LOGOS

Operational Emergency Response Plan

Moorebank Intermodal Precinct – Precinct West Stage 2

logosproperty.com

Moorebank Intermodal Precinct – Precinct West Stage 2

SSD 7709

Operational Emergency Response Plan

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
01	23/02/2022	Draft for Client review	N. Yousefi	R. Salisbury
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The work undertaken to provide the basis of this report comprised a study of available documented information from a variety of sources (including the Client).

Should additional information become available which may affect the opinions expressed in this report, Aspect Environmental Pty Ltd reserves the right to review such information and, if warranted, to modify the opinions accordingly.

Acronyms and Definitions

Acronym / Term	Meaning
AEP	Annual Exceedance Probability
APZs	Asset Protection Zones
ARI	Average recurrence interval
BMP	Bushfire Management Plan
BoM	Bureau of Meteorology
PBP 2006	Planning for Bushfire Protection 2006 guideline
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CoC	Conditions of Consent
DCCEEW	Department of Climate Change, Energy, the Environment and Water (formerly DotEE)
DotEE	Department of the Environment and Energy (now DCCEEW)
DJLU	Defence Joint Logistics Unit
DPE	Department of Planning and Environment
DPE (E&H)	Department of Planning and Environment (Environment and Heritage) (formerly OEH)
DPHI	NSW Department of Planning, Housing and Infrastructure (formerly Department of Planning and Environment)
DRSABCD	The Danger Response Send Airway Breathing CPR Defibrillation
ECO	Emergency Control Organisation
EIS	Environmental Impact Statement
EPC	Emergency Planning Committee
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ERP	Emergency Response Plan
ERT	Emergency Response Team
facility	A building structure or workplace that is or may be occupied
FCMMs	Final Compilation of Mitigation Measures
ESIC	Emergency Services Incident Controller
FRM	Floodplain risk management
HSE	Health, Safety & Environment
IPA	Inner Protection Area

Acronym / Term	Meaning
Major (Critical) Incident	Means an incident that: (a) causes death or permanent injury to a person; (b) incident requiring emergency medical response; (c) causes significant property damage; (d) is likely to give rise to public comment; (e) is likely to result in legal proceedings against the Estate Manager or Tenant or otherstakeholders; or (f) is a near miss with the potential to cause any of the above; and (g) an environmental incident resulting in medium to long term harm to the environment.
Material Harm (to the environment)	Has the meaning assigned in section 147 of the *Protection of the Environment Operations Act1997*
Minor (Non-Critical) Incident	Means an incident that results in: (a) First Aid/Medical Treatment Injuries; (b) minor property damage; (c) a near miss with limited consequences; or (d) an environmental incident resulting in short term or possible harm to the environment.
MIP	Moorebank Intermodal Precinct
MoNDC	Moorebank National Distribution Centre
MoRDC	Moorebank Regional Distribution Centre
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
MPW Concept Approval	MPW Concept Approval (SSD 5066), granted by DPE 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.
NRS	National Relay Service
OEH	Office of Environment and Heritage (now DPE (E&H))
OEMP	Operations Environmental Management Plan
OSD	Onsite Detention
OTAMP	Operational Traffic and Access Management Plan
PMF	probable maximum flood
PEEP	Personal Emergency Evacuation Plan
REMMs	Revised Environmental Management Measures.
SDS	Safety Data Sheets
TOBAN	Total Fire Bans
WHSMS	Work Health and Safety Management System
SES	State Emergency Services
SSD	State significant development
Traffic Controllers	Only trained and accredited traffic control personnel will be used for traffic control works, as identified in the Operational Traffic and Access Management Plan.

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1. Site Details and Summary

1.1. Site Details

Moorebank Intermodal Precinct (MIP) – West Stage 2 development	
Site address:	400 Moorebank Ave, Moorebank NSW 2170
Location:	The MIP - West Stage 2 development is located approximately 800m south of the intersection of Moorebank Avenue and the M5 Motorway.
Cross street(s):	Anzac Road (to the east) and Bapaume Road (to the North)

1.2. Key Contacts

Key contact details are provided in Table 1-1.

Table 1-1 Key contact details

Function	Contact details
Facilities Manager / Chief Warden	0404 608 790 Michael.Beresford@au.knightfrank.com
LOGOS Site Health, Safety & Environment (HSE) Manager	0474 728 484 ZacMullane@logosproperty.com
LOGOS Asset Manager	0424 438 332 MellissaKarapalevski@logosproperty.com
LOGOS Communications Manager	0428 939 725 AlisonMillerSwan@logosproperty.com
Property Manager (Facilities)	Selina.Liang@au.knightfrank.com

1.3. Warehouse Fire System Summary

Section 5 provides evacuation routes and assembly points for the site. Individual warehouse fire safety systems are to be developed collaboratively with the tenants prior to occupation, and in accordance with relevant BCA requirements.

1.4. Emergency Contacts

Emergency contact details are included in Table 1-2.

Table 1-2 Emergency contact details

Service	Authority	Contact Number
Local Emergency Operations Controller	Emergency	000
	Local	1300 553 065
Fire Brigade	Emergency	000
Ambulance	Emergency	000
Liverpool Police Station	Emergency	02 9821 8444
State Emergency Service	Emergency	13 25 00
Liverpool Hospital Cnr Elizabeth and Goulburn Streets, Liverpool NSW 2170	Local	02 8738 3000
Local Medical Centre Elizabeth Drive Medical Centre, 177, Elizabeth Dr, Liverpool	Local	02 9600 7778
NSW Fire and Rescue	Local	1300 729 579
NSW Rural Fire Service Cnr Alderney Street and Townson Avenue, Minto NSW 2566	Local	1800 679 737 02 9603 7077
RMS Traffic Incident Reporting	Local	13 17 00
Sydney Trains Safety Incident and Injury	Local	1800 772 779
Sydney Trains Rail Management Centre	Local	02 9379 1743
ARTC Australian Rail Track Corporation (Enquiries)	Local	(08) 8217 4366
Department of Planning, Housing and Infrastructure (DPHI) line Environment and Heritage (E&H) Environment line	Emergency	13 15 55 02 9995 5555 (if calling from outside NSW)
Poisons Information	Poisons Information	13 11 26
Liverpool City Council Ground Floor, 33 Moore St, Liverpool NSW 2170	Customer contact centre for NSW residents	1300 362 170
	Calling from interstate	02 9821 9222

Service	Authority	Contact Number
	National Relay Service (NRS) for heritage and speech impaired customers	133 677
Safe Work NSW	Customer contact number	13 10 50
	NRS for hearing and speech impaired customers	133 677
Managing Agent Hotline number	Local	1300 533 065
LOGOS Asset Manager	Local	0424 438 332
LOGOS HSE Manager	Local	0474 728 484
Emergency Response Team (ERT)	Emergency Control Organisation (ECO)	Refer to staff notice board
	Emergency Planning Committee (EPC)	Refer to Section 2.4.1
Neighbouring facilities	Glenfield Waste Services	0408 531 476
	ABB	1800 222 435
	Defence Joint Logistics Unit (DJLU)	TBA
	Goodman Building Manager	9230 7378 & 0400 668 290
Utilities		
Electricity	Ausgrid (24 hours)	13 13 88
	Endeavour Energy (24 hours)	13 10 03
Water	Sydney Water	13 20 90
Gas	Jemena	13 19 09
Network	Telstra	13 22 03
	Optus	13 13 44
	NBN	1800 687 626
After Hours Contacts		
Security Guard	PSI Corporate	0429 598 623

2. Overview

2.1. Purpose and Scope

This Emergency Response Plan (ERP) identifies the emergency response and management measures that will be applied to emergencies that may arise from operational activities at Moorebank Precinct West (MPW) Stage 2 development, and also for emergencies that may originate externally to the development, such as bushfire or flood.

