Construction Flora and Fauna Management Plan – Addendum

Moorebank Intermodal Precinct – Precinct West South



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Moorebank Intermodal Precinct – Precinct West South

EPBC 2011/6086 Approval

Construction Fauna and Flora Management Plan – Addendum



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Revisions

Revision	Date	Description	Prepared by	Approved by
01	24/01/2024	Draft for client review		
02	28/02/2024	Final		

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Acronyms and Definitions

Acronym / Term	Meaning
Addendum	Construction Environmental Management Plan – Addendum
CDC	Complying Development Certificate (230736/01)
CEMP	Construction Environmental Management Plan (SSD7709 MPW2)
CEMP Addendum	Construction Environmental Management Plan Moorebank Intermodal Precinct – Precinct West South
CFFMP	Construction Flora and Fauna Management Plan (SSD7709 MPW2)
CFFMP Addendum	Construction Flora and Fauna Management Plan Moorebank Intermodal Precinct – Precinct West South (this Plan)
CoC	Conditions of Consent as detailed in the SSD 5066 Development Consent
Construction area / footprint	Extent of construction works, namely areas to be disturbed during the construction of the Project, as identified in the CDC
Contractor's EM	Contractor's Environmental Manager
EIS	Environmental Impact Statement
Environmental Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. Environmental incidents include pollution incidents and environmental emergencies. Environmental incidents may arise from natural (e.g. storm, wind or bushfire) or human factors.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
Material harm	Harm that involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
MPW	Moorebank Precinct West
MPW Concept Approval	MPW Concept Approval (SSD 5066), granted by (the now) DPIE on 29 September 2014 for the development of an intermodal terminal facility including a rail link connecting the site to the Southern Sydney Freight Line, an intermodal terminal, warehousing and distribution facilities and a freight village.
MPW Concept EPBC Act Approval	Commonwealth Approval (No. 2011/6086) granted in September 2016 under the Environment Protection and Biodiversity Conservation Act 1999, for the impact of the MPW Project on listed threatened species and communities (sections 18 and 18A of the EPBC Act) and Commonwealth action (sections 28 of the EPBC Act).
MPW Stage 2/3	Moorebank Precinct West Stage 2 and Stage 3 ('the Project')
OFFMP	Moorebank Logistics Park – Precinct West Stage 2 (SSD7709) Operational Flora and Fauna Management Plan

Acronym / Term	Meaning
Non-compliance	An occurrence, set of circumstances, or development that results in a non- compliance or is non-compliant with Development Consent SSD 7709 and SSD 10431 Conditions of Consent or EPBC Act Approval (EPBC 2011/6086) Conditions of Approval but is not an incident.
Non-conformance	Observations or actions that are not in strict accordance with the CEMP and the aspect specific sub-plan.
The Project	The construction of the five warehouses and associated landscaping and infrastructure on the MPW South Site.
Project site / Project footprint	The subject of the MPW Stage Concept Approval EIS, the part of the MPW Site which includes all areas to be disturbed by the Project (construction area).
REMM	Revised Environmental Management Measures. These are the management and mitigation measures presented in the MPW Concept Plan Supplementary RtS (August 2017).
SSD	State significant development
TISEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
WoNS	Weeds of National Significance



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1. Introduction

This Construction Flora and Fauna Management Plan – Addendum (Addendum) applies to construction activities being undertaken at the Moorebank Precinct West (MPW) South Site, in Moorebank, New South Wales and addresses:

- the relevant conditions of the 2011/6086 Approval issued under the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act)
- the relevant conditions of the MPW Concept and Stage 1 (State Significant Development (SSD) 5066) Development Consent
- the applicable complying development conditions issued with the Complying Development Certificate (CDC) 230736/01 in accordance with Chapter 6 of the State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP).

The MPW Stage 2 Construction Environmental Management Plan (CEMP) and subplans were originally approved by the (then) Department of Planning, Industry and Environment (DPIE) prior to the commencement of construction in accordance with Condition of Consent (CoC) C2 of the MPW Stage 2 (SSD 7709) Development Consent.

