specify requirements for pre-start meetings and toolbox talks. Pre-start meetings or toolbox talks are important for raising awareness and educating personnel on issues related to all aspects of the project, including environmental issues. These should be used to ensure environmental awareness continues throughout the work activity.

Relevant environmental issues to be raised during pre-start meetings and toolbox talks may include:

- Health and safety
- Biodiversity constraints
- Potential Aboriginal sites and non-Aboriginal heritage
- Erosion and sedimentation control
- Emergency and spill response, including prevention, reporting, clean-up and control
- Weed and pathogen management
- Working near water and water pollution controls
- Storage and handling of chemicals
- Community engagement.

3.1.7. Complaints Procedure

Site-specific CEMPs must require the Contractor to establish a system to receive, record, track and respond to all complaints or enquiries received regarding the project field activities. Table 8 provides an example complaints register. The Contractor is to acknowledge all complaints in writing within a reasonable timeframe and a detailed response generated accordingly. The site-specific CEMP must nominate appropriate person(s) to implement and manage the Complaints Register, including responding to the complaint and informing the Principal's Representative.

Table 8. Complaints register.

Number	Name	Date	Nature of Complaint	Response	Corrective Actions	Outcome Achieved Y/N	Date of Outcome Achieved
1							

3.2. Compliance Assurance

3.2.1. Pre-construction

The Principal's Representative shall review and approve the Contractor's site-specific CEMP prior to the commencement of the development works. The Principal's Representative will inspect the preconstruction sediment and erosion controls and other management measures installed and provide advice to the Contractor on where improvements could be made, if necessary.

3.2.2. During and after works

During the development works, the Principal's Representative will work with the Contractor to ensure the objectives of the site-specific CEMP and other associated Plans are being met. Inspection and

auditing of the Contractor's implementation of the environmental requirements associated with the development and site reshaping works must be completed. This will include the following:

- Daily pre-start meetings shall be held prior to the commencement of any work. The purpose
 of the pre-start meeting will be to discuss the scheduled work activities, any safety or
 environmental issues or requirements and any corrective actions. The record of Toolbox
 Safety Meeting will record the subjects discussed and the personnel in attendance. Any
 special requirements from the Principal's Representative in regard to the procedures, scope
 or timing of the works will be discussed at the daily pre-start meeting
- Observation of Site conditions and characteristics to ensure that the adopted work practices are meeting the objectives of the site-specific CEMP. This will comprise of regular inspection of the worksite and visual monitoring of the sediment and erosion controls, water quality, air quality and dust emissions, noise, contamination and waste management and vegetation management (i.e. tree protection)
- Management of unexpected finds (e.g. contamination, friable asbestos etc.) to ensure that identified contamination is not disseminated further and is appropriately managed during site works
- Attendance at specific incidents or earthwork/excavation/demolition events
- Ensure that site management requirements (including OHS plans and environmental management plans) are being appropriately implemented
- Environmental audit against the requirements of the Contractor's site-specific CEMP and provision of an audit report documenting non-conformances and rectification activities
- Documentation of material movements both on and off-site and collation of waste disposal information/reporting in accordance with requirements of the site-specific CEMP. A monitoring report, outlining details of the site inspections including an action register of improvements and rectifications to be made, will be provided to the Principal's Representative, via email or other agreed means.

3.3. Specific Control Measures

3.3.1. Noise and Vibration Management

Contractors are responsible for the development of a site specific Noise and Vibration Management Plan (NVMP) which must be compliant with the *Interim Construction Noise Guidelines* (NSW Government 2009). NVMPs must refer to the relevant ACT and NSW guidelines and legislation applicable to each site as identified in Table 2. At a minimum the following control principles should be considered for this work. The Contractor(s) are responsible for the execution of the noise and vibration management plan.

Table 9. Noise and Vibration Control Measure

lssue	Control Measure	Responsibility
Site operations	• Operations would be undertaken during normal hours of	Contractor
	construction as defined in Section 3.1.3	
	 Equipment and site activities are to comply with 	
	Standard Construction vibration/noise levels specified by	
	WorkCover and ACT and NSW EPA requirements.	
Equipment and	 Idle equipment is to be switched off or throttled down 	
Vehicles	 Trucks that are being loaded or unloaded or are waiting 	
	for access to the Site are to be switched off	
	 Plant and equipment should be away from sensitive 	
	receivers where possible	
	• The lowest noise generating plant should be selected	
	where possible	
	 Use of non-tonal reversing alarm or quackers 	
High Noise	• Unless otherwise approved or expressly permitted, high	
Impact Activities	noise impact works must only be undertaken:	
	 Between the hours of 8:00am and 6:00pm 	
	Monday to Friday;	
	 Between the hours of 8:00am and 1:00pm 	
	Saturday; and	
	 In continuous (i.e. any period during which there is 	
	less than a 1 hour respite between ceasing and	
	recommencing any of the work) blocks of no more	
	than 3 hours, with at least a 1 hour respite	
	between each block of work generating high noise	
	impact, where the location of the work is likely to	
	impact the same receivers.	

3.3.2. Air Quality Management

The Contractor(s) is responsible for the development and execution of a site specific Air Quality Management Plan (AQMP) consistent with *Protection of Environment Operations (Clean Air) Regulation* 2011 (NSW) or the *Environment Protection Act* 1997 (ACT). AQMPs must refer to the relevant ACT and NSW guidelines and legislation applicable to each site as identified in Table 2. The following control principles should be considered for this work. The Contractor(s) is responsible for the execution of the air quality management plan.

Table 10. Air Quality Control Measure

Issue	Control Measure	Responsibility
Dust and particulates	 Minimise the release of dust during the hazardous material removal Install temporary dust fences around the site Install temporary fencing and screens around site during development work Use water truck/unit to keep dust levels low. Consider the use of polymers or similar for large exposed area Consider stabilising and remediating areas not in use. Consider clearing area prior to work to minimise exposed surface area. 	Contractor
Equipment and Vehicles	 Idle equipment is to be switched off or throttled down. Trucks that are being loaded or unloaded or are waiting for access to the Site are to be switched off 	

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3.3.3. Soil and Water Management

The Contractor(s) is responsible for the development and implementation of a Soil and Water Management Plan (SWMP) for sites larger than 2,500 square metres. Subsequent Erosion and Sediment Control Plans are also required to outline specific management measures for stockpiling and management of soil, and to ensure water quality is maintained both on and off site. Erosion and sediment control measures must address commitments of the Program Report (A T Adams Consulting 2017) and Strategic Assessment Report (Umwelt 2017) for the protection of biodiversity (Table 1).

All works in the ACT are be carried out in accordance with the *Environment Protection Guidelines for Construction and Land Development in the ACT, March 2011.* Requirements are stipulated under the Environment Protection Agreement, under the *Environment Protection Act 1997* (ACT).

All works in the NSW are to be carried out in accordance with *Managing Urban Stormwater: Soils and Construction* (The Blue Book; NSW Government 2004) to be consistent with requirements of the *Protection of the Environment Operations Act 1997* (NSW) and the *Water Management Act 2000* (NSW).

At a minimum the Erosion and Sediment control principles specified in *Managing Urban Stormwater: Soils and Construction* (The Blue Book; NSW Government 2004) and *Environment Protection Guidelines for Construction and Land Development in the ACT, March 2011* must be addressed. SWMPs must refer to the relevant ACT and NSW guidelines and legislation applicable to each site as identified in Table 2. A summary of measures is provided in Table 11.

lssue	Control Measures	Monitoring
General	 Inductions Induction of all staff in relation to significant waterways and spoil management issues, and appropriate hazard management measures 	Contractor
	 Risk Assessment A site-specific risk register to be developed for each site to identify drainage patterns, determine factors that can increase risk of sediment entering drains or waterways 	
	 Licencing All take of ground water or surface water will have in place a licence under the relevant NSW or ACT legislation For all works affecting a waterway (including creeks, ponds, or drainage lines), relevant licence under NSW or ACT legislation would be obtained 	
	 Monitoring Site supervisors to check weather predictions and ensure that Sediment and Erosion controls are placed before significant predictions of rain (>10mm) Contractor to conduct at a minimum a weekly enviromental inspection Prior to any major rain event Contractor to take photos of all relevant enviromental site control for records. 	
Site hygiene and monitoring	 Avoid tracking dust and soil off site onto local roads. Clean up as you go. Ensure surrounding areas are clean and free of sediment. Strip and segregate topsoil for use in rehabilitation. 	Contractor