This ERP has been prepared in accordance with the *Australian Standard 3745-2010 Planning for Emergencies in Facilities* to enable a quick and decisive response to potential or actual emergencies, which could threaten the safety of staff, contractors, subcontractors and visitors, impact or pollute the surrounding environment, cause damage to plant and equipment, or significantly disrupt operational activities, and will be implemented during operations.

The EPC and the ECO defined in this ERP constitute the ERT responsible for addressing emergencies for the development.

Further, this ERP addresses the relevant requirements of the Conditions of Consent (CoC), specific to emergency situations during operations on the MPW Stage 2 development. Refer to Appendix A for detail on how this ERP addresses the relevant CoC.

2.1.1. Objectives and targets

Table 2-1 outlines the objectives and targets of this ERP and specifies the outstanding actions required to implement this plan.

Table 2-1 ERP Objectives and Targets

Objective	Target	Timeframe	Accountability
Establish and implement an ERP for the operation of the MPW Stage 2 development in accordance with *Australian Standard 3745-2010 Planning for Emergencies in Facilities.*	Establish an EPC in accordance with Section 6 of this ERP.	Prior to operation	Chief Warden / Facilities Manager
	Review the emergencies identified in Section 3 of this ERP and include additional emergency scenarios where appropriate.	Prior to operation	Chief Warden / Facilities Manager / HSE Manager / EPC
	Review the emergency response procedures identified in Section 4 of this ERP and revise and amend these procedures where appropriate.	Prior to operation	Chief Warden / Facilities Manager / HSE Manager / EPC

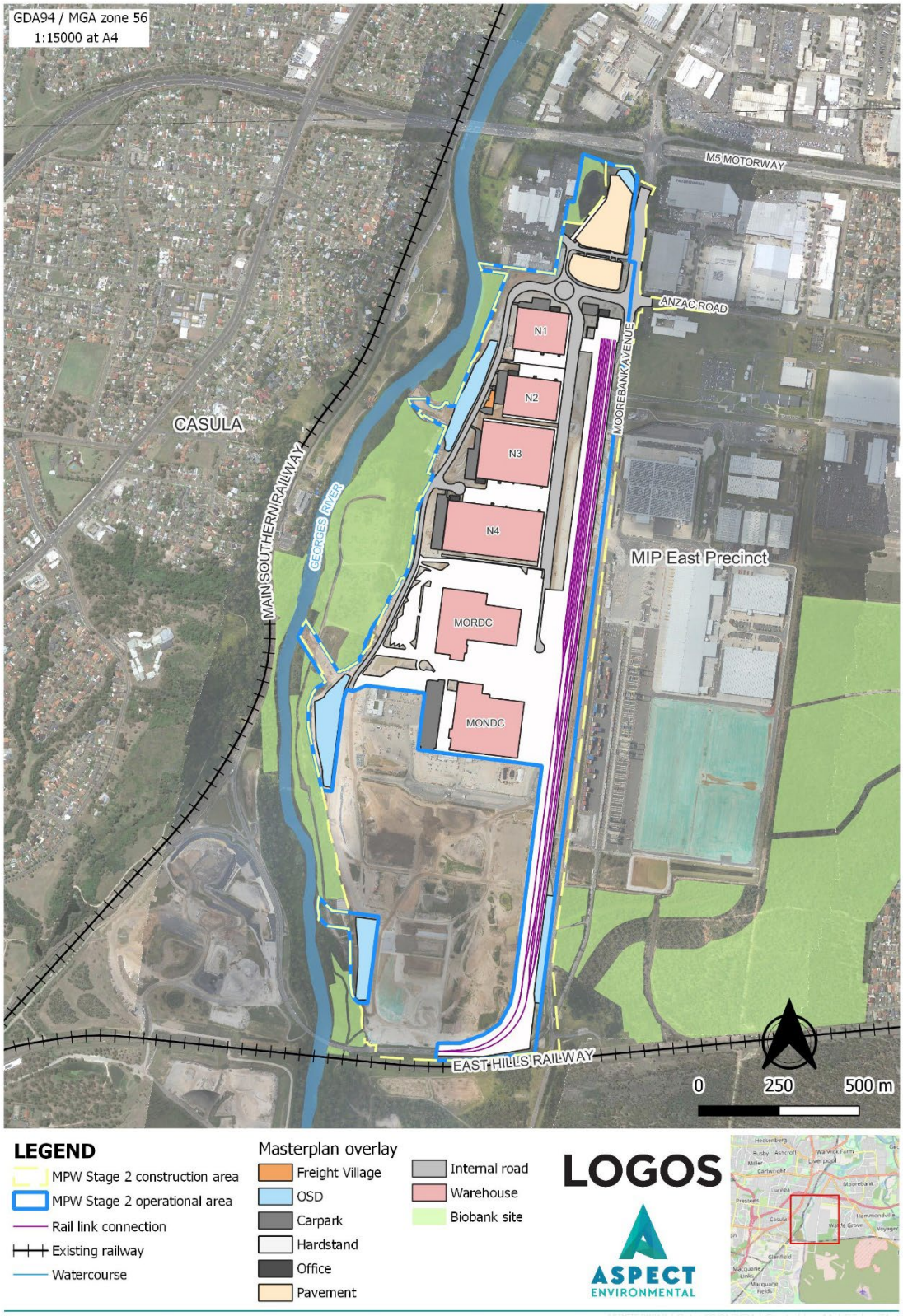
Objective	Target	Timeframe	Accountability
	Review the responsibilities of the EPC (as per Section 6.1) and delegate roles to ensure all responsibilities are met.	Prior to operation	EPC
	Delegate accountabilities identified in this table to appropriate person where appropriate.	Prior to operation	Chief Warden / Facilities Manager / HSE Manager / EPC
Establish an ECO to implement the ERP.	Appoint an ECO in accordance with Section 6.1.2 and Section 7 of this ERP.	Prior to operation	Chief Warden / Facilities Manager / HSE Manager / EPC
Implement procedures to provide all occupants with training in the relevant emergency response procedures.	Provide training to all workers, EPC members and ECO members as detailed in Section 8 of this ERP.	During operation and as new workers commence onsite	Chief Warden / Facilities Manager / HSE Manager / EPC
	Develop and refine effective training protocols in accordance with Section 8 and update as required.	Prior to and during operation	Chief Warden / Facilities Manager / HSE Manager / EPC
	Conduct emergency response exercises in accordance with Section 9 of this ERP.	Ongoing	Chief Warden/Facilities Manager / HSE Manager/ EPC
Periodically review and update the implemented ERP as required.	The ERP is updated in accordance with Section 10 of this ERP.	Ongoing	Chief Warden / Facilities Manager / HSE Manager / EPC

2.2. The MPW Stage 2 Development

The MIP is an integral component of the freight, ports, and transport strategies, which aim to streamline the freight logistics supply chain from port to store, deliver savings to businesses and consumers, and help service the rapidly growing demand for imported goods in south-west Sydney. The MIP is divided into Moorebank Precinct East (MPE) and MPW developments (Figure 2-1).