The MPW Stage 3 (SSD 10431) Development Consent was issued by the Independent Planning Commission on 11 May 2021. CoC B17 required a CEMP to be approved by the Planning Secretary prior to commencement of construction. CoC B19 allows the Applicant to prepare standalone CEMP and relevant sub-plan documents, or update versions of CEMP documents already approved by the Planning Secretary as part of the MPW Stage 2 (SSD 7709) Development Consent. The MPW Stage 2 CEMP and sub-plans were subsequently updated to include the requirements of the MPW Stage 3 SSD 10431 Development Consent and approved by the Planning Secretary. A Construction Fauna and Flora Management Plan (CFFMP) was not required under SSD 10431.

This Addendum to the MPW Stage 2 CFFMP has been prepared to apply environmental management measures, where relevant, consistently for the construction of the MPW South Project (the Project) and meet the relevant conditions of the applicable development consents and approvals. This Addendum forms a subplan to the MPW Stage 2/3 CEMP – Addendum that has been prepared for the Project.

The location of the Project site is shown in Figure 1-1.

The Project involves the construction and operation of five warehouses ('S1', 'S2', 'S3', 'S5' and 'S6') on the MPW South Site, as well as ancillary works including landscaping and infrastructure.



Figure 1-1 MPW South Site location



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1.1. Project Approvals

The Project was approved under both the EPBC Act and Environment Planning and Assessment Act (EP&A) Act. The approvals and consents granted under these acts include conditions relevant to construction.

The EPBC 2011/6086 Approval was granted on 27 September 2016 and includes environmental conditions relevant to the management of flora and fauna impacts during construction and relevant to this Addendum. This Addendum has been prepared under CoA 21.

The SSD 5066 Development Consent was granted on 3 June 2016. The consent, excluding those conditions related to stage 1 (early works), are applicable to the project.

CDC 230736/01 for the Project was issued under the TISEPP on 27 February 2024. The CDC included conditions relevant to the construction of the Project but not specifically relevant to flora and fauna management and to this Addendum.

The compliance of this Addendum with the relevant conditions of the approvals and consents is detailed in Section 2.1.

1.2. Addendum Purpose and Application

This Addendum has been developed to address the relevant requirements of the approvals and consents. It aims to demonstrate how impacts to flora and fauna will be managed during construction of the Project.

It provides methods to monitor, measure, reduce and mitigate impacts on flora and fauna by contractors during the construction of the Project, including all subcontractors and consultant partners.

This Addendum was developed in reference to the following documents:

- Moorebank Intermodal Terminal Project Environmental Impact Statement, Chapter 13 Biodiversity, Parsons Brinkerhoff October 2014
- MPW Stage 2/3 CEMP
- MPW Stage 2 CFFMP
- MPW South CEMP Addendum.

The most recent, approved version of this Addendum will be implemented to manage the potential impacts of the Project on flora and fauna during construction. Construction will not commence until this Addendum has been submitted to the Minister responsible for the EPBC Act (or delegate). Construction will be undertaken in accordance with the most recent, approved version of this Addendum.

1.3. Objectives and Targets

The objectives and targets for this Addendum are the same as those detailed in Table 1-1 of the MPW Stage 2 CFFMP.

1.4. Consultation

The MPW Stage 2 CFFMP was prepared in consultation with stakeholders as detailed in Table 1-2 of the MPW Stage 2 CFFMP.

No stakeholder consultation was required for the preparation of this Addendum.

2. Environmental Management

2.1. Legislative Requirements

The regulatory framework for the Project is outlined within the Compliance and Obligations Register (refer to Appendix A of the MPW South CEMP – Addendum). This register identifies the requirements of Project approval and consents and where they are addressed. Appendix A of the MPW Stage 2/3 CEMP identifies relevant legislative instruments, their key objectives and relevance to the Project, including legislative and voluntary obligations, permits and licences, standards and guidelines.

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

2.1.1. Compliance Matrix

The Project is being delivered under approvals and consents granted under the EPBC Act and EP&A Act. These approvals and consents include requirements to be addressed in this Addendum and to be met during the construction of the Project. The conditions specific to the development of this Addendum are detailed in Table 1-1.