Table 11. Soil and Water Management Control Measures

 If stockpiles contain contaminated (e.g. Asbestos Cement Material - ACM) soils, then clear labelling and relevant documentation should be maintained. Consider use a street sweeper to keep local roads clean Inspect and mainatin controls to ensure that they are working effectively; at a minimum weekly during dry periods and daily during rainy periods. Remove built up sediment and repair sediment control devices as necessary. Erosion and Sediment Management Site specific erosion and sediment management controls must be prepared and implemented progressively, and prior to works commencing, in accordance with the Blue Book (NSW Government 2004) for NSW sites and/ or Erwinomment Protection Guidelines for Construction and Land Development in the ACT, March 2011. Erosion and Sediment Control plans must define location and type of all sediment controls Erosion and Sediment Control weather. Ensure all run-off from disturbed areas is directed towards sediment controls. Place controls so that sediment is trapped as close to the source as possible. Install controls downstream of disturbed areas, stockpiles, along slopes, and to protect drainage lines (e.g. drains, pitk, creeks). Typical controls employed to capture sediment are geo- fabric, sediment function, and starbed bareas, stockpiles, along slopes, and to protect drainage lines (e.g. drains, pitk, creeks). Typical controls employed to capture sediment are geo- fabric, sediment during rainfall events into any water bodies in the vicinity. Scour management Install fit design earthworks with check dams and cut off drains to minimise run-off Install right and Revgetation Install right earts and Revgetation Ensure effective and rapid revegetation of disturbed areas Winimise the removal of vegetation and reuse removed vegetation where possible<	lssue	Control Measures	Monitoring
Erosion and Sediment ManagementErosion and Sediment Control PlansContractorSite specific erosion and sediment management controls must be prepared and implemented progressively, and prior to works comment 2004) for NSW sites and/ or Environment Protection Guidelines for Construction and Land Development in the ACT, March 2011.ContractorErosion and Sediment Control Plans must define location and type of all sediment control plans must define location and type of all sediment control serversErosion and Sediment Control MeasuresMinimise disturbed areas and clear in stages where reasonable and feasibleAvoid causing site disturbance during wet weather.Ensure all run-off from disturbed areas is directed towards sediment controls.Place controls so that sediment is trapped as close to the source as possible.Install controls so that sediment is trapped as close to the source as possible.Install controls construction and general stock sediment forces, and straw bales.Install controls controls so that sediment during rainfall events into any water bodies in the vicinity.Scour managementScour management9.10 (Ausign earthworks with check dams and cut off drains to minimise run-offInstall / design earthworks with check dams and cut off drains to minimise run-offInspect and maintain after rainfall eventsImplement soil management plan for individual work areasEnsure effective and rapid revegetationEcus effective and rapid revegetation of disturbed areasEnsure effective and rapid revegetation and reuse removed vegetation where possibleEnsure effective and rapid revegetation and reuse removed vegetation where possibleSpoil Ma		 If stockpiles contain contaminated (e.g. Asbestos Cement Material - ACM) soils, then clear labelling and relevant documentation should be maintained.Consider use a street sweeper to keep local roads clean Inspect and mainatin controls to ensure that they are working effectively; at a minimum weekly during dry periods and daily during rainy periods. Remove built up sediment and repair sediment control devices as necessary. 	
 Contractor site supervisors to check weather predictions and ensure that Sediment and Erosion controls are placed before significant predictions of rain (>10mm) 	Erosion and Sediment Management	 Erosion and Sediment Control Plans Site specific erosion and sediment management controls must be prepared and implemented progressively, and prior to works commencing, in accordance with the Blue Book (NSW Government 2004) for NSW sites and/or Environment Protection Guidelines for Construction and Land Development in the ACT, March 2011. Erosion and sediment control plans must define location and type of all sediment controls Erosion and Sediment Control Measures Minimise disturbed areas and clear in stages where reasonable and feasible Avoid causing site disturbance during wet weather. Ensure all run-off from disturbed areas is directed towards sediment controls. Place controls so that sediment is trapped as close to the source as possible. Install controls downstream of disturbed areas, stockpiles, along slopes, and to protect drainage lines (e.g. drains, pits, creeks). Typical controls employed to capture sediment are geofabric, sediment fences, and straw bales. Install silt socks or silt wardens around drains to minimise off-site movement of sediment during rainfall events into any water bodies in the vicinity. Scour management Install / design earthworks with check dams and cut off drains to minimise run-off Inspect and maintain after rainfall events Implement soil management plan for individual work areas Weigetation Removal and Revegetation Ensure effective and rapid revegetation of disturbed areas Minimise the removal of vegetation and reuse removed vegetation where possible Spoil Management Contractor site supervisors to check weather predictions and ensure that Sediment and Erosion controls are placed before cimplicant pradictions for ain (>10000) 	Contractor

lssue	Control Measures	Monitoring
	 Excavated soil material to be stockpiled on an impermeable membrane, covered and bunded to prevent run-off Cover stockpiles or treat with suitable polymer technology and establish cover as required, and inspect and maintain after rainfall or high wind events. Implement erosion and sediment control plan specific to stockpiling of soils for individual work areas along the project alignment. Minimise the amount of soil to be stockpiled on site Do not store excavated soil adjacent within 40m to watercourses Excavated soil to be stored in designated stockpile areas Install silt fences around designated soil stockpile areas If stockpiles contain contaminated (e.g. ACM) soils, then clear labelling and relevant documentation should be maintained. 	
Water management	 Surface water Site specific Soil and Water Management plans must be prepared and implemented progressively during works in accordance with the Blue Book (NSW Government 2004) for NSW sites and/ or Environment Protection Guidelines for Construction and Land Development in the ACT, March 2011 Divert clean water around the work site in accordance with guidelines Catch dams and ponds will be implemented where required by Revised Universal Soil Loss Equation (RUSLE) calculations and will be constructed according to the site specific Erosion and Sediment Control Plan (as per the Blue Book) Establish a water quality monitoring program Pollution of downstream environments Implement egress controls to prevent mud and dust tracking on local roads Work in existing creeks or drainage areas to be managed as per the area specific erosion and sediment control plan Wheel cleaning and wash down of equipment and machinery would be undertaken in a specific area, and all washdown water captured for appropriate disposal. This would be through the use of designated areas with spill control and prevention kits No refuelling to take place within 40 m of water courses Water grade spill control and prevention kits to be used near waterways Identify potential receptors and implement control measures in-stream to minimise potential for downstream impacts (e.g. sediment booms, barriers) 	Contractor

lssue	Control Measures	Monitoring
	 Prepare and test emergency spill response for sediment and other materials being released from works. Feedback form test exercise to ensure effective response In-stream monitoring if required included in ESCP / SWMP Water quality compliance limits for discharge points would be Total suspended solids 50 mg/L pH 6.5 – 8.5, and Oil and grease no visible trace 	
	 Groundwater Provide spill control kits Report and clean up all spills Dewatering is to be managed in areas assessed for potential of contaminated groundwater entering excavations. 	

3.3.4. Waste Management

The Contractor(s) is responsible for the development and execution of a site-specific Waste Management Plan (WMP) to be prepared in accordance with relevant NSW or ACT regulation and guidelines, including the *Waste Classification Guidelines* (NSW EPA 2014), *ACT's Environmental Standards: Assessment and Classification of Liquid and Non-Liquid Wastes* (Environment ACT 2000) and the *Waste and Recycle Management Code for the ACT* (ACT NOWaste 2016). WMPs must refer to the relevant ACT and NSW guidelines and legislation applicable to each site as identified in Table 2. Table 12 provides a summary of control measures to be considered for inclusion in site specific WMPs.

Table 12. Waste Control Measures

lssue	Control Measures	Responsibility
Waste Generation	 Inductions All Contractors and sub-contractors should be inducted into best practice waste minimisation techniques for the project, if applicable. Minimisation 	Contractor
	 Use less raw materials or resources and where possible use products derived from recycled materials Minimisation of waste, through more recycling activities Re-use waste material generated on site wherever possible including soil, for beneficial reuse 	
	 Classification Any waste materials including soil and rocks which will be taken off-site must be assessed and tested by an environmental scientist accrording th the relevant NSW or ACT EPA gudielines (including Waste Classification Guidelines (NSW EPA 2014) and ACT's Environmental Standards: Assessment and Classification of Liquid and Non-Liquid Wastes (Environment ACT 2000)) 	

Issue	Control Measures	Responsibility
	 Disposal Hazardous materials must be managed in accordance with relevant guidelines for the transport and disposal of hazardous waste applicable in either NSW or ACT. Appropriate off-site disposal in accordance with their 'Duty of Care' obligations, of waste types, e.g. asbestos-containing material, general C&D waste or waste generated from products and chemicals brought onto the site for this project Sand buckets should be used/provided at designated locations for the disposal of cigarette butts. Buckets should be emptied as required and covered to prevent the spread of ash and other debris. Recycling must be undertaken where possible in compliance with the relevant NSW and ACT legislation Wheel cleaning and wash down of equipment and machinery would be undertaken in a specific area, and all washdown water captured for appropriate disposal. This would be through the use of designated wash down areas and bunding, sump and storage tanks/pond. 	
	 Stockpiling and storage Waste receptacles must be provided for disposal of different waste types; Bins must be covered to prevent wind blown litter and animal disturbance Waste generated on site should only be stockpiled in designated areas prior to removal by the Contractor Excavated soil material and other construction and demolition waste is to be stockpiled on an impermeable membrane, covered and bunded to prevent run-off The Site is to be left in the same condition in which the Contractor found it, with all project related material to be removed following completion of all works Liquid waste would would be stored as follows: In a bunded and covered area, with budns large enough to contain at least 100% of the volume of the largest tank At least 40 m from water bodies or watercourses Away from environmentally sensitive areas 	
	 Reporting All waste material generated, and any other material which may require off-site disposal must be documented in waste material register. Waste transmittal forms to be kept by the Contractor for auditing purposes Waste disposal dockets shall be obtained and retained for all material moving off-site to allow accurate records to be kept The Contractor is to immediately notify the Principal's Representative in the event of an incident such as an uncontained or contained spillage and implement any mitigation measures that have been identified in this CEMP Regular site inspection should be undertaken and documented 	

3.3.5. Hazardous Materials Management

The Contractor(s) are responsible for the development and execution of a site specific Hazardous Materials Management Plan that complies with the legislation applicable at the site. The minimum control measures outlined in Table 13 should be implemented. The handling, storage, use and disposal of these substances should be conducted in accordance with the relevant SDS and specific guidance documents.