Construction and operation of Stage 2 of MPW development (State significant development (SSD) 7709), which is the second stage of development under the MPW Concept Approval (SSD 5066) was approved in November 2019 by Independent Planning Commission.

Figure 2-1 Site operational layout



2.2.1. Facilities neighbouring the MPW development

To the east of Moorebank Avenue is the MPE development, which includes an intermodal terminal and warehouses.

Additionally, located on the eastern side of Moorebank Avenue is the DJLU, Goodman Building, and Kitchener House.

The MPW development is bounded to the west by the Georges River and Glenfield Waste Services on the opposing riverbank, to the south by the East Hills Passenger rail line and to the north by the M5 Motorway and ABB Australia.

2.3. Fire Safety Features

Fire extinguishers are installed in the main compound only. A copy of the main compound evacuation diagram is enclosed in Section 5.

2.4. Organisational Arrangements

2.4.1. Emergency Planning Committee

The EPC comprises the persons responsible for the documentation and maintenance of this plan. The full contact details for the current members of the EPC are located onsite. The responsibilities of the EPC are discussed in detail in Section 6.

The current members of the EPC are detailed in Table 2-2. The responsibilities of the EPC are discussed in detail in Section 6.

Table 2-2 EPC Representatives

EPC Members*	Name	Contact Details
Facilities Manager / Chief Warden	Michael Beresford	0404 608 790 Michael.Beresford@au.knightfrank.com
LOGOS HSE Manager	Zac Mullane	0474 728 484 ZacMullane@logosproperty.com
LOGOS Asset Manager	Mellissa Karapalevski	0424 438 332 MellissaKarapalevski@logosproperty.com
LOGOS Group Head of Insurance	Robert Guin	0432 405 621 RobertGuin@logosproperty.com
LOGOS Communications Manager	Alison Miller Swan	0428 939 725 AlisonMillerSwan@logosproperty.com
Property Manager (Facilities)	Selina Lang	Selina.Liang@au.knightfrank.com
Additional members as required		
*Note: * Member details should be updated as required to ensure that details of EPC membership remain current at all times*		

2.4.2. Emergency Control Organisation

The ECO includes the person or persons appointed by the EPC to direct and control the implementation of the emergency response procedures during operation of MPW Stage 2 development. The contact details of all MPW ECO members will be available on the staff notice boards and will be highlighted to all operational staff, tenants, contractors and visitors during staff training and / or site inductions.

2.5. Extent and Record of Distribution of this ERP

This ERP relates to the MPW Stage 2 operations. Primarily, this ERP addresses outdoor emergencies and external threats such as bushfire and flooding across the development. The extent to which this ERP currently relates is mapped in Figure 2-1.

This ERP will be distributed to all occupants of the development via the provision of hard-copy material at each facility that can be made available through ECO representatives where required.

The locations of hard copy versions of the ERP (or relevant excerpts) are detailed in Table 2-3.

Table 2-3 ERP hard copy locations

Building/Facility	ERP Location	Responsible Person
Maersk Logistics & Services Australia Pty Ltd	Security Gatehouse	Tom Stefulj
Sydney Tools Pty Ltd	Security Gatehouse	Danny Yalim/Patrick Hacklany
Moorebank National Distribution Centre (MoNDC)	Security Gatehouse	Andrew Jones
Moorebank Regional Distribution Centre (MoRDC)	Security Gatehouse	Jared Buckby

2.6. Hours of Operation

Operations for the development are 24 hours a day, seven days a week.

The EPC will ensure that, as far as is practicable, the ECO membership includes representatives who cover all operational shifts via MPW stage 2 development.

2.7. Validity Period

This ERP is valid for a maximum of five years from the date of preparation.

The ERP will not be valid where there is a substantive change to the facility activities covered by this ERP. Such change would initiate a review of this ERP as detailed in Section 10.

3. Emergency Identification Outcomes

In preparing this ERP a preliminary risk assessment (Appendix B) was undertaken to identify the potential emergencies of relevance to the MPW Stage 2 development. The risk assessment has been prepared with reference to Work Health and Safety Management System (WHSMS) (WHSMS-LOGOS-005). Table 3-1 lists the emergency event and scenarios that have been identified through the risk assessment process. Section 4 includes the emergency response procedures for each of the emergencies identified in Table 3-1.

[NOTE: Identified emergencies to be periodically reviewed and updated where necessary by the EPC]

Table 3-1 Emergency identification and where addressed in ERP

Source	Emergency	Emergency Response Procedure
Internal	Fire, smoke or explosion	**CODE RED** Section 4.5 – Fire, Smoke or Explosion Emergency Response Procedure
	Bomb threat	**CODE PURPLE** Section 4.6 – Bomb Threat or Suspicious Package Emergency Response Procedure
	Medical emergency	**CODE BLUE** Section 4.7 – Medical Emergency Response Procedure
	Personal threat	**CODE BLACK** Section 4.8 – Unauthorised Access to development Emergency Response Procedure
	Vehicle / plant incident	**CODE YELLOW** Section 4.9 – Vehicle / Plant Incident, Structural Collapse or Train Derailment Emergency Response Procedure
	Structural collapse	**CODE YELLOW** Section 4.9 – Vehicle / Plant Incident, Structural Collapse or Train Derailment Emergency Response Procedure
	Environmental pollution incident	**CODE YELLOW** Section 4.10 – Environmental Pollution Incident Emergency Response Procedure

Source	Emergency	Emergency Response Procedure
External	Bushfire	**CODE BROWN**
		Section 4.11 – Bushfire Emergency Response Procedure
	Flood	**CODE BROWN**
		Section 4.12 – Flooding Emergency Response Procedure
	Offsite pollution incident	**CODE BROWN**
		Section 4.13 – Off-site Discharge Emergency Response Procedure