	Table 1-1	Approvals and	consents	compliance	matrix
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CoA/ CoC	Rec	juirement	Section	How Addressed
EPBC	2011/	6086 Approval		
1	(or µ activ	person taking the action must not undertake permit to be undertaken) any construction vities or operations outside the development print as depicted in Annexure 1.	CEMP – Addendum Section 3.2	
	bioc	tions of the CEMP and OEMP relating to liversity must be prepared by a suitably lified expert and must:		
	a)	be consistent with the Biodiversity Provisional Environmental Management Framework (3 July 2014), provided at Appendix O to the finalised EIS	Sections 3.2.	
7	b)	incorporate all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'mandatory'	3.3 and MPW Stage 2 CFFMP Appendix C	
	c)	explain how all measures 6A to 6R, 6T, 6V and 6X from Table 7.1 of the finalised EIS that are described as 'subject to review' have been addressed		
	d)	include detailed biosecurity protocols, prepared in consultation with relevant New South Wales		

CoA/ CoC	Requirement	Section	How Addressed
	and Commonwealth biosecurity agencies, in relation to international and interstate container movement		
	e) be approved by the Minister.		
SSD 50	66 Development Consent		
The cor	ncept approval did not identify conditions relating to fa	una and flora.	
REMM	Requirement		
	Following detailed design and before construction, detailed flora and fauna mitigation measures would be developed and presented as part of the CEMP. These detailed measures would incorporate the measures listed in 6B to 6W. The CEMP would address:		
6A	 general impact mitigation; staff/contractor inductions; vegetation clearing protocols; pre-clearing surveys and fauna salvage/translocation; rehabilitation and restitution of adjoining habitat; weed control; pest management; and monitoring. 	Sections 2.3 and 3.3	
	The plans would include clear objectives and actions for the Project including how to:		
	 minimise human interferences to flora and fauna; 		
	 minimise vegetation clearing/disturbance; 		
	 minimise impact to threatened species and communities; 		
	 minimise impacts to aquatic habitats and species and 	;	
	undertake flora and fauna monitoring at regular intervals.		
6B	Vegetation clearing would be restricted to the construction footprint and sensitive areas would be clearly identified as exclusion zones.	N/A	Entire constructio site was cleared under SSD7709 - MPW 2.
6C	The exclusion zones would be marked on maps, which would be provided to contractors, and would	Table 3-1 and CEMP – Addendum Section 3.2.1	Management Measure FF1. Section 3.2.1 Contractor is



CoA/ CoC	Requirement	Section	How Addressed
	also be marked on the ground using high visibility fencing (such as barrier mesh).		required to prepare Environmental Control Maps. The content must be included in the site induction.
6D	A trained ecologist would accompany clearing crews to ensure disturbance is minimised and to assist in relocating any native fauna to adjacent habitat.	N/A	Entire construction site was cleared under SSD7709 – MPW 2.
	A staged habitat removal process would be developed and would include the identification and marking of all habitat trees in the area.		
	Where reasonable and feasible, clearing of hollow- bearing trees would be undertaken in March and April when most microbats are likely to be active (not in torpor) but are unlikely to be breeding or caring for young, and when threatened hollow- dependent birds in the locality are also unlikely to be breeding.		
	Pre-clearing surveys would be conducted 12 to 48 hours before vegetation clearing to search for native wildlife (e.g. reptiles, frogs, Cumberland Land Snail) that can be captured and relocated to the retained riparian vegetation of the Georges River corridor.		Entire construction
6E	Vegetation would be cleared from a 10 m radius around habitat trees to encourage animals roosting in hollows to leave the tree. A minimum 48 hour waiting period would allow animals to leave.	N/A	site was cleared under SSD7709 – MPW 2.
	After the waiting period, standing habitat trees would be shaken (where safe and practicable) under the supervision of an ecologist to encourage animals roosting in hollows to leave the trees, which may then be felled, commencing with the most distant trees from secure habitat.		
	Felled habitat trees would either be immediately moved to the edge of retained vegetation, or left on the ground for a further 24 hours before being removed from the construction area, at the discretion of the supervising ecologist.		
	All contractors would have the contact numbers of wildlife rescue groups and would be instructed to		