Table 1	3 Hazardous	Materials	Control	Measures
TUDIC T	J. 1102010003	widtenuis	Control	IVIEUSUIES

lssue	Control Measure	Responsibility
Documentation	 A register of any dangerous substances stored on the premises along with safety data sheets would be kept in a secure location and maintained A Dangerous Substances (General) Regulation 2004 (ACT) manifest would be maintained to provide emergency services Authority with information about the quantity, type and location of dangerous goods stored and handled on premises. Manifests must be prepared in accordance with (NOHSC - 2017 (2001). This enables an appropriate response if called to an incident Placards must be displayed folowing nationally and internationally agreed standards on all premises holding quantities at or over threshold volumes to provide visual warning of the hazards associated with the dangerous goods and/or combustible liquids at the premises 	Contractor
Hazardous materials	 If required, an Asbestos Management Plan (AMP) will be prepared by Contractor(s) to manage and control all activities associated with the removal of Hazardous Materials such as ACMs, synthetic mineral fibres, polychlorinated biphenyls containing electrical equipment and others. The AMP must be prepared by the appropriately qualified hygienist, and ACT/NSW licensed asbestos removalist prior to the commencement of site works and would incorporate relevant mitigation measures and controls Where indicators of acid generating material are encountered, excavations should cease and an assessment should be conducted by a suitably qualified environmental scientist. Samples should be collected and sent to a National Association of Testing Authorities (NATA) accredited laboratory for determination of either Chromium Reducible Sulfur (CRS) or Suspension Peroxide Oxidation Combined Acidity and Sulfate (SPOCAS). 	Contractor
Dangerous goods	 Flammable and combustible liquids The following requirements and conditions need to apply in regard to the minor storage of flammable and combustible liquids on construction sites (AS 1940 (2004)): Liquids shall not be for sale or commercial distribution Liquids shall be kept at least 1 m away from any boundary, workshop, dwelling or protected place Liquids shall be kept at least 40 m from any body of water, watercourse or environmentally sensitive area 	Contractor

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lssue	Control Measure	Responsibility
	 Liquids shall be kept in a lined bund to prevent seepage into groundwater The ground around the store shall be kept clear of combustible vegetation or refuse for a distance of at least 3 m Any potential flow of spillage shall be prevented from reaching a protected place, watercourse or property boundary by such means as the use of natural ground slope, or the provision of a diversion channel, kerb or bund Bunded such at 100% of the largest tank would be contained Storage of minor quanities must be consistent with the Standards 	
	 Major Quantities Should there be a requirement to store quantities of dangerous goods in quantities greater than detailed in the Placard and Manifest specifications, then the type, quantity and location of goods must be documented. Where the quantity of dangerous goods stored and handled on a premises are greater than the <i>Manifest</i> Quantities in Schedule 1 of the national standard, the <i>occupier</i> is required to: Document the location and quantity of the substance Prepare a written emergency plan Prepare a notification to the Authority. 	

3.3.6. Contamination Management

The Contractor(s) is responsible for the development and execution of a site-specific Contamination Management Plan (CMP) to manage potential contamination issues for each stage of development as required under the legislation applicable at the site. Contamination Management Plans should be informed by all available information, i.e. at a minimum a Preliminary Site Investigation. The Unexpected Finds Procedure for ACM is detailed in Appendix C.

Due to the Site's location, it is anticipated that a range of hazardous or potential contaminants may be encountered during the development and subsequent excavation/demolition works of the above ground premises. These may include, but not be limited to the following:

- Agricultural sites (potential heavy metals and arsenic, organochlorides)
- Sewer pipes (potentially ACMs)
- Telstra pits (potentially ACMs)
- Stormwater pipes (potentially ACMs)
- Fill material (potentially ACMs)
- Buildings (potentially ACMs)
- Builders Wastes (potentially ACMs).

The site-specific CMP must address these potential contaminants.

Table 14. Contamination Control Measure

lssue	Control Measure	Responsibility
Spill and discharge management	 Ensure that existing or proposed activities do not discharge to land. Ensure that existing or proposed activities do not discharge to surface waters. Ensure that existing or proposed activities do not discharge to groundwater. Spill kits to be kept on site and be readily available should spill occur they should be of marine grade for activities near the waterways. 	Contractor
Contaminated soils	 Excavate only in areas assessed for potential contamination impact, as part of the contaminated soils management plan Report suspicious, discoloured, odorous soils/fill materials immediately to supervisor. 	Contractor
Unexpected Contamination Finds	 A Contamination Unexpected Finds Protocol (UFP) would be implemented in the event that unexpected finds are identified at the Site during excavation works (see e.g. Table 15). The contamination unexpected finds protocol would define processes and responsibilites in the event that unanticipated contamination is identified: It is also intended to provide guidance to workers at the Site in recognising potentially unacceptable material including: Visually contaminated or odorous soil and/or groundwater or underground storage containers Asbestos-containing material (ACMs) buried infrastructures such as old asbestos pipes sheeting, or tile, with fibres observable along broaks in material 	Contractor

An example Contamination Unexpected Finds Protocol for inclusion in each site-specific CEMP is provided in Table 15.

Table 15. Example Contamination Unexpected Finds Protocol

Action	Responsibility
Unexpected Finds discovered	Principal's
STOP WORK.	Representative /
Notify Principal's Representative. Site Supervisor and Environmental Scientist to assess the find.	
Immediately cordon off the area and make the area safe.	Contractor
Manage, remove or treat the item in accordance with the applicable EPA regulations, laws, guidelines and industry practice. Obtain relevant EPA approval on the remediation and validation works, as required.	Principals Representative / Contractor
Site deemed to be SAFE by Environmental Scientist and work to proceed Upon conclusion, prepare an unexpected finds report for EPA	Principals Representative/ Contractor

3.3.7. Traffic Management

The Contractor(s) are responsible for the development and execution of a site specific Traffic Management Plan in accordance with requirements 20 and 22 of the Program for protection of PTWL habitat. The Contractor(s) are responsible for the execution of the traffic management plan. The traffic control measures outlined in Table 16 should be implemented.

Table 16. Traffic Control Measures

Issue	Control Measure	Responsibility
Onsite Vehicle movements	 Designate and mark haul / truck routes to minimise environmental disturbance Establish stable site access and egress controls Consider use of crushed recycled and certified clean materials to stabilise access routes Establish wheel washes and vehicle brush off points Limit speeds on unsealed surfaces site to 10 km or 20 km where applicable Damage to existing infrastructure off the Site is to be avoided/minimised Any damage to existing infrastructure resulting from the Contractor's activities is to be restored to its original condition Prior to vegetation clearance, offtrack vehicle movement to be restricted For any track development in the WBCC, ensure that track and trail design adheres to the requirements of the Program and SAR for protection of PTWL habitat. Define, signpost and fence restricted access areas Observe buffers and exclusion areas around areas of natural and heritage value Restrict traffic movements, within the conservation corridor, to preserve the PTWL habitat These control measures are dervied from, and should follow, the principles outlined in the conservation corridor acess and activitiy nodes, section 3.6.2 of the program report. 	Contractor
Off-site vehicle movement	 The Traffic Control Plan must include: Accredited traffic management personnel will manage the Site entry/exit during material haulage phases Identification of potential impacts on other road users and appropriate management measures 	Contractor
Exclusion zones	 Vehicle exclusion areas established for biodiversity, heritage or sediment management purposes should be clearly delineated through clearly marking on plans, exclusion fencing and signage. Environmental exclusion zones will be implemented prior to the commencement of construction 	Contractor

3.3.8. Fire Management

The Contractor(s) are responsible for the development and execution of a Fire Management Plan (FMP) to manage the risk of ignitions during vegetation clearance and manage threat to the site from external bushfires. FMPs must be consistent with the applicable ACT or NSW guidelines and legislation,

i.e. the *Emergencies Act 2004* (ACT). At a minimum the following control principles should be adopted for this work.

lssue	Control Measure	Responsibility
Fire Risk	 All site vehicles must carry fire extinguishers The SWMS and induction must include reference to risks highlighted in the Bushfire Management Plan A Bushfire Management Plan should be prepared Development and implementation of a hot works permit system Allowance for fire ban exemption applications where reasonable and feasible 	Contractor
Ignition Sources	 Potential ignition sources to be identified Specific controls for potential ignition sources to be provided, including: No Parking on long grass No vegetation clearance works to be undertaken in Total Fire Ban conditions Movement of vehicles off tracks would be restricted when high cured biomass is present 	Contractor

3.3.9. Heritage Management

Where features of cultural heritage significant are identified, the Contractor(s) is responsible for the development and execution of site-specific Heritage Management Plans (HMPs) to manage potential impacts on matters of heritage significance. The Contractor(s) will be educated in the location of features of cultural significance during the site induction process where they will be shown maps of known features and their location specifically discussed. The locations will also be included in the stage specific CEMP to provide an additional reinforcement of their location and importance. HMPs would require approval from the ACT Heritage Council or OEH under the *Heritage Act 2004* (ACT) and/or the *Heritage Act 1977* (NSW), *National Parks and Wildlife Act 1974* (NSW), *National Parks & Wildlife Regulation 2009* (NSW) legislation (Table 2) prior to the commencement of construction works. General heritage controls are presented in Table 18.