4. Emergency Response Procedures

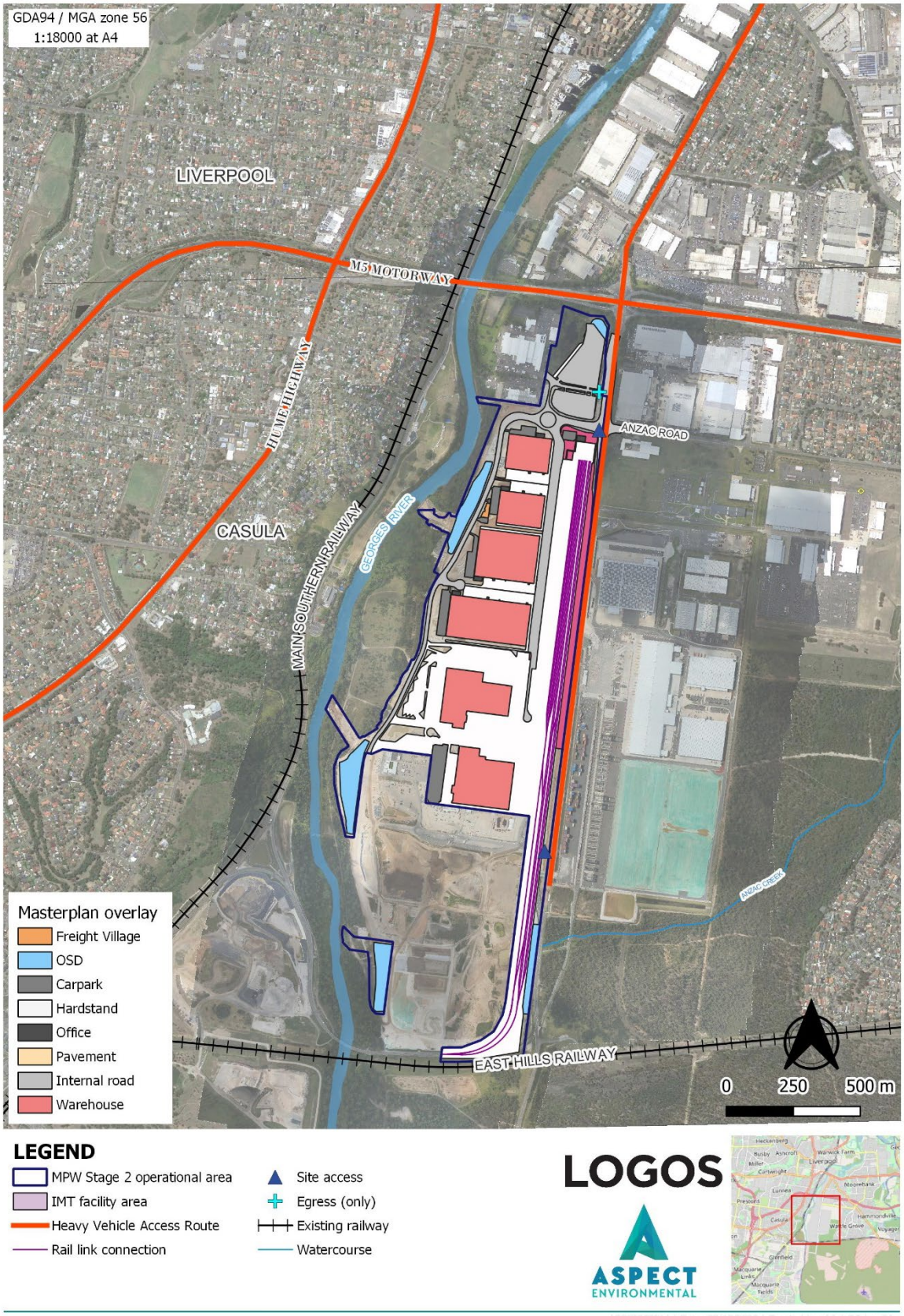
4.1. Access for Emergency Services

Emergency Services will be able to access the development via the approved site access points shown in Figure 2-1. The facility address for Emergency Services is 400 Moorebank Ave, Moorebank NSW 2170.

Emergency services will be able to access MPW Stage 2 development via Bushmaster Avenue, shown in Figure 2-1. In the event that Emergency Services require directions to the scene, escortsand guides will be dispatched by the Chief Warden to greet them at the access point and unlock gates, as required.

Emergency services access will also be provided to ABB as well as a secondary evacuation route for ABB in the event that Bapaume Road is not accessible as a result of development related works.

Figure 4-1 Heavy vehicle access routes to MPW Stage 2 development



4.2. Traffic Management

The emergency location will be readily accessible and available for all attending Emergency Services personnel, vehicles and equipment. The Chief Warden will direct appropriate personnel to site access points to direct Emergency Services to the appropriate location and confirm that access is unobstructed.

Where required, under the direction of the Chief Warden, appointed Traffic Controllers will redirect vehicular and pedestrian traffic to ensure access to the incident area by emergency services is not prevented or delayed and that no additional incident or escalation occurs. Traffic controllers may redirect incoming non-emergency vehicles away from the facility if required.

If safe to do so, provision will be made for redirected light and heavy vehicles to turn around within the MPW Stage 2 operation development to avoid generating congestion on Moorebank Avenue. In case of incident requiring heavy vehicles not to approach the development, they will be advised via radio, where possible. Traffic controllers that are deployed to manage incoming emergency services and other traffic will also monitor the conditions on Moorebank Avenue in the vicinity of the development to prevent the implemented management procedures from introducing additional hazards for public road users.

Traffic management measures will require an adaptive response to address the specific conditions of the incident involved. As such, reliable lines of communication between the traffic controllers and the Chief Warden will be established to effectively address the existing emergency while also managing the traffic such that no further incidents occur. Coordination between Traffic Controllers, the Chief Warden and Emergency Services will be required to effectively provide appropriate public safety measures throughout the duration of the emergency operation.

4.2.1. Accredited work zone traffic controllers and management training

Only trained and accredited traffic control personnel will be used for traffic control works on public roads during an emergency / incident. Traffic controllers will undergo appropriate training and be certified as competent prior to their assignment to undertake traffic management. The minimum requirement is to have satisfactorily completed the RMS' training package – Traffic Control Using a STOP / SLOW bat.

4.3. Post Emergency Response

4.3.1. Incident reporting and investigation

All emergency or potential emergency events or incidents will be reported back to LOGOS and the EPC by the Chief Warden. The Chief Warden will prepare a report for the EPC which details the incident and any deficiencies identified in the relevant emergency response procedure.

It may be necessary to secure an incident scene using, for example, witch's hats, tape, barricades, or portable fencing until an investigation can be completed.

Incident and Emergency Reporting will be undertaken in accordance with LOGOS Incident Reporting and Management Procedure (WHSMS-LOGOS-007) and Section 4.8 of the OEMP.

4.3.2. Debrief

Emergency debrief meetings will be held with all members of the ECO following each emergency scenario exercise or actual emergency event to identify any deficiencies in the emergency response procedures.

Findings from the debrief session will be reported to the EPC so that they can update the emergency response procedures of this ERP accordingly. Minutes from the debrief meeting will be recorded and anycorrective actions entered into each Contractor's system, in accordance with LOGOS' WHSMS.

4.3.3. External incident reporting and complaints notification

4.3.3.1. Environmental incident and non-compliance reporting

Environmental incidents and non-compliances are discussed in Sections 4.8 and 6.4 of the MPW Stage 2 OEMP, respectively. It is a condition of the MPW development approvals that relevant external authorities must be notified following environmental incidentsor non-compliances within the development.

Environmental incidents are defined as a set of circumstances that causes or threatens to cause material harm to the environment. Environmental incidents can include pollution incidents, where there has been a leak or spill resulting from operational activities, or environmental emergencies, which may arise from natural (e.g. storm, wind or bushfire) or human factors.

The Chief Warden will ensure that all significant environmental and pollution incidents and non-compliances are reported immediately to the EPC for arranging notifications to the relevant authorities asdetailed in Section 4.8.4 of the MPW Stage 2 OEMP.

Non-compliances will be managed and notified, as required, as described in Section 6.4 of the MPW Stage 2 OEMP.

4.3.3.2. Complaint management

Any relevant complaints regarding this ERP and the associated procedures will be directed to the Community Engagement Consultant via a representative of the EPC or the LOGOSCommuications Manager . Further details on the complaint management process are provided in Section 4.7 of the MPW Stage 2 OEMP.