CoA/ CoC	Requirement	Section	How Addressed
	coordinate with these groups in relation to any animal injured or orphaned during clearing.		
	Within areas of high quality intact native vegetation proposed to be removed:		
	 topsoil (and seedbank) is to be collected from native vegetation that are to be permanently cleared and used in the revegetation of riparian areas; and 		
	 native plants in areas that are to be permanently cleared are to be relocated and transplanted in riparian areas identified for rehabilitation. 		
6F	Relocation of fauna to adjacent retained habitat would be undertaken by an ecologist during the supervision of vegetation removal	N/A	Entire construction site was cleared under SSD7709 – MPW 2.
6G	An ecologist would supervise the drainage of any waterbodies on the Project site and would relocate native fish (e.g. eels), tortoises and frogs to the edge of the Georges River and/or the existing pond at the northern end of the IMT site.	N/A	Entire construction site was cleared under SSD7709 – MPW 2.
6H	The design of site fencing and any overhead powerlines would consider the potential for collision by birds and bats and minimise this risk where practicable.	Table 3-1	Management Measure FF2.
61	The potential for translocation of threatened plant species as individuals or as part of a soil translocation process would be considered during the detailed development of the CEMP.	N/A	Entire construction site was cleared under SSD7709 – MPW 2.
6J	Consideration would be given to fitting roost boxes to the bridge over the Georges River to provide roost sites for the Large-footed Myotis and other species of microbats (e.g. Eastern Bentwing-bat) which may utilise such structures. Provision of roost boxes under bridges has been identified as priority action for the recovery of the Large-footed Myotis.	MPW Stage 2 CFFMP	Section 3.2.4 and Management Measure FF28.
6K	Important habitat elements (e.g. large woody debris) would be moved from the construction area to locations within the conservation area which would not be cleared during the Project, or to stockpiles for later use in vegetation/habitat restoration.	N/A	Entire construction site was cleared under SSD7709 – MPW 2.
6L	Winter-flowering trees would be preferentially planted in landscaped areas of the Project site to provide a winter foraging resource for migratory and nomadic nectar- feeding birds and the Grey-headed Flying-fox.	MPW South Landscape Management Plan	



CoA/ CoC	Requirement	Section	How Addressed
6M	A bridge/viaduct or similar design would be used for the railway crossing of the Georges River. This may allow connectivity of terrestrial habitat along the river banks underneath the bridge.	N/A	Georges River rail crossing was constructed under SSD6766 MPE 1.
6N	Options for maintaining habitat connectivity would be investigated, and may include establishing native vegetation and placing habitat elements such as rock piles and large woody debris under the bridge to provide cover for fauna.	crossing and bridge (nortl	Georges River rail crossing and fauna bridge (north-south) was constructed
	Where reasonable and feasible options to allow light and moisture to penetrate under the Georges River bridge will be incorporated into the detailed design.		
60	Erosion and sediment control measures such as silt fencing and hay bales would be used to minimise sedimentation of streams and resultant impacts on aquatic habitats and water quality.	MPW South CSWMP – Addendum	Table 3-1 and Management Measures SW2, SW3, SW4, SW8, SW18 and SW19.
6P	The detailed design process for the bridge over the Georges River would consider disturbance to aquatic habitat and fish passage conditions. The design would as a minimum adhere to the fish friendly passage guidelines (Fairfull & Witheridge 2003) for waterway crossings.	N/A	Georges River rail crossing was constructed under SSD6766 MPE 1.
6Q	Opportunities for planting of detention basins with native aquatic emergent plants and fringing trees would be explored in the detailed design of the Project and, if practicable, implemented so that they would provide similar habitat in the medium term to that lost through the removal of existing basins.	N/A	Onsite detention basins were constructed under SSD7709 MPW 2.
6R	The CEMP (or equivalent) would include detailed measures for minimising the risk of introducing weeds and pathogens.	Table 3-1	Management Measures FF5, FF7 and Appendix A
6S	The Project would include a long-term program for the duration of the Project operation of weed removal and riparian vegetation restoration within parts of the Georges River corridor, which would include monitoring landscaped areas for the presence of noxious and environmental weeds. A preliminary weed management strategy is provided in Appendix E of Technical Paper 3 – Ecological	Moorebank Logistics Park – West Precinct, Operational Flora and Fauna Management Plan Rev 3 (OFFMP)	N/A