Table 18. Heritage C	ontrol Measures
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lssue	Control Measures	Responsibility
Known Heritage Sites (e.g. culturally significant trees and artefacts)	 Approvals If known heritage sites are to be damaged or disturbed, the Contractor(s) are responsible for ensuring that all approvals and permits under the applicable NSW and/or ACT legislation are held prior to any actions being taken Induction European and Aboriginal Heritage constraints to be included in the induction such that the Contractor(s) and Sub-Contractor(s) personell are aware of the potential for Aboriginal sites to be present in all landscapes, and the offences for damaging any Aboriginal sites under the relevant NSW and/or ACT legeslation. These inductions shall include: Known Aboriginal Sites to be protected 	Contractor

lssue	Control Measures	Responsibility
	 Exclusion protocols for Heritage site Unexpected finds protocols Exclusion Fencing Location of exclusion fencing to be included in all relevant site CEMPs The boundary of all exclusion fencing around indigenous heritage sites will be marked with temporary fencing by the Representative Aboriginal Organisation (RAOs) and a qualified heritage consultant prior to installation of protective fencing. This will be arranged and managed by the Principal's Representative. The european heritage area at Belconnen farm will be protected as specified in the Belconnen Farm Conservation Management Plan Signage identifying fenced heritage sites as 'no access' areas should be prominently installed on fencing at the time of installation, and fencing and signage is to be maintained during construction works Written notification and photographic evidence on completion of fencing should be provided to the ACT Heritage Council (ACT) or OEH (NSW). The Heritage Consultant will compile this notification for the project Protective fencing is to be installed at a distance of 10 m from the drip line of culturally significant trees Protective fencing is to follow the defined edge of development. To ensure that boundary fence installation does not inadvertently impact these heritage sites, each should be demarcated with temporary fencing by heritage personnel (RAOS and qualified heritage consultant) prior to boundary fence installation. This work is to be arranged and manageed by the Principal's Representative. Exclusion fencing is to be installed prior to the commencement of works	
Unexpected Heritage Finds	 Unanticipated Discovery Plan Inclusion of Unanticipated Discovery Plan Inclusion in site inductions training for personnel and subcontractors All works to be directed by an Unexpected Discovery Plan (Appendix B). 	Contractor

3.3.10. Vegetation and Biodiversity Management

The Contractor(s) is responsible for the development and execution of a site-specific Vegetation and Biodiversity Management Plan for each stage of works.

The Ginninderry development area is subject to a number of ecological constraints, including the presence of two Commonwealth listed critically endangered ecological communities, i.e. *White Box – Yellow Box – Blakely's Red Gum Grassy Woodland* and *Derived Native Grasslands* and *Natural Temperate Grassland of the South-Eastern Highlands* (GCC only), critically endangered Golden Sun Moth (*Synemon plana*), vulnerable Pink-tailed Worm-lizard (*Aprasia parapulchella*), and a variety of

listed threatened woodland birds. Ecological constraints to be considered during construction are shown in Appendix E.

Site-specific CEMPs must comply with Commonwealth approval conditions (Table 1) and incorporate any site-specific constraints protected under NSW or ACT legislation or approvals. The vegetation and biodiversity control measures outlined in Table 19 would be considered, with reference to site specific constraints.

lssue	Control Measures	Responsibility
General	 Induction All Contractor(s) and Sub-Contractor(s) involved in pre- construction clearance and construction will be given site induction to ensure awareness of environmental protection protocols. This induction would include: A summary of the environmental protection measures including those in this document, to be implemented to protect the quality of the surrounding environment, including flora and fauna management, weed control, erosion and sediment control, and water quality management The location of, and protection measures for, any sensitive ecological areas as mapped in this document. Principal's Representative to review and approve induction content prior to delivery 	Principal's Representative (where relevant) / Contractor
	 Exclusion Zones Environmental Exclusion Zone and No Go Areas are to be defined in the CEMP and fenced off prior to any works taking place within 100 m of a site A permit system to be governed by the Principal's Representative would be enforced to control access to sensitive areas Development would not take place within the Little Eagle Exclusion Zone Unless otherwise approved, or comprising restoration activities, works would not take place within the box – gum woodland management zone or the Pink-tailed Worm-lizard management zone defined in the Offset Management Plan. 	
	 Exclusion Fencing Fencing would be established along the boundary between the works area and adjacent areas with biodiversity values to prevent construction activities, vehicles and personnel entering exclusion areas. This would include: Exclusion fencing must be established adjacent to the Ginninderry Conservation Corridor, or around any works undertaken within the Conservation Corridor Exclusion fencing and appropriate buffer zones around sensitive values, including box – gum woodland, natural temperate grassland, Pink-tailed Worm-lizard habitat, to prevent construction activities, vehicles and personnel entering exclusion areas. 	

Table 19. Vegetation and Biodiversity Management Control Measures

Issue	Control Measures	Responsibility
	 Fencing would be established to aappropriate standards for construction site safety. Signage Signage identifying fenced biodiversity sites as 'no access' areas should be prominently installed on fencing at the time of installation, and fencing and signage is to be maintained during construction works. 	
Flora and Endangered Ecological Communities	 Exclusion fencing Exclusion fencing around any Commonwealth listed woodland areas outside the Conservation Corridor to prevent construction activities, vehicles and personnel entering such areas. 	Contractor
	 Pre-clearance surveys Ensure that areas within the conservation corridor require preclearance surveys to identify threatened plant species and natural temperate grassland are clearly identified. 	
Fauna	 Induction All personnel and contractors involved in construction will be provided with environmental induction training in recognition of finding unanticipated fauna in construction areas. Specifically, the induction would include briefing on the identification of threatened fauna potentially occurring at the site Personnel should be briefed in an unanticipated animal protocol for construction workers at any stage of the works which would incorporate: Stopping work in the vicinity of the animal Contacting the Principal's Representative unless the Principal's Representative has provided the Contractor with contact details of a suitably qualified ecologist that has then been included in their CEMP Contacting a qualified and licenced ecologist to remove / manage the animal appropriately Documenting recovered animals. 	Contractor
	 Timing of Clearance Where possible tree clearance will be undertaken outside of the Superb Parrot breeding season (Appendix D). Superb Parrot breeding status will be assessed during pre-clearance surveys under circumstances where tree clearance is undertaken during their breeding season. 	
	 Exclusion Fencing Exclusion fencing is to be around any Pink-tailed Worm- lizard habitat retained outside the Conservation Corridor to prevent construction activities, vehicles and personnel entering such areas Exclusion fencing around the Little Eagle nesting area buffer. 	