CODE ORANGE – EVACUATION

4.4. Emergency Evacuation Response Procedure

In the event that an evacuation is required, the following evacuation response will be followed:

1. Upon hearing the alarm, or being notified of an evacuation, all work will cease immediately. Where possible, all plant and machinery will be switched off and tools left behind.
2. Wardens will be positioned in a predetermined location and will direct personnel to the assembly points.
3. Personnel will NOT STOP to collect personal items while an evacuation is in progress, as all personnel are required to assemble at the nominated assembly points immediately.
4. If any personnel notice that other personnel have not heard the evacuation signal, they will make them aware that the evacuation is in progress and assist them to evacuate.
5. Wardens will then evacuate any remaining personnel who require assistance, along with their designated assistant(s), following the measures outlined in their respective Personal Emergency Evacuation Plans (PEEPs).
6. Following evacuation of the relevant area, Wardens will check their area of responsibility to determine whether all persons have been evacuated and report the result of the check to the Chief Warden, including whether any refuge is occupied.
7. Due to the unpredictable nature of emergencies, the Chief Warden will need to determine whether the primary assembly point provides a safe refuge. If not, all personnel will be directed to a secondary assembly point.
8. In the event that a facility evacuation is required, staff / visitors are to proceed (if safe to do so) to the nominated safe refuge / assembly area until the emergency has been terminated or as directed by the attending Emergency Services.
9. At the safe refuge / assembly area, the Wardens will confirm that all personnel on the facility (including visitors) are accounted for. The records of all head counts will be provided to the Chief Warden, including details of any missing person(s).
10. No one will leave the safe refuge / assembly point until the “all-clear” is given by the Chief Warden, or the attending emergency services.
11. Upon cessation of the emergency or potential emergency, Wardens will direct staff and visitors to return to work.
12. The post emergency response activities of the ECO, identified in Section 4.3, will be initiated.

CODE RED – FIRE, SMOKE OR EXPLOSION

4.5. Fire, Smoke or Explosion Emergency Response Procedure

In the event of a fire, smoke or explosion within the MPW Stage 2 development, all small fires or smouldering objects will be quickly extinguished (if safe to do so and by trained staff / visitors), as they have the potential to quickly get out of hand. In the event of a fire, smoke or explosion, the following initial actions will be undertaken:

1. If staff are trained and if it is safe to do so, follow the R.A.C.E procedure as detailed below:
   - **Rescue**: rescue any people in immediate danger
   - **Alarm**: raise the alarm and notify the Chief Warden
   - **Contain**: if practical, close all windows and doors to contain the fire
   - **Extinguish**: try to control fire immediately with correct equipment.
2. Chief Warden will ascertain the location, extent and nature of the emergency and determine if an evacuation is required. The Chief Warden will also notify Emergency Services and contact First Aid Officers as required.
3. Chief Warden will nominate a Warden or other person(s) to meet Emergency Services and direct them to the emergency.
4. If an evacuation is required, the evacuation procedure in Section 4.4 (CODE ORANGE – Emergency Evacuation Response Procedure) will be followed. Otherwise, all personnel will follow the instructions of the Chief Warden.
5. Where required, the Chief Warden is to allocate Traffic Controllers to divert and redirect traffic away from the emergency, until the emergency is declared terminated.
6. If the emergency has the potential to affect other area(s) within the development or neighbouring sites, the Chief Warden will notify affected parties of the situation or delegate this responsibility to another person.
7. On arrival of the attending Emergency Services, the Chief Warden will:
   - Hand over control to the Emergency Services Incident Controller (ESIC)
   - Brief the ESIC of the emergency (i.e. type and location)
   - Provide the status on the evacuation (if evacuation required), details of any unaccounted-forpersonnel / visitors, and any other relevant information.
8. When the ESIC terminates the emergency, then:
   - The ESIC will return control to the Chief Warden
   - The Chief Warden will advise Warden(s) in the affected area(s) that the emergency has beenterminated and the “all-clear” has been given
   - The Wardens will direct personnel to return to their work area and resume work activities.
9. The post emergency response activities of the Emergency Control Organisation, identified in Section 4.3, will be initiated.

CODE PURPLE – BOMB THREAT

4.6. Bomb Threat or Suspicious Package Emergency Response Plan

All bomb threats will be treated as serious, until proven otherwise. Depending on the type of bomb threat, the following initial actions will be undertaken:

1. Upon receiving a **written bomb threat**:
   - Contact Police
   - Cease handing the written bomb threat to preserve the condition and prevent contamination
   - Place the letter into a paper envelope or plastic sleeve
   - Record the time and method the written bomb threat was received
   - Contact the Chief Warden.
2. Upon receiving a **telephone threat**:
   - Remain on the phone call (DO NOT hang up the telephone or mobile phone, as if may be possible to trace the call, even after the caller has hung up)
   - Contact Police
   - Complete the Bomb Threat Checklist (Appendix E – Bomb Threat Checklist)
   - Contact the Chief Warden
   - DO NOT advise other staff members unless advised to do so by the Police or Chief Warden.
3. Upon receiving or finding a **suspicious package or device**:
   - Contact Police
   - Do NOT touch, cover, handle, tilt or move the package or device
   - Place the item on a flat surface, if possible
   - Contact the Chief Warden
   - Prevent others from entering the area.
4. On becoming aware of a bomb threat emergency, the Chief Warden will:
   - Contact Police
   - Ascertain the location, extent and nature of the emergency
   - Contact the First Aid Officer(s), as required
   - Contact Emergency Services and respond as directed by the operator.
5. Chief Warden will nominate a warden or other person to meet Emergency Services and direct them to the emergency.
6. If an evacuation is required, the Code Orange evacuation procedure in Section 4.4 will be followed, if not, all personnel will follow the instructions of the Chief Warden.

7. If the emergency has the potential to affect other area(s) within the development or neighbouring site, the Chief Warden will, where appropriate, notify affected parties of the situation or delegate this responsibility to another person.
8. On arrival of the attending Emergency Services, the Chief Warden will:
   - Hand over control to the ESIC
   - Brief the ESIC of the emergency (i.e. type and location)
   - Provide the status on the evacuation (if evacuation required), details of any unaccounted - for personnel / visitors - and any other relevant information.
9. When the ESIC terminates the emergency, then:
   - The ESIC will return control to the Chief Warden
   - The Chief Warden will advise Warden(s) in the affected area(s) that the emergency has been terminated and the “all-clear” has been given
   - The Wardens will direct personnel to return to their work area and resume work activities.
10. The post emergency response activities of the ECO, identified in Section 4.3 will be initiated.

CODE BLUE – MEDICAL EMERGENCY

4.7. Medical Emergency Response Procedure

In the event of a medical incident or emergency within the site, the following steps will be taken:

1. Notify Chief Warden who will:
   - Determine the severity of the injury and the appropriate response required
   - Arrange for a First Aid Officer to be contacted and administer first aid
   - Confirm Emergency Services are called where the injury is classified as serious or life threatening.
2. Where Emergency Services are requested, the Chief Warden will nominate a warden or other person tomeet Emergency Services and direct them to the emergency.
3. Applying First Aid
   - For those injuries that are minor and classified as First Aid, the patient will wait for the First Aid Officer to arrive.
   - First Aid will be applied by a suitably trained person at the workplace (holder of a current first aidcertificate), following the DRSABCD process.
   - The DRSABCD Action Plan assists in assessing whether a patient has any life-threatening injuries and if immediate first aid is necessary. The following steps will be implemented:
     - **D**anger – ensure the area is safe for yourself, others and the patient
     - **R**esponse – Check for a response
     - **S**end – send for help, call 000 if needed
     - **A**irway – check for obstructions to airway
     - **B**reathing – check if patient is breathing
     - **C**PR – commence CPR if necessary
     - **D**efibrillation – source and apply defibrillation if available.
   - The First Aid Officer will then complete an Injury Report Form, a copy of which will be retained by the Shift Supervisor.
4. What to do if the Injury is classified as serious
   - Where the onsite first aider has determined that the injury is serious and that any movement of the patient may aggravate the injuries, the patient will be left in place whilst awaiting the arrival of the Emergency Services.
   - During this time, the Shift Supervisor or Person in Charge will ensure that:
     - The patient is kept warm
     - The patient is lying on their side unless it is suspected that they have suffered spinal damage, when they should not be moved
     - The patient’s airways are clear

  - Efforts are made to stem the flow of blood by applying a tourniquet or pressure pad.