CoA/ CoC	Requirement	Section	How Addressed
	Impact Assessment in Volume 4 of the EIS, setting out the principles for the management of the riparian zone.	Biodiversity Agreement (BA) 341	
6U	The management of the conservation area along the Georges River would include management of fire regimes to promote biodiversity conservation.	BA 341	N/A
6W	The management plan for the Georges River riparian corridor (refer to Appendix E of Technical Paper 3 – Ecological Impact Assessment in Volume 4 of the EIS) would be implemented and would include a monitoring program designed to detect operational impacts.	OFFMP SSD5066 CoC D21(d)(ii)	N/A
6X	Ongoing monitoring of macroinvertebrate communities will be undertaken prior to, during and following construction upstream and downstream of the proposed impact at the Georges River Bridge and reference locations to assist identify any changes in aquatic communities.	N/A	Georges River rail crossing was constructed under SSD6766 MPE 1.
6Xi	Directional lighting will be used where lighting is required within the construction area. Lights would be directed away from the riparian vegetation adjoining the Georges River as far as is practicable.	Table 3-1	Mitigation Measure FF10
6Y	The Biodiversity Offsets Strategy detailed in Appendix C of the Response to Submissions report will be implemented.	BA 341	N/A
6Z	 A riparian restoration plan (or equivalent) for the Georges River riparian zone and Casula offset area would be implemented. This plan includes areas outside the Conservation Area, including areas along the western bank of the Georges River. The objectives of the plan include: improved habitat values for native animals and plants, particularly threatened species; and 	OFFMP	N/A
	 management of undesirable fauna species including introduced animal species and some Australian native animals which may be 		

CoA/ CoC	Requirement	Section	How Addressed
	detrimental to the biodiversity of the Project site.		
	Measures to manage undesirable fauna species include:		
	 monitoring of the site for the presence of introduced and undesirable animal species as part of fauna monitoring; 		
6AA	 cooperating with government bodies, interest groups and adjacent landowners in regional pest management programs including the NSW Department of Primary Industries and the NSW Office of Environment and Heritage; 	D21(d)(ii) N	Section 3.2.4 and Management Measure FF28.
	 managing the use of nest boxes by undesirable species by removing the eggs and/or young of introduced animals (e.g. Black Rat and Common Myna) under appropriate permit conditions; 		
	 removing any insect colonies (bees, wasps, termites, ants found in nest boxes); and 		
	modifying or moving nest boxes to discourage use by undesirable species.		
11A	Where possible, establish and maintain areas of native flora and vegetation within the Project site to generate significant carbon sequestration benefits.	LTEMP OFFMP	N/A
CDC 2	30736/01		
The CE	DC did not identify conditions relating to fauna and flora.		

2.2. Roles and Environmental Responsibilities

Key roles and responsibilities associated with the implementation of this Addendum are detailed in Table 2-6 of the MPW Stage 2 CFFMP.

2.3. Training

Appropriate training and inductions for construction and site personnel will be undertaken in accordance with Section 2.5 of the MPW South CEMP – Addendum. The following biodiversity specific information will be included within the induction:

- Location and importance of threatened flora and fauna species (and habitat), and endangered ecological communities
- Boundaries and "NO-GO" zones
- Procedures on encountering fauna
- Pesticide and herbicide application requirements.



Training and/or toolbox talks will also be undertaken on weed and threatened flora and fauna identification, the appropriate guidelines and methods for removing weeds, driving vehicles in weed infested locations and the disposal of weed infested topsoil.

Records of all training and inductions are to be filed in accordance with the document control system outlined in the MPW South CEMP – Addendum.

3. Implementation

3.1. Existing Environment

Section 3.1 of the MPW Stage 2 CFFMP describes the existing environment in terms of:

- Threatened flora species
- Vegetation
- Weeds
- Threatened flora species
- Fauna Habitat
- Aquatic Species.