Issue	Control Measures	Responsibility			
	 Preclearance Surveys and Ecological Supervision If DA approval require preclearance surveys to be undertaken the approach outlined below should be followed: Areas of identified Pink-tailed Worm-lizard habitat would be searched prior to clearance by a suitably qualified ecologist Collection of rocks from areas of identified Pink-tailed Worm-lizard located within the Development Area would be supervised by a suitably qualified ecologist Any large native trees determined to contain habitat hollows during the tree assessment are considered to be habitat trees. A suitably qualified and licensed ecologist would supervise felling of habitat trees and recover any injured or stunned wildlife (refer to Appendix A). Supervision by an ecologist is not required for trees that do not contain hollows. Habitat trees should be removed according to the following protocol: Habitat trees (i.e. hollow bearing) will be identified and clearly marked by an arborist or ecologist prior to clearance A suitably qualified ecologist must be on site to supervising ecologist and machine operator Habitat trees will be nudged with large machinery the day prior to felling to encourage wildlife using the hollows to leave Immediately prior to clearance, habitat trees will be nudged twice with a 5-minute interval between nudges to allow fauna to leave Each habitat tree will be pushed over with as little ground impact as possible, given safety conditions If animals are disturbed during tree felling or rock clearance, work should stu areas, or into other areas following the guidance of Conservation Planning and Research, ACT Government (CPR). 				
Tree Management	 NSW Tree Management Trees to be removed must be approved in accordance with the Yass Valley Council Local Environmental Plan (2013) Trees to be retained in NSW would be fenced and managed according to an approved Landscape Management Protection Plan. 	Contractor			

lssue	Control Measures	Responsibility			
	 Non-protected trees to be retained (ACT) Non-protected trees to be retained will be fenced and managed according to an approved Landscape Management Protection Plan. Protected Trees (ACT) Where Protected Trees exist within the Project impact footprint, the tree(s) would be marked with a tree potential root zone using exclusion fencing during construction. Construction works cannot occur in a protected tree's Tree Protection Zone, defined in the <i>Tree Protection Act 2005</i> (ACT) as: the area under the canopy of the tree; and the 2 m wide area surrounding the vertical projection of the canopy the 4 m wide area surrounding the trunk as measured at 1 m. If the tree has a specific Tree Management Plan: For <i>Registered Trees</i>, the above applies, in addition to any works commencing within 5 m of the edge of the canopy of a registered tree, the works must be referred to the Conservator of Flora and Fauna for comment and agreed to in writing by the Conservator For a <i>Regulated Tree</i>, the Conservator of Flora and Fauna must be approached for approval if works are required in the Tree Protection Zone. Heritage Trees (ACT and NSW) Heritage trees will be protected according to the general tree protection protocols specified, and heritage management protocols specified in Section 3.3.9. Removal of heritage trees must only occur if approval is provided by the Heritage Council (ACT) or OEH (NSW). 				
Woody Debris	sediment control plan.	Contractor			
Disposal, Collection and Placement	 vegetation bisposal (<50 cm diameter of exotic species) Vegetation smaller than 30 cm in diameter will be recycled, chipped or mulched and re-used on site or disposed of at a green waste facility. 	Contractor			
	 Woody Vegetation Disposal (native species, >30 cm diameter) Native logs from trees or dead timber removed from the construction site with a diameter greater than 30 cm are to be collected and stored for box – gum woodland restoration activities within the Conservation Corridor Ecological supervision and fauna rescue procedures would be implemented during any removal of habitat trees (see e.g. Appendix A). 				

lssue	Control Measures	Responsibility
	 Log placement Native logs with a diameter greater than 30 cm are to be placed within the designated woodland areas to achieve a maximum density of 20 to 40 tonnes per hectare All placement of logs is to be arranged/supervised by the Principal's Environmental Represenatative in a manner consistent with the Offset Management Plan, as follows: Place in clumped arrangements Place flat on the ground about 1 m apart (i.e. not heaped) Place under trees and out in the open Do not place logs on rocky outcrops Place more than 20 m from the river corridor boundary Ensure adequate clearances from infrastructure Do not place on knowned threatened species sites, rare plant populations or heritage sites Do not place on research plots (unless specifically required) Placement Conservator of Flora and Fauna. 	
Rock Collection and Placement	 Rock Collection Construction areas should be screened for suitable rocks for Pink-tailed Worm-lizard habitat by a suitably qualified ecologist Suitable rocks would be collected and stored for Pink-tailed Worm-lizard habitat restoration in the Conservation Corridor Ecological supervision and fauna rescue procedures would be implemented during rock collection (see e.g. Appendix A). Rock Placement Rock placement for Pink-tailed Worm-lizard habitat restoration on site is to be arranged/supervised by the approval holder or Principal's Environmental Represenatative in a manner consistent with the Offset Management Plan, which must define: Placement extent Placement would be constrained by the following factors Do not place on knowned threatened species sites, rare plant populations or heritage sites Do not place on research plots (unless specifically required) Placement methods will be updated in consulation with the ACT Government Conservator of Flora and Fauna. 	Contractor
Weed and pathogen hygiene	 Induction Inducting all site personnel including contractors, as to their soil and weed hygiene, and vehicle cleaning requirements Pre-mobilisation inspections are to be performed and recorded 	Contractor

lssue	Control Measures	Responsibility
	 Post-mobilisation inspection and cleanouts, if required, to be performed and recorded. 	
	Hygiene protocols	
	 Soil hygiene protocol would be implemented incorporating the following: 	
	 Ensuring that any non-local fill introduced to the site is sourced from certified clean fill sources If applicable, erecting signs at suitable locations to remind contractors, sub-contractors that they are required to clean all vehicles prior to entering / 	
	 leaving the site if they are arriving / leaving for another works site All plant and equipment undertaking works will be required to be cleaned or brushed down prior to 	
	 arrival and departure from the work site to prevent weed transmission Ensuring that wheel cleaning provisions are 	
	 available, where required, to effectively clean vehicles / machinery Parking vehicles and construction machinery in 	
	 designated areas only Regularly monitoring all construction areas, parking areas, lawdown areas and other dicturbed 	
	Project areas for weed establishment and controlling weeds as necessary	
	 Inspecting and removing loose soil and vegetative material, where necessary, from plant and mechanical equipment / vehicles prior to entering 	
	and leaving the site, so as not to transfer weeds onto / off the site from other works sites	
	 The Erosion and Sediment Control Plan would include for details regarding mud tracking 	
	 Specific weed control measures would be required to prevent the spread of Chilean needlegrass along Ginninderra Creek, particularly in association with the development of Ginninderra Drive Extension. 	

4. Implementation and Operation

4.1. Environment Management Framework

Site-specific CEMPs should commit all parties to operate in accordance with, and is compliant with, AS/NZS ISO14001. All related works related will be done in accordance with:

- ISO 14001 Environmental Management System
- ISO 9001 Quality Management system
- AS/NZS 4801 Health Management System
- All relevant legal requirements.
- This CEMP and the various sub-plans that are potentially connected to it.

4.2. Environmental Management System Documentation

The strategies defined in this CEMP Framework have been developed with consideration of the Project Approval requirements, safeguards and mitigation measures presented in the environmental assessment and approval documents. This CEMP Framework establishes the system for implementation, monitoring and continuous improvement to minimise impacts from work on the environment. Site-specific CEMPs should be developed for each stage of development or associated works which address the specific risks.

This CEMP Framework has been prepared to assist the Contractor to mitigate impacts that may occur throughout the construction phase of the Program. Site-specific CEMPs must be prepared in consultation with the relevant ACT and NSW regulators and consistent with the following guidelines and requirements:

- AS/NZS ISO14001: (2004) Environmental Management Systems requirements with guidance for use
- ACT Government (2013) Environmental Guidelines for preparation of an Environment Management Plan, Enviroment Protection Agency (ACT), ACT.
- NSW Government (2004) Guideline for the Preparation of Environmental Management Plans, Department of Infrastructure, Planning and Natural Resources, ACT.
- Endorsed by the ACT Conservator (for both the ACT and NSW portion of the site)
- Approved by the ACT Minister for the Environment (ACT portion).
- NSW Office of Environment and Heritage (regarding NSW portion of the site)
- Feedback from the Commonwealth Department of Enviornment

The legal frameworks and guidelines applicable to CEMPs may be subject to change over time. It is the responsibility of the Contractor to ensure that site-specific CEMPs are prepared in compliance with the current legislation and guidelines in the relevant jurisdiction. Also to be prepared in accordance to the specific contract conditions.

4.3. Worker and Public Health and Safety Policies

The Contractor is responsible for ensuring that reference to the applicable Worker and Public Health and Safety Policies are included in the site-specific CEMPs, including details of the Contractor's Health and Safety System, applicable OHS Legislation and industry best practice.

4.4. Resources, Roles, Responsibilities and Authority

The following sections outline the roles and responsibilities in relation to the implementation of the overarching CEMP and site-specific CEMP. Site-specific CEMPs must outline how all aspects of these responsibilities are addressed.

4.4.1. Principal's Representative

The Principal's Representative comprises of a representative of Riverview Project (ACT) Pty Ltd, or a delegate, and would be responsible for:

- Overseeing the works on site with regards to contractual and environmental compliance
- Advise the Contractor of its observations relating to environmental performance of the works
- Review the management plans provided by the Contractor and offer comments
- Conduct audits of the environmental controls, required documentation and reports
- Review and request any training or site induction documentation
- Issue non-conformance and /or stop work notices to the contractor as required
- Cooperate with the Contractor to resolve any nonconformances or impasses
- Report to Riverview of any major non-conformances
- Have the authority to stop work under the contractor, where necessary
- Provide monthy environmental report to Riverview
- Inspection and release of hold points under the Contract.