5. On arrival at the scene, Emergency Services will establish the severity of the case and whether the patient will require hospitalisation.
6. Injured person attended by ambulance:
   - Where it has been determined that the patient requires immediate hospitalisation then the First Aid Officer will request the attendance of an ambulance.
   - Whilst awaiting the ambulance:
     - The First Aid Officer will apply first aid as appropriate
     - The Shift Supervisor or Person in Charge will contain the incident area as appropriate and renderevery assistance to the Emergency Services Personnel
     - Where appropriate, the Chief Warden will allocate a worker to travel with the patient to thehospital.
7. In the event of a serious injury that requires hospitalisation, the Chief Warden will advise the Area Manager as soon as is practicable. It is the responsibility of the Area Manager to contact the injured person's next of kin.
8. The post-emergency response activities of the ECO, identified in Section 4.3, will be initiated.

CODE BLACK – PERSONNEL THREAT

4.8. Unauthorised Access to Site Emergency Response Procedure

Should any unauthorised person(s) be observed within the site, the following steps will be taken:

1. On becoming aware of any unauthorised access:
   - Notify the Chief Warden before approaching any person(s), as there may be a risk of an argument escalating.
   - Establish if the person/persons pose a potential threat. If uncertain, call Police (000).
   - If a threat is not observed, approach the person to obtain their identity and reason for being on the facility.
   - If the person is unauthorised and has no business to be there, politely ask them to leave the facility.
   - If the person(s) refuses to comply, notify facility Security.
   - Police are to be called if assistance is required to remove them from the facility.
2. The following is advised:
   - Never engage in physical intervention.
   - Try to restrict entry to buildings and facility equipment.
   - Call for assistance if needed.
   - Secure records, files and other valuable items of property if there is a risk of access.
   - Promote an air of confidence and calm.
3. If the emergency has the potential to affect other area(s) within the development or neighbouring sites, the Chief Warden will, where possible, notify affected parties of the situation or delegate this responsibility toanother person.
4. If the unauthorised person/persons pose a threat to cause harm to occupants, then the following optionsshould be considered by the Chief Warden:
   - Escape, Hide, Tell.
   - Where immediate escape from the facility is not considered personally safe, then occupants should hide out of sight and remain silent, or alternatively take other action to protect their safety.
   - Lockdown.
   - Secure the facility (full or partial) or an area to protect its occupants in response to an occurring orimminent threat that may have the potential to cause harm.
   - Full or partial evacuation.
   - The Code Orange evacuation procedure in Section 4.4 should be followed where appropriate.

5. The post emergency response activities of the ECO, identified in Section 4.3, will be initiated.

CODE YELLOW – INTERNAL EMERGENCY

4.9. Vehicle/ Plant Incident, Structural Collapse or Train Derailment Emergency Response Procedure

In the event of a vehicle accident, container fall, train derailment or structural stability / collapse within the development, the following process will be followed:

1. On becoming aware of an accident, the person will:
   - Notify the emergency services if persons are injured– call 000 – Ambulance & Police.
   - Provide assistance to the injured person/persons.
   - If trained and it is safe to do so, secure the affected area(s) to restrict access with available equipment.
2. Notify the Chief Warden.
3. The Chief Warden will ascertain the location, extent and nature of the emergency and determine if an evacuation is required. The Chief Warden will also notify Emergency Services and contact First Aid Officers as required.
4. Where Emergency Services are requested, the Chief Warden should nominate a warden or other person to meet Emergency Services and direct them to the emergency.
5. If the emergency has the potential to affect other area(s) within the development or neighbouring sites, the Chief Warden will notify affected parties of the situation or delegate this responsibility to another person.
6. If development access or tenanted activities are affected, the Chief Warden will notify Area Manager / Terminal Manager, who will then notify the affected tenant(s). Area Manager / Terminal Manager will also notify the Asset Manager / Development Manager.
7. Where required, the Chief Warden is to allocate Traffic Controllers to divert and redirect traffic until the emergency is declared terminated.
8. If an evacuation is required, the evacuation procedure in Section 4.4 should be followed. If not, all personnel are to follow the instructions of the Chief Warden.
9. On arrival of the attending Emergency Services, the Chief Warden will:
   - Hand over control to the ESIC
   - Brief the ESIC of the emergency (i.e. type and location)
   - Provide the status on the evacuation (if evacuation required), details of any unaccounted- for personnel / visitors, and any other relevant information.
10. When the ESIC terminates the emergency, then:
    - The ESIC will return control to the Chief Warden
    - The Chief Warden will advise Warden(s) in the affected area(s) that the emergency has been terminated and the “all-clear” has been given.
11. The Wardens will direct personnel to return to their work area and resume work activities.

12. The post emergency response activities of the ECO, identified in Section 4.3, will be initiated.

CODE YELLOW – INTERNAL EMERGENCY

4.10. Environmental Pollution Incident Emergency Response Procedure

In the event of an oil, chemical or fuel spill or leak within the site, the following process will be followed:

1. On becoming aware of an oil, chemical or fuel spill, the person will:
   - If injury has occurred notify Fire & Rescue NSW & Ambulance – call 000
   - Notify the Chief Warden
   - If trained and it is safe to do so, secure the affected area(s) to restrict access with available equipment.
2. The Chief Warden will ascertain the location, extent and nature of the emergency and determine if an evacuation is required. The Chief Warden will also notify Emergency Services and contact First Aid Officers as required.
3. Where Emergency Services are requested, the Chief Warden will nominate a warden or other person to meet Emergency Services and direct them to the emergency.
4. If the emergency has the potential to affect other area(s) within the development or neighbouring sites, the Chief Warden will notify affected parties of the situation via email, telephone or face to face or delegate this responsibility to another person.
5. Where required, the Chief Warden will allocate Traffic Controllers to divert and redirect traffic away from the emergency until the emergency is declared terminated.
6. If an evacuation is not required, the Chief Warden will ensure the following steps are undertaken tomanage the emergency:
   - Control
     - Control the spill to minimise quantity spilt into the environment. Barricade off the area ifneeded to prevent vehicles and/or people from entering
     - In the case of gaseous emissions, maintain a safe distance and cordon off the area.
   - Contain
     - Contain what has already been spilt and isolate to prevent further discharge, runoff, or emissions particularly into stormwater drains or watercourses.
   - Clean up
     - Refer to the relevant Safety Data Sheets (SDS)
     - Use material provided in spill kits to contain the pollution
     - In the case of vaporous or gaseous emissions, follow directions provided by Emergency Services.
   - Dispose
     - All waste materials are to be placed in waste containers and labelled appropriately for disposal to an appropriately licensed waste facility

  - Disposal dockets are to be collected by the Chief Warden.