3.2. Aspects, Impacts and Risks

Impacts of the Project on biodiversity were assessed by the Moorebank Precinct West-Biodiversity Assessment Report (Arcadis, 2017b), which was prepared in accordance with the NSW Framework for Biodiversity Assessment (FBA) (OEH 2014). Section 1.2 of the MPW South CEMP – Addendum describes the Project, including construction activities, construction hours and ancillary construction activities. Section 3.1 and Appendix D of the MPW South CEMP – Addendum details the aspects, impacts and risks associated with the construction of the Project.

3.3. Management Measures

Management actions prescribed by this Addendum aim to avoid and minimise impacts on biodiversity. Management measures to be implemented prior to, during and after construction are detailed in Table 3-1. These measures have been sourced from the MPW Stage 2 CFFMP and subsequently amended to be relevant for the construction of the Project. Table 3-1 Management Measures

ID	Management Measure	Timing	Responsibility	Reference
Pre-C	onstruction Management Actions			
FF1	To minimise potential impacts in areas vulnerable to erosion near aquatic areas (such as Georges River), these areas must be identified as "NO-GO" areas on all design, construction and operational drawings as well as sensitive area drawings.	During Construction	Construction Contractor's EM	MPW Stage 2 CFFMP
FF2	Where practicable, reduce the height and increase the visibility of temporary fences to reduce likelihood of collision by birds and bats. Consult the Project Ecologist if any powerlines require relocating to ensure they are not placed in bat flyways or in a location that could impact birds.	Maintained until construction completion	Site Supervisor	MPW Stage 2 CFFMP REMM 6H
FF3	All site personnel involved in construction activities must be inducted during Toolbox Talks on the requirements of this Addendum prior to commencing work on the Project site. Site personnel are to be:			
	 Informed that they are not to encroach on biodiversity offset (vegetated areas) Made aware of the locations of threatened flora species, Threatened Ecological Communities and vegetation to be retained, measures required to protect them, and the consequences of damage to these areas 	During Construction	Construction Contractor's EM	MPW Stage 2 CFFMP
	 Made aware of the local fauna that may occur on the Project site Made aware of the Unexpected Finds Protocol, pertaining to threatened flora and fauna species that may be found on the Project site 			
	Informed of the incident response procedures in the MPW South CEMP – Addendum.			
Consi	ruction Management Actions			
FF4	If any previously unidentified native flora or fauna are encountered on site, then the unexpected finds protocol (Appendix D of the MPW South CEMP – Addendum) must be implemented.	During Construction	Construction Contractor's EM	MPW Stage 2 CFFMP
FF5	No spoil, excavated material, plant or equipment is to be stockpiled or stored within vegetation exclusion zones.	During Construction	Construction Contractor's EM	Standard Practice

ID	Management Measure	Timing	Responsibility	Reference
FF6	Winter-flowering trees must be preferentially planted in landscaped areas of the Project Site to provide a winter foraging resource for migratory and nomadic nectar-feeding birds and the Grey-headed Flying-fox.	During Construction	Construction Contractor's EM	REMM 6L
FF7	Weeds, pests and vermin must be managed in accordance with the Weed, Pest and Vermin Management Protocol (Appendix C of MPW Stage 2 CFFMP).	During Construction	Construction Contractor's EM	MPW Stage 2 CFFMP
FF8	Fences and other preventative actions must be implemented and maintained to keep terrestrial fauna away from operational terminals and construction activities.	During Construction	Site Supervisor	MPW Stage 2 CFFMP
FF9	 If any animal is injured, contact the relevant local wildlife rescue agency (e.g. WIRES) and/or local veterinary surgery as soon as practical. WIRES: 1300 094 737 Sydney Wildlife Rescue: 9413 4300 Moorebank Veterinary Hospital: 8798 4859 Liverpool Veterinary Hospital: 9602 6015. Until the animal can be cared for by a suitably qualified animal handler, if possible, minimise stress to the animal and reduce the risk of further injury by: Handling fauna with care and as little as possible Covering large animals with a towel or blanket and placing in a large cardboard box Placing small animals in a cotton bag, tied at the top. Keeping the animal in a quiet, warm, ventilated, and dark location. In the case of arboreal or flying mammals, attempts will be made to relocate the den or nest under the supervision of the Project Ecologist. After capture, the animal(s) will be held by a trained wildlife carer for a period of no longer than two weeks until the roost or den can be relocated, either as an entire tree or part thereof. 	During Construction	Construction Contractor's EM	MPW Stage 2 CFFMP
FF10	Directional lighting will be used where lighting is required within the construction area. Lights would be directed away from the riparian vegetation adjoining the Georges River as far as is practicable.	During Construction	Site Supervisor	REMM 6Xi