4.4.2. Contractor Responsibilities

The Contractor's Management responsibilities include:

- Provide a safe working environment
- Provide resources for; PPE, monitoring and emergency response equipment
- Investigate incidents
- Ensure all activities are performed in accordance with the Contractor's Health and Safety System, OHS Legislation and industry best practice
- Ensure necessary resources are provided (budget, equipment, trained staff etc.)
- Providing an approved set of safe work method statements
- Review and monitor environmental performance at regular meetings
- Required to be notified of any environmental incidents and review the management procedures in place to deal with such occurrences
- Monitor non-compliance and review management procedures to prevent re-occurrence of non-conformances
- Monitor statutory requirements and manage compliance
- Appropriate and adequate resources are to be allocated, implemented and maintained to allow for effective implementation and maintenance of site-specific CEMPs
- Monitor progress of achieving compliance with site-specific CEMPs, together with ensuring that site activities comply with all statutory and project-specific requirements. Any findings of non-compliance should be reported
- Manage remediation actions to correct incidents of environmental non-compliance
- Facilitate the monitoring and reporting of incidents that may impact on the surrounding environment.
- Conduct a risk assessment (as specified in Section 2.3) prior to any work commencing
- Ensure consistency between site-specific CEMPs and this CEMP Framework
- Obtaining authorisation from the Principal's Representative to commence site works
- Coordination of site activities, including sequence of works
- Arrange induction of contractors and site representative in accordance with the OH&S procedures of the Principal's Representative if appropriate
- Instruction of site representative as to the nature and requirements of site supervision
- Monitor statutory requirements and manage compliance
- Make all staff aware of and understand their responsibilities under site-specific CEMPs

- Identify any environmental training requirements
- Allocate adequate resources to carry out Environmental Management/Control measures and Emergency Response if required
- Applying for necessary approvals/licences (e.g. traffic management) and maintaining records of these approvals/licences
- Report all incidents with the potential to cause serious environmental harm or harm to human health to the Project Manager
- Implementation of exclusion zones prior to the commencement of works
- Site control during period of site activities
- Coordination of site activities
- Set-out of work locations
- Safety of site operations
- Ensuring fire precaution measures are implemented
- Ensuring materials, equipment and methods conform to specifications
- Monitoring performance of the development, excavations and ground conditions to ensure adverse conditions do not develop during the works
- Implementing corrective action where non-conformance or adverse conditions are observed
- Recording daily contractual information (weather, times, personnel, equipment, progress, breakdowns, standby times and non-conformance with specification)
- Ensure that the site-specific CEMP is maintained up to date
- Ensure that records of planned environmental control measures are kept on site as required
- Regularly check mitigation measures and monitoring programs for compliance/effectiveness.
- Conducting the auditing and reporting required by the CEMP, including reporting of incidents and complaints.
- Ensure all Sub-Contractors have the responsibility to deliver the measures detailed in the site-specific CEMPs and related Project Plans during the works program. If there is a non-compliance, Sub-Contractors are required to stop works and facilitate rectification of works to the appropriate standards. All subcontractors have a responsibility to deliver the measures detailed in the site-specific CEMP during the works. These include but not limited to:
 - Ensuring, at a minimum, compliance with Work Health and Safety (WHS) and environmental regulations and appropriate standards for the works to be carried out
 - Relevant WHS and environmental management procedures should be submitted to the Principal's Representative prior to site work commencing
 - Conduct site induction training for all site staff and visitors
 - Ensure that the equipment provided to undertake the works complies with specifications
 - Provide supervision and training of staff
 - Conduct toolbox meetings for staff.

All persons have a duty under the *Environment Protection Act 1997 (ACT)* and the *Protection of the Environment Operations Act 1997 (NSW)* where there is 'material harm to the environment' or a pollution incident to notify all incidents with the potential to cause material environmental harm to relevant Contractor personnel and the Principal's Representative.

4.5. Contractor Management

Environmental requirements and responsibilities will be specified to Contractors in the contract documentation. As part of the selection process, consideration will also to be given to their past environmental performance. The Principal's Representative may participate in the tender assessment and selection process for Sub-Contractors where it is deemed necessary due to associated environmental risks.

All contractors will be required to develop and submit environmental management documents to outline how they will undertake their works. The plan will need to be in accordance with the approved site-specific CEMP, conditions of approval, relevant specifications and legal requirements. Contractor's environmental management documents will need to address the specific requirements of their contract and scope of works.

Contractors will be responsible for staff and Sub-Contractors under their control and will be required to oversee works on site to ensure that environmental controls are implemented and maintained and review their performance against the requirements of site-specific CEMPs by regular inspections and audits.

Contractors will be required to participate in environmental inspections and audits of their works.

At any stage of the works, if subcontractor personnel are found to have ignored environmental controls or have caused environmental harm, their activities will cease, a nonconformance issued in accordance with the Principal's Representative quality systems and works will not recommence until the nonconformance is successfully closed out.

A monitoring form will be developed by the Contractor, and approved by the Principal's Representative, that will be used to assess:

- Contractor's general work practices
- Effectiveness of the sub-contractor's environmental protection measures
- Contractor's compliance with the requirements of site-specific CEMP
- Maintenance of environmental measures.

4.6. Construction Environmental Management Plan (CEMP) Availability

This CEMP Framework will be made publicly available via the Ginninderry website. Confidential information will be removed from all documents provided or made available to the public.

Site-specific CEMPs would also be made available for public inspection on request. Confidential information will be removed from all documents provided or made available to the public.

5. Inspections, Monitoring and Auditing

5.1. Environmental Inspections

Site specific CEMPs must include details of regular environmental inspections, including:

- Pre-work inspections to be carried out by the Project Contractor's staff and will include a check of relevant environmental controls and resources required to ensure effective operation and maintenance
- Site-inpections are to be carried out by the Contractor to evaluate and audit implementation of environmental controls. The Principal's Representative may undertake site-inspections at their discretion
- Post-rainfall inspections to be carried out by the Contractor to evaluate the effectiveness of environmental controls. The Principal's Respresentative may undertake post-rainfall site-inspections at their discretion.
- The site-specific CEMP must define responsibilities and processes for inspections recording findings of inspections, including maintenance requirements or deficiencies in environmental controls. Processeses for identifying and implementing actions to address deficiencies and maintenance must be defined, including requirements for documenting these at the conclusion of the inspection and time frames for implementation of corrective actions agreed.

5.2. Environmental Monitoring

Site-specific CEMPs must include a procedure for monitoring of the project against environmental outcomes to measure the effectiveness of management plans, measure environmental controls and implementation of site-specific CEMP to address approval requirements. The monitoring procedure will include:

- Purpose and scope
- Minimum acceptable frequency and standards listed in applicable approvals, licences and regulations
- Relevant EPA approved methods, Australian Standards or, in the absence of an Australian Standard, industry acceptable procedures
- Environmental targets and parameters
- Procedures for response to any exceedances of targets/standards
- Processes for recording and reporting results.

The site-specific CEMP must include processes for advising the Principal's Representative of any non-conformances from monitoring.

The site-specific CEMP must specify reporting procedures where a non-conformance is detected or monitoring results are outside of the expected range and are directly attributable to the work (i.e. are influenced by factors under the direct control of the work, e.g. noise from construction equipment). Steps in the process will typically include:

- A detailed analysis of the results by the Project Manager with a view to determining possible causes for the nonconformance
- A site inspection by the Project Manager or delegate
- Advising relevant personnel of the problem
- Identifying and agreeing on actions to resolve or mitigate the non-conformance
- Implementing actions to rectify or mitigate the non-conformance.

- A non-conformance Environmental Incident Report and/or Environmental Improvement Notice may be issued by the Project Manager in response to the non-conformance if it is found to be construction related
- The timing for any improvement will be agreed between the relevant Site Engineer/Superintendent and Project Manager based on the level of risk (e.g. a significant risk will require immediate action).
- All environmental monitoring equipment shall be maintained and calibrated per manufacturer's specifications and appropriate records kept.

5.3. Auditing and Reporting

5.3.1. Contractor Internal Audits

The Contractor will develop an internal audit checklist and correlating audit schedule, that will reflect compliance/non-compliance with the site-specific CEMPs. The audit checklist and schedule will be reviewed and approved by the Principal's Representative. The purpose of auditing is to verify compliance with:

- The site-specific CEMP and associated plans
- Consistency of the site-specific CEMP with this CEMP Framework
- Approval requirements (Letter of Authority)
- Any relevant legal and other requirements (e.g. licences, permits, regulations, contract documentation)
- An audit checklist will be developed and amended as necessary to reflect changes to this CEMP, subsequent approvals and any changes to Acts, regulations or guidelines.

An audit report will be issued for action. A follow-up/closeout audit will be coordinated within one month of the issue of the audit report.

5.3.2. Principal Contractor Audits

The Principal's Representative may at any time conduct audits of the Contractor and sub-contractors.

5.4. Compliance Tracking Program

This Framework CEMP and the subsequent site-specific CEMPs require a Compliance Tracking Program or compliance register be developed and implmented.

Riverview will develop and maintain a compliance tracking database for the life of the project. The database will capture and track all environmental requirements, including conditions of approval and mitigation requirements from the Endorsed Program (18 July 2017) and Final Approval Decision (1 September 2017) under the EPBC Act, and Contractual Requirements and all subsequent management plans, in accordance with Standard Condition 15 of the Final Approval Decision. It will also capture timing requirements and assign ownership to each requirement. The database will provide a comprehensive tracking system for the life of the project and regular reporting.