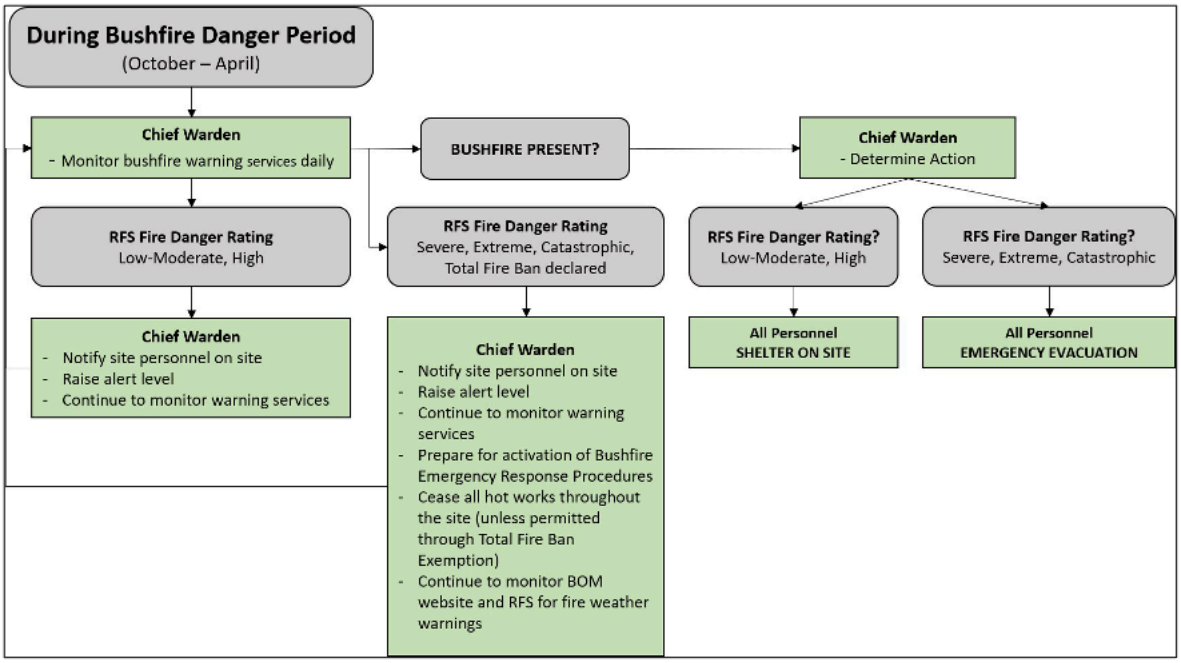
7. If an evacuation is required, the evacuation procedure in Section 4.4 will be followed. If not, all personnelare to follow the instructions of the Chief Warden.
8. The Site HSE Manager will report to Area Manage / Terminal Manager and Asset Manager / Development Manager who will report the incident to the relevant authority(s) if the incident causes or threatens to cause *material harm* to the environment, in accordance with the procedure outlined in the Section 4.8 of the OEMP.
9. On arrival of the attending Emergency Services, the Chief Warden will:
   - Hand over control to the ESIC
   - Brief the ESIC of the emergency (i.e. type and location)
   - Provide the status on the evacuation (if evacuation required), details of any unaccounted- for personnel / visitors, and any other relevant information.
10. When the ESIC terminates the emergency, then:
    - The ESIC will return control to the Chief Warden
    - The Chief Warden will advise Warden(s) in the affected area(s) that the emergency has been terminated and the “all-clear” has been given
    - The Wardens will direct personnel to return to their work area and resume work activities.
11. The post emergency response activities of the ECO, identified in Section 4.3, will be initiated.

CODE BROWN – EXTERNAL EMERGENCY

4.11. Bushfire Emergency Response Procedure

A bushfire can occur at any time of the year. In all cases, the protection of people (including fire fighters) willbe the first and highest priority. The Action / Decision flowchart for bushfire emergencies is shown in Figure 4-2.

Figure 4-2 Action/ decision flowchart for Chief Warden



4.11.1. Bushfire warning services

During the bushfire danger period (October to April), the Chief Warden will monitor the following sources for Bushfire alert levels, Total Fire Bans (TOBAN) and National Fire Danger Rating advice:

1. NSW Rural Fire Service (RFS) (http://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans)
2. Bureau of Meteorology (BoM) also issue fire weather warnings (http://www.bom.gov.au/australia/warnings/)
3. Fires Near Me App (https://www.rfs.nsw.gov.au/news-and-media/stay-up-to-date).

4.11.2. Bushfire monitoring and level of alert

The Chief Warden for the Project site (or other nominated persons) will:

1. Monitor daily weather and RFS fire danger rating.

   If RFS fire danger rating is – Low-Moderate, High

   1. Increase level of alert.
   2. Continue to monitor the BoM website and RFS website for fire weather warnings.

If RFS fire danger rating is – Severe, Extreme, Catastrophic – TOBAN declared

1. Increase level of alert.
2. Notify all occupants of fire danger rating.
3. Cease all hot works throughout the development (unless permitted through TOBAN Exemption).
4. Prepare for activation of Bushfire Emergency Evacuation or Sheltering Procedures.
5. Continue to monitor the BoM website and RFS website and media for fire weather warnings.

4.11.3. Bushfire response

1. On becoming aware of a bushfire, the observer will call 000 to report the fire and notify the Chief Warden immediately.
2. The Chief Warden will ascertain the location, extent and nature of the emergency and determine if an evacuation is required. The Chief Warden will also notify Emergency Services and contact First Aid Officers as required.
3. If the emergency has the potential to affect other area(s), the Chief Warden will notify affected parties of the bushfire.
4. If an evacuation is required, the evacuation procedure in Section 4.4 will be followed. If not, all personnel are to follow the instructions of the Chief Warden.
5. On arrival of the attending Emergency Services, the Chief Warden will:
   - Hand over control to the ESIC
   - Brief the ESIC of the emergency (i.e. type and location)
   - Provide the status on the evacuation (if evacuation required), details of any unaccounted- for personnel / visitors, and any other relevant information
   - Seek instruction from emergency services and follow the instructions.
6. When the ESIC terminates the emergency, then:
   - The ESIC will return control to the Chief Warden
   - The Chief Warden will advise the Warden(s) in the affected area(s) that the emergency has been terminated and the “all-clear” has been given
   - The Wardens will direct personnel to return to their work area and resume work activities.
7. The post emergency response activities of the ECO, identified in Section 4.3, will be initiated.

4.11.4. Sheltering onsite

Relocation of employees on the development, otherwise known as sheltering, will be implemented in the first instance unless it is deemed unsafe to remain onsite. The safest option is to relocate before the impact of a bushfire. However, if it is unsafe to evacuate, occupants will seek shelter as far away from the bushfire impacted areas as possible.

Shelter and assembly areas will be situated away from bushfire prone land and vegetation as outlined in the MPW Stage 2 Bushfire Emergency and Evacuation Plan (Appendix H) (that is, they should be away from the Asset Protection Zone (APZ) along the western boundary and more than 10m from existing bushfire prone vegetation within the development). The Chief Warden, in conjunction with the EPC, will determine the suitability of the assembly points based on the existing bushfire hazard within the development at the time.