ID	Management Measure	Timing	Responsibility	Reference
FF11	Keep Project site tidy for vermin control, where possible using biodegradable pesticides / herbicides.	During Construction	All site personnel	Standard Practice
FF12	No works to be undertaken within the riparian corridor outside of the approved construction boundary.	During Construction	Construction Contractor's EM	MPW Stage 2 CFFMP REMMs 18A and E24A
Upon	Completion of Construction			
FF13	evegetation by seeding must utilise native species of local provenance.	As soon as practicable after disturbance	Construction Contractor's EM	Standard Practice
			Site Supervisor	
Monito	pring			
FF14	Monitoring of fauna and weed species within the Project site will be undertaken in accordance with Section 4.1	During Construction	Construction Contractor's EM	MPW Stage 2 CFFMP

4. Monitoring and Review

4.1. Environmental Monitoring

Monitoring, including site inspections, will be undertaken in accordance with Sections 4.1 and 4.2 of the MPW South CEMP – Addendum. Monitoring required to determine the effectiveness of management measures required by the Addendum are outlined in Table 4-1.

Table 4-1 Monitoring activities

Monitoring Activity	Frequency	Responsibility
Inspect areas immediately adjoining the clearing boundary (i.e. within "NO-GO" areas), to ensure no material stockpiling, plant or equipment storage is located within a "NO-GO" area.	Daily	Site Supervisor
Inspection of sediment control measures (sediment fencing) to ensure all measures are intact and functioning properly, to avoid indirect impacts on adjoining areas.	Weekly, and as soon as practical following rainfall	Contractor's EM/ Site Supervisor
Inspection of cleared and disturbed areas, to confirm that appropriate stabilisation measures have been implemented.	Weekly	Contractor's EM/ Site Supervisor
Inspect site for the presence of weeds, vermin and pest species in sufficient numbers to pose an environmental hazard or cause the loss of amenity for the surrounding area.	Weekly	Contractor's EM
Inspection of nest boxes as per the Nest Box Strategy	In accordance with Nest Box Strategy	Principals Representative
Inspect landscaped areas to determine whether additional maintenance is required	Weekly post landscaping activities until handover to maintenance contractor	Contractor's EM

4.2. Environmental Auditing and Reporting

Auditing and reporting will be undertaken in accordance with Sections 4.3 and 4.6 of the MPW South CEMP – Addendum.

4.3. Review and Improvement

Review and improvement of this Addendum will be undertaken in accordance with Section 4 of the MPW South CEMP – Addendum. Continuous improvement will be achieved by the ongoing evaluation of environmental management performance and effectiveness of this Addendum against environmental policies, objectives and targets.

Revisions of this Addendum will be undertaken in accordance with Section 1.1.4 of the MPW South CEMP – Addendum.

4.4. Incidents

In the event of a safety/environmental incident or unpredicted impacts relating to the management of flora and fauna, it is the responsibility of all personnel to report to the Site Supervisor.

All environmental incidents will be managed and reported in accordance with Section 2.8 of the MPW South CEMP – Addendum.

4.5. Non-Compliance and Non-Conformance

It is the responsibility of all site personnel to report non-compliances and nonconformances to the Site Supervisor and/or the Contractor's Environmental Manager. Non-compliances and non-conformances will be managed in accordance with Section 4.4 of the MPW South CEMP – Addendum.

4.6. Complaints

Complaints handling will be undertaken in accordance with Section 2.6 of the MPW South CEMP – Addendum.