The requirements of the Compliance Tracking Program are:

• The Contractor shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this approval. The Program shall be submitted to the Principal's Representative for approval prior to the commencement of works and operate for a minimum of one year following commencement of operation, or as otherwise agreed by the Project Manager. The Program shall include, but not necessarily be limited to:

- Provisions for the notification of the approval prior to the commencement of the works and prior to the commencement of operation of the work (including prior to each stage, where works are being staged)
- Provisions for periodic review of the compliance status of the work against the requirements of the Project Approval
- Provisions for periodic reporting of compliance status to the Principal's Representative, including a Pre-Works Compliance Report, during Works reporting and a Pre-Operation Compliance Report
- Mechanisms for recording environmental incidents during construction and actions were taken in response to those incidents
- Provisions for reporting environmental incidents to the Principal's Representative and relevant public authorities during the works
- Procedures for rectifying any noncompliance identified during environmental auditing, review of compliance or incident management
- Provisions for ensuring all employees, contractors and sub-contractors are aware of and comply with, the conditions of this approval relevant to their respective activities.
- The Compliance Tracking Program describes how the requirements of the Endorsed Program (18 July 2017) and Final Approval Decision (1 September 2017) under the EPBC Act, and Contractual Requirements and all subsequent management plans, will be met and sets out a program and frequency for compliance reporting and independent auditing. The compliance reporting required under the Compliance Tracking Program will record how the the Endorsed Program (18 July 2017) and Final Approval Decision (1 September 2017) under the EPBC Act, and Contractual Requirements and all subsequent management plans, has been addressed.
- Issues identified during environmental inspections requiring further action beyond normal practice or maintenance will be logged into this Database. Also, oversight of inspection outcomes, audit issues, incidents, and corrective actions will be provided through the actions created.

5.5. Review and Improvement

This CEMP Framework will be used to create a site-specific CEMP by the Contractor, for each stage of the development. Responsibility for updating the CEMP Framework would lie with Riverview. The Contractor is responsible for updating site-specific CEMPs as changes are made to the CEMP Framework. The Principal's Representative will notify the Contractor of any changes.

The site-specific CEMP will be finalised by the Contractor for each stage prior to commencement of works and will integrate requirements and information specific to that stage. Site-specific CEMPs must include provision to be reviewed and updated by the Contractor through the following review process:

- Management reviews are to be conducted as part of the continual improvement process. The management review can consist of group reviews or executive reviews.
- A group review includes relevant project team members. The Contractors personnell overseeing environmental responsibilities will also meet as required to review environmental management issues for the works. The meeting can be run in conjunction with a wider group meeting.
- Reviews in relation to environmental aspects shall include:
 - A review of the aspects and impacts register, legal register and environmental induction
 - Consideration of monitoring, inspection and audit results
 - A review of incidents and any lessons learnt
 - Consideration of any new regulatory issues
 - A review of the effectiveness of erosion and sediment controls
 - Consideration of issues raised by Contractor personnell overseeing environmental responsibilities

- Consideration of changes in operational needs such as resourcing
- Feedback from management reviews.
- If deemed necessary, an executive review will involve the management team. This review includes but not limited to:
 - Effectiveness of the implemented environmental management documentation
 - Management effectiveness
 - Potential improvements to the environmental management documentation
 - Adequacy of resources
 - Findings of audits
 - Environmental objectives and targets
 - Environmental performance
 - Compliance with legal and other requirements
 - Critical non-conformance or repeated non-conformances
 - Organisation changes
 - Effectiveness of training and inductions.

5.6. Non-Conformance, Corrective/ Preventive Actions

Site-specific CEMPs must include provision for issuing and documenting non-conformance notices, improvement opportunities, and implementation of associated corrective and preventative actions, as follows:

- Any member of the project team and Contractors may raise a non-conformance or improvement opportunity.
- The Principal's Representative, or a public authority, may also raise a non-conformance or improvement opportunity using the same process.

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

Site-specific CEMPs must document processes for corrective/preventive actions and improvement opportunities to be entered into the Contractor's quality system database. The record will be updated with the date of closeout and any necessary notes. The database will be reviewed on a regular basis to ensure actions are closed out as required.

A provision will be included in the CEMPs where by the Principal's Representative can, if necessary, stop any non-conforming activites. Defined processes must ensure that works must not commence until a corrective/preventive action has been closed out and a non-conformance report prepared by the Project Contractor.

Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance, or incident management must also be documented in a Compliance Tracking Program.

6. Communication

6.1. Internal Communications

Site specific CEMPs must define clear lines of communication throughout all levels and functions (e.g. management, staff and subcontracted service providers) which are key to minimising environmental impacts and achieving continual improvements in environmental performance. As a guide, site-specific CEMPs should consider the following framework for internal communications:

- The Principal's Representative will meet as required throughout the project with the Contractor to discuss any potential issues with environmental management on-site, and any amendments to plans that might be required or any changes to construction activities.
- If required, meetings may also be scheduled with relevant ACT/NSW government/local council/land owner/land occupier representative. The purpose of these meetings would be to communicate ongoing environmental performance and to identify any issues to be addressed.
- The Principal's Representative can participate in toolbox talks on a regular basis. This forum will provide an opportunity for the environment team members to communicate on environmental performance, to advise on any upcoming sensitive environmental matters for future work areas and to receive feedback from on-site personnel.

6.2. External Authority Consultation

Site-specific CEMPs must define a point of contact for environment issues. As a standard, the Contractor would be the main point of contact regarding specific environmental issues. The Contractor has the responsibility to report on the ongoing environmental performance of the work to Principal's Representative and. Any communication required with the EPA and the independent ACT/NSW EPA approved Site Auditor will be made through Riverview. The Contractor will report as required to Principal's Representative on progress and any key environmental matters.

7. Documentation

7.1. Environmental Records

Site-specific CEMPs must define the following responsibility for maintaining environmental records.

The Contractor would be responsible for maintaining all environmental management documents at the point of use. Types of records include:

- All monitoring, inspection and compliance reports/records
- Correspondence with public authorities
- Induction and training records
- Reports on environmental incidents, other environmental non-conformances, complaints and follow-up and close-out actions
- Community engagement information
- Minutes of CEMP and construction environmental management system review meetings and evidence of any action taken.

All environmental management documents are subject to ongoing review and continual improvement. This includes revision and updating should there be changes to scheduled activities or to legislative or licensing requirements.

Only the Principal's appointed representative (or delegate) has the authority to change any of the environmental management documentation. Environmental documents and records will be kept and updated in accordance with the applicable Quality Management Plan.

7.2. Document Control

Site specific CEMPs must define the document control procedures. The Principal's Representative will coordinate the review and distribution, as appropriate, of all relevant environmental documents.

The procedure will ensure that documentation is:

- Developed, reviewed and approved prior to issue
- Issued for use
- Controlled and stored for the legally required timeframe
- Removed from use when superseded or obsolete
- Archived.

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

8. References

ACT Government (2013) Territory Plan – Current Version, ACT Government, Canberra.

ACT Government (2013). *Environmental guidelines for preparation of an Environment Management Plan*. Environment Protection Authority, Environment and Sustainable Development Directorate

A T Adams Consulting (2017). *Urban development at West Belconnen. Program report*. Report prepared for Riverview Projects (ACT) Pty Ltd. A T Adams Consulting Pty Ltd, Kingston, Australian Capital Territory.

National Occupational Health and Safety Council (2005) *Code of Practice for the Safe Removal of Asbestos, 2nd Edition* [NOHSC: 2002 (2005)]

National Occupational Health and Safety Council (2005) *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005)]

NSW Government (2004) *Guideline for the Preparation of Environmental Management Plans*. Department of Infrastructure, Planning and Natural Resources, NSW.

Standards Australia (2001) Australian and New Zealand environmental management international standard (AS/NZS ISO 14001), Standards Australia, NSW

TRC Tourism Ltd (2018) Management Plan for the Ginninderry Conservation Corridor (2018-2023). Report prepared for Riverview Projects (ACT) Pty Ltd.

Umwelt (2017) *West Belconnen project strategic assessment. Strategic assessment report*. Report prepared for Riverview Projects (ACT) Pty Ltd. Umwelt (Australia) Pty Limited, O'Connor, Australian Capital Territory.

Appendix A Example Fauna Search, Rescue & Release Procedure

Pre-operations

- Appropriate scientific licences must be obtained prior to the works.
- All staff will be experienced in fauna handling and will be utilising the appropriate PPE. They
 will be supervised by a more experienced fauna ecologist trained in fauna handling
 procedures;
- Equipment for specific species will be made available from RSPCA;
- Contractor will be briefed on operational requirements including fauna licensing requirements;
- Only vaccinated staff can handle bats.

Operations

Preclearance Rock Searches

- Preclearance area searches will be conducted by qualified ecologists experienced in PTWL surveys.
- Each rock within PTWL habitat areas and deemed to be suitable for PTWL will be rolled over and checked for PTWL presence.
- Any PTWL detected will be captured and translocated to suitable habitat in the Ginninderry Conservation Corridor.

Rock Removal Procedure

- An ecologist will be on standby to translocate any PTWL detected during rock removal.
- Uninjured PTWL will be captured and translocated to suitable habitat in Ginninderry Conservation Corridor
- Injured PTWL will if possible be collected, assessed and if necessary passed to the RSPCA.

Tree Felling Procedure

- All non-habitat trees will be felled as a group and then all checked by qualified ecologists for fauna
- Habitat trees will be 'bumped' by machinery the day before then, on clearing day, bumped again five minutes before felling. Emerging animals will be caught by qualified ecologists if possible
- The habitat trees will be individually lowered to the ground and immediately checked by qualified ecologists before the next habitat tree is felled.

Fauna Recovery

Uninjured fauna

- If uninjured fauna emerge from falling or fallen timber and they can be captured, they will be placed in a canvas bag in a box and put aside in quiet, cool, dark area in a vehicle.
- They will be taken to the designated release within the GCC within one hour, or if deemed necessary to reduce stress to the animal released during the evening.

Injured fauna

If fauna are injured during the removal of habitat trees, where possible and appropriate, handling and health assessment procedures will be conducted as per 'Australian Mammals: Biology and Captive Management' (Jackson 2003). Staff with suitable experience and qualifications will handle and assess

the animals and train and extend the experience of assisting staff. The procedures for injured fauna are as follows:

Fauna will be assessed as soon as possible to determine health condition and to minimise stress;

- If the animal is assessed as not requiring medical attention they will be removed from the impact site and placed at the designated 'storage' site (a vehicle). They will be taken to the release site at the completion of operations.
- If the fauna has only minor injuries and does not require immediate attention, basic first aid will be applied and then stowed at the storage site.
- The RSPCA will be contacted to collect injured animals requiring attention after of the clearing event before close of business.
- If the fauna is seriously injured and requires immediate attention, the RSPCA will be contacted immediately for advice and to potentially collect the animal for treatment if possible.
- Towels or blankets will be used to cover large animals.
- Stowed fauna must be protected from heat and noise exposure. Fauna will need to be placed in a quiet, dark and well ventilated place upon collection.
- Once the RSPCA arrives at the site, the responsibility of the fauna passes to them. Decisions about the animal welfare will be determine by the RSPCA.
- Fauna attributes will be recorded including capture and relocation sites, sex, age and health conditions.
- Any fauna deaths will be recorded. These will be removed from impact site and disposed of as per RSPCA instructions.

Release procedures

- Animal release will be conducted during the evening at the release site as per license conditions.
- Stunned birds which may be recovering will be released when they appear able to fly. More seriously injured birds will be inspected by RSPCA on their arrival.
- No releases will be conducted in heavy rain or strong wind.
- Animals taken into care by the RSPCA are the responsibility of RSPCA. It is suggested rehabilitated animals are also released in the Ginninderry Conservation Corridor.

Equipment and PPE

A range of equipment and PPE is required for handling the various fauna. Eye protection, sturdy boots, long pants and long sleeve shirt are required. Large sturdy gloves are required for large mammals (for example possums) and bats. Latex gloves will be used for frogs. Hand wash will be used after handling reptiles and frogs. A first aid kit will be within close proximity. All staff will be trained in first aid.

Possums: Held in large hessian bags (ensuring that the bag is inside out to prevent the animal claws getting caught in the stitching.

Gliders: Calico cloth bags that can tie on top.

Birds and nests: Large cardboard box with soft cloths within it.

Bats: Calico bags (30cm by 45cm deep) that can tie on top. They will be held individually in bags and placed within shoe boxes.

Reptiles: small lizards into a calico bag (held individually). Snakes will be placed within a snake bag (Note: the only species that may be within tree hollows is the carpet python).

Frogs: One frog per bag to reduce the risk of spreading disease. Gloves will always be used and frogs will be placed in calico bags.

Card board boxes or the back of open vehicles can be used to ensure bagged animals are stowed in a dark, cool, well ventilated place (a vehicle) until release or receipt by RSPCA.

STAFF NAME & SIGNATURES:

I have read and understand these procedures:

NAME:	signature:	date:
NAME:	signature:	date:
NAME:	signature:	date:

Appendix B Unexpected Discovery Plan (Heritage)

Construction Environmental Management Plan (CEMP) Framework | Ginninderry Development | Riverview Projects (ACT) Pty Ltd. | 30018032 SMEC Australia | 54

APPENDIX C – UNANTICIPATED DISCOVERY PLAN

The process outlined in the unanticipated discovery plans should not be undertaken until it has been endorsed by the ACT Heritage Council. The plans provide guidance to project personnel so that obligations in accordance with the *Heritage Act 2004* can be meet.

If any items are uncovered during the course of works, which are considered to possibly be of Aboriginal or historical significance the following unanticipated discovery plan should be implemented. All Aboriginal and significant historical heritage places or objects are protected under the *Heritage Act 2004*. Offence provisions (Section 74 and Section 75) of the Act apply to impacting heritage sites. Any unanticipated find of potential heritage value should follow the process outlined below to avoid breaching obligations under the Act.

1. UNEXPECTED DISCOVERY OF ABORIGINAL CULTURAL HERITAGE

If suspected Aboriginal Heritage items (isolated stone artefacts, artefact scatters, archaeological deposits or scarred trees) are found then the following management process must be implemented:

- 1. Work must immediately stop in the area within a buffer zone of 10 metres from the primary grid coordinate.
- 2. ACT Heritage (132281) must be informed of the suspected find within 5 working days.
- 3. A suitably qualified heritage advisor and the Representative Aboriginal Organisation (RAOs) must be engaged to assess the potential site.
- 4. If the items are not considered to be Aboriginal, activity may recommence.
- 5. If the items are considered to be Aboriginal, the Proponent, RAOs and the Cultural Heritage Advisor, will discuss the possibility of avoiding and minimising harm to the Aboriginal cultural heritage, and the Proponent must avoid or minimise harm to the Aboriginal cultural heritage, where possible.
- 6. If the items are considered to be Aboriginal, an assessment report will need to be prepared and submitted to the Heritage Council. After approval from the Heritage Council, the artefacts should be recorded and salvaged in accordance with the approved methodology.
- 7. After approval of the salvage report, works can recommence.

2. UNEXPECTED DISCOVERY OF HISTORICAL CULTURAL HERITAGE

If suspected historical items are found then the following management process must be followed:

- 1. Work must immediately stop in the area within a buffer zone of 10 metres from the primary grid coordinate.
- 2. ACT Heritage must be contacted on 13 22 81 for advice.

- 3. A suitably qualified heritage advisor needs to be engaged to assess the potential site.
- 4. If the items are not considered to be historically significant, activity may recommence.
- 5. If the items are considered to be historically significant, a management recommendation should be given by the heritage advisor.
- 6. Following approval by ACT Heritage Council and completion of the management recommendation, the activity may then recommence.

3. UNEXPECTED DISCOVERY OF HUMAN REMAINS

If any suspected human remains are discovered during any works, all activity in the areas must cease immediately. The following contingency plan describes the actions that must be taken in instances where human remains or suspected human remains are discovered. Any such discovery at the activity area must follow these steps.

Discovery:

- If any suspected human remains are found during any activity, works in the vicinity **must** cease.
- All personnel should leave the area immediately
- The remains must be left in place, and protected from harm or damage.

Notification:

- The ACT Federal Police must be notified immediately. All details of the location and nature of the human remains must be provided to the relevant authorities.
- If there are reasonable grounds to believe that the remains are Aboriginal, ACT Heritage must be contacted immediately on **13 22 81**.
- The Project Manger must be contacted immediately.

Process:

• If the remains are considered to be Aboriginal by the AFP an appropriate management and mitigation, or salvage strategy will be implemented following consultation with the RAOs and ACT Heritage.

Appendix C Unexpected Finds Procedure (ACM)

Unexpected Finds Protocol

In the event that any previously unidentified material suspected of containing potentially hazardous substances is found, the following procedure will be implemented:

1. Contractor to IMMEDIATELY cease works and barricade the area

2. Contractor to notify Superintendent (if applicable) and/or responsible entity

3. Responsible Entity to engage Environmental Consultant

4. Environmental Consultant to make observations of the materials and undertake any testing deemed necessary

5. Environmental Consultant to make evaluation of any potential unacceptable risks to human health and the environment, recommend remedial works as necessary and advise the Site Auditor

6. **Environmental Consultant** to provide guidance to assist with the appropriate re-use and/or disposal of material

7. EPA may need to be contacted (please call 132 281).

Appendix D Breeding Seasons of Selected Birds

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Superb Parrot												
Little Eagle												
Brown Treecreeper												

Appendix E Biodiversity Constraints and Buffers



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Last updated by: FA13847 on 2/05/2022 at 11:52



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