Appendix A – Weed, Pest and Vermin Management Protocol

Purpose

This Weed, Pest and Vermin Management Protocol explains the actions and measures to be implemented if any weeds, pest species and/or vermin are found on the Project site. To date, 12 weeds listed as priority weeds for the Greater Sydney Region under the *Biosecurity Act 2015*, of which nine are also listed as Weeds of National Significance (WoNS) (Australian Weeds Committee 2010) have been identified on the site. This Weed, Pest and Vermin Management Protocol prescribes measures to manage weeds, pests and vermin that may be identified on the site, in accordance with the *Biosecurity Act 2015* and the *Pesticides Act 1999* and *Pesticides Regulation 2017*. *The Biosecurity Act 2015* repeals the *Noxious Weed Act 1993* as of 1 July 2017.

Training

All personnel undertaking construction activities within the site will be inducted on the identification of priority weed species/WoNS, pest species and vermin that may occur on the site and will be trained in this protocol through Toolbox Talks or a site induction.

Protocol - prevent introduction of noxious weeds, pest species and/or vermin

As outlined in Section 3.3 of the CFFMP, the following management measures must be implemented to prevent the introduction of weeds to the Project site:

- Vehicles, equipment, materials and footwear are to be clean on entry (free of soil, mud and/or seeds) to minimise the introduction or spread of weeds; site access controls in accordance with Landcom Blue Book – standard drawing SD 6-14 to be installed at the site entry.
- No spoil, excavated material, plant or equipment is to be stockpiled or stored outside of the delineated "NO-GO" zones.
- Undertake weekly inspections of cleared and disturbed areas, to identify the presence of establishing weeds.

Identification of weeds, pest species and/or vermin

The movement of people, plant and equipment during construction activities has the potential to introduce weed propagules to the construction footprint. Disturbed areas (i.e. where the soil profile has been disturbed by vegetation clearing and/or earthworks) are most susceptible to the establishment of weeds. Weeds, pest species and/or vermin may be identified on the site during the weekly inspections of cleared and disturbed areas that must be carried out, in accordance with the monitoring requirements prescribed by Section 4.1. Known weed species are listed in the table below.



Table 1 Known weed species

Weed	Status
Alligator Weed; Alternanthera philoxeroides	WoNS, priority weed
Ground Asparagus; Asparagus aethiopicus	WoNS, priority weed
Bridal Creeper; Asparagus asparagoides	WoNS, priority weed
Boneseed; Chrysanthemoides monilifera subsp. monilifera	WoNS, priority weed
Bitou Bush; Chrysanthemoides monilifera subsp. rotundata	WoNS, priority weed
Lantana; <i>Lantana camara</i>	WoNS, priority weed
Blackberry; <i>Rubus fruticosus</i>	WoNS, priority weed
Sagittaria; Sagittaria platyphylla	WoNS, priority weed
Salvinia; <i>Salvinia molesta</i>	WoNS, priority weed
Fireweed; Senecio madagascariensis	WoNS, priority weed
Giant Reed; Arundo donax	Priority weed
Peruvian Primrose; <i>Ludwigia peruviana</i>	Priority weed
African Olive; Olea europaea subsp. cuspidata	Priority weed

Management of weeds, pest species and/or vermin

If weeds, pests and/or vermin are identified in the site, the following steps must be implemented.

1. Identify weed, pest species and/or vermin

The Contractor's EM is to identify the weed, pest or vermin to species level.

2. Remove weed, pest species and/or vermin

The Contractor's EM must recommend management measures specific to the species identified in the site. Management measures may include:

- Physical removal of weed species
- Application of herbicides for chemical removal of a weed species in accordance with requirements of the *Pesticides Act 1999* and Pesticides Regulation 2017
- Record details of any pesticide or herbicide used in accordance with the Pesticides Regulation 2017
- Disposal of weed and non-native vegetation
- Capture or deterrent of a fauna pest species. f. Capture fauna vermin species or removal of flora vermin species.



CONTINUE MONITORING FOR WEED, PEST SPECIES AND/OR VERMIN

The Contractor's EM must ensure that the weed, pest species or vermin is included in subsequent inductions and Toolbox Talks.

Subsequent weekly inspections must include inspections of areas from which weeds, pest species or vermin have been removed. Inspect the site on a regular basis, no less than every month, to confirm that the measures in this protocol are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area.