Personnel will relocate onsite (shelter), beyond the reach of bushfire, to the nominated bushfire emergency assembly areas identified in Figure 5-1 as directed by the Chief Warden.

Each of the suggested assembly points have been identified with consideration to the extent of bushfire prone areas surrounding the site. The assembly points will be adequately signposted to clearly identify the location to evacuees.

The primary emergency assembly point is located within the premises of the Main Compound. The Main Compound will be accessible for all site personnel working on construction works for the development.

Two secondary assembly points will be identified in the event that a bushfire occurs in or near the Main Compound (refer to Section 5). Figure 5-1 will be updated to identify all assembly points prior to the commencement of operations.

While sheltering procedures are in place, the following actions will be implemented:

- The Chief Warden will maintain situational awareness through radio, NSW RFS website, 1800 NSW RFS, smart phone applications and local firefighting resources.
- Two people are to make regular exterior visual inspections (wearing appropriate protection from bushfire) of the refuge for embers and extinguish where possible or call 000 for assistance.
- If any buildings within the Project site catch fire, internal evacuation protocols will be followed [to be developed on finalisation of facility design).

As the additional warehouses are constructed and become operational, the EPC will review the ERP to identify the additional evacuation routes and assembly points required.

4.11.5. Bushfire emergency evacuation procedure

The decision to advise or direct evacuation will be considered whenever there is a potential need to move people to a safer place. This process will be constantly reviewed in response to changing circumstances and will be determined by the Chief Warden.

Prior to evacuation, site personnel will move to the primary assembly point. If it has been identified that a bushfire is in or near that location, site personnel will move to the secondary assembly point (refer Section 5) Sheltering Onsite.

During evacuation, site personnel will be responsible for their own transport. Site personnel will travel from the primary assembly point via Bushmaster Avenue to Moorebank Avenue. After site personnel have exited the development from the

operational access point, site personnel will then travel north towards the intersection of Moorebank Avenue and the M5 Motorway (South-West Motorway). The evacuation route is shown in Figure 5-1.

CODE BROWN- EXTERNAL EMERGENCY

4.12. Flooding

A floodplain risk management (FRM) guideline was developed in conjunction with the State Emergency Service (SES) to provide a basis for the flood emergency response categorisation of floodplain communities (both existing and future). Classification assists in the prioritisation and requirements of emergency responses and provides emergency response assistance to the community in flood events. When used with FRM Guideline SES Information Requirements from the FRM Process, it identifies the type and scale of information needed by the SES to assist with ERP.

The Floodplain Development Manual, 2005 requires flood studies and FRM studies and plans to address the management of continuing flood risk to both existing and future development areas. As continuing flood risk varies across the floodplain so does the type and scale of emergency response and therefore the information necessary for effective ERP. Below outlines the results of the flood risk studies for MPW Stage 2 and the necessary ERP procedure.

4.12.1. Flood risk for the development

As described in Section 12.4.2 of the EIS (Arcadis, October 2016), the development was anticipated to incur either minor or negligible flood impacts from the Georges River and Anzac Creek, which was considered acceptable without further flood mitigation.

The filling of the development site has raised the operational area above the regional probable maximum flood (PMF) levels, although areas not impacted by regional flooding can still be affected by local PMF flow regimes. Modelling results indicated that potential water levels driven by a PMF event would be effectively managed with the proposed stormwater management systems. Nonetheless, the EIS recommended that a Flood Emergency Response Plan be prepared and implemented for the operational phase of the development.

4.12.2. Flood emergency response procedure

The BoM provides flood forecasting and warning services for the Georges River catchment and will issue a Flood Watch up to four days in advance of expected onset of flooding. Flood Watch is updated at least daily when issued. The development will utilise a Flood Watch as a trigger for notification of relevant parties in advance of any flood event.

In the event of a flood, the following steps will be undertaken:

1. On becoming aware of a flooding event through monitoring of the BoM website or an alert being raisedby an occupant, the Chief Warden will ascertain the location, extent and nature of the emergency and notify Emergency Services and contact First Aid Officers as required.
2. The Chief Warden will notify all site personnel to ‘shelter in place’ at the emergency assembly point as shown in Figure 5-1.

3. Chief Warden to instruct all site personnel to remain on the development and not to attempt to enter or drive through any flood waters.
4. Chief Warden to coordinate closure of development to external visitors.
5. Relevant regulator notification and incident management to be undertaken in accordance with the OEMPin Section 4.8.
6. When it is safe to do so, the following will occur:
   - Power will be isolated to inundated areas of the site.
   - Loose materials to be moved out of flood prone area or secured.
   - Emergency erosion and sediment controls will be implemented. This may include temporary bunds todivert water around key areas such as stockpiles and reduce risk to surrounding properties which might otherwise be affected.
   - Evacuate site once given the “all-clear” from the Chief Warden.
7. On arrival of the attending Emergency Services (if requested), the Chief Warden will:
   - Hand over control to the ESIC.
   - Brief the ESIC of the emergency (i.e. type and location).
   - Provide the status on the evacuation (if evacuation required), details of any unaccounted – for personnel / visitors, and any other relevant information.
8. When the ESIC terminates the emergency:
   - The ESIC will return control to the Chief Warden.
   - The Chief Warden will advise Warden(s) in the affected area(s) that the emergency has been terminated and the “all-clear” has been given.
   - The Wardens will direct personnel to return to their work area and resume work activities if safe to doso. If resumption of work activities is not appropriate, then the Chief Warden will determine whether personnel should depart the development.
9. Following the event, a safety walk will be conducted by Wardens to determine whether or not it is safe to return to work and restore / repair flood damage, as required. This will include an electrician checking any inundated or water affected power boxes or electrical equipment. The power is to remain off until assessed by the electrician.
10. During the flood emergency, the Chief Warden will:
    - Monitor the BoM website for warnings, Australian Broadcasting Corporation radio broadcasts, local emergency services social media pages, and local news outlets.
    - Follow all advice and instructions given by emergency services, as required.
    - Ensure all occupants onsite are informed of the ‘shelter in place’ approach and not to attempt evacuation from development until it is safe to do so.

4.13. Off-site Discharge Emergency Response Procedure

In the event of an uncontrolled pollution incident off site, or following a vehicle accident, the following steps will be taken:

1. Notify the Chief Warden of the situation immediately.
2. If discharge cannot be contained with the equipment on hand notify Emergency Services immediately.
3. Where possible try to contain and isolate discharge to prevent further discharge, if appropriately trainedand safe to do so.
4. Erect barriers around the area to prevent vehicles and pedestrians from entering the area. In the case of gaseous emissions, maintain a safe distance.
5. The Site HSE Manager will report to Area Manage / Terminal Manager and Asset Manager / Development Manager who will report the incident to the relevant Authorityif the incident causes or threatens to cause *material harm* to the environment, in accordance with the procedure outlined in the Section 4.8 of the OEMP.
6. On arrival of the attending Emergency Services:
   - Hand over control to the ESIC.
   - Brief the ESIC of the emergency (i.e. type and source of discharge, actions undertaken to date and other relevant information).

When the ESIC terminates the emergency, undertake the relevant post emergency actions identified in Section 4.3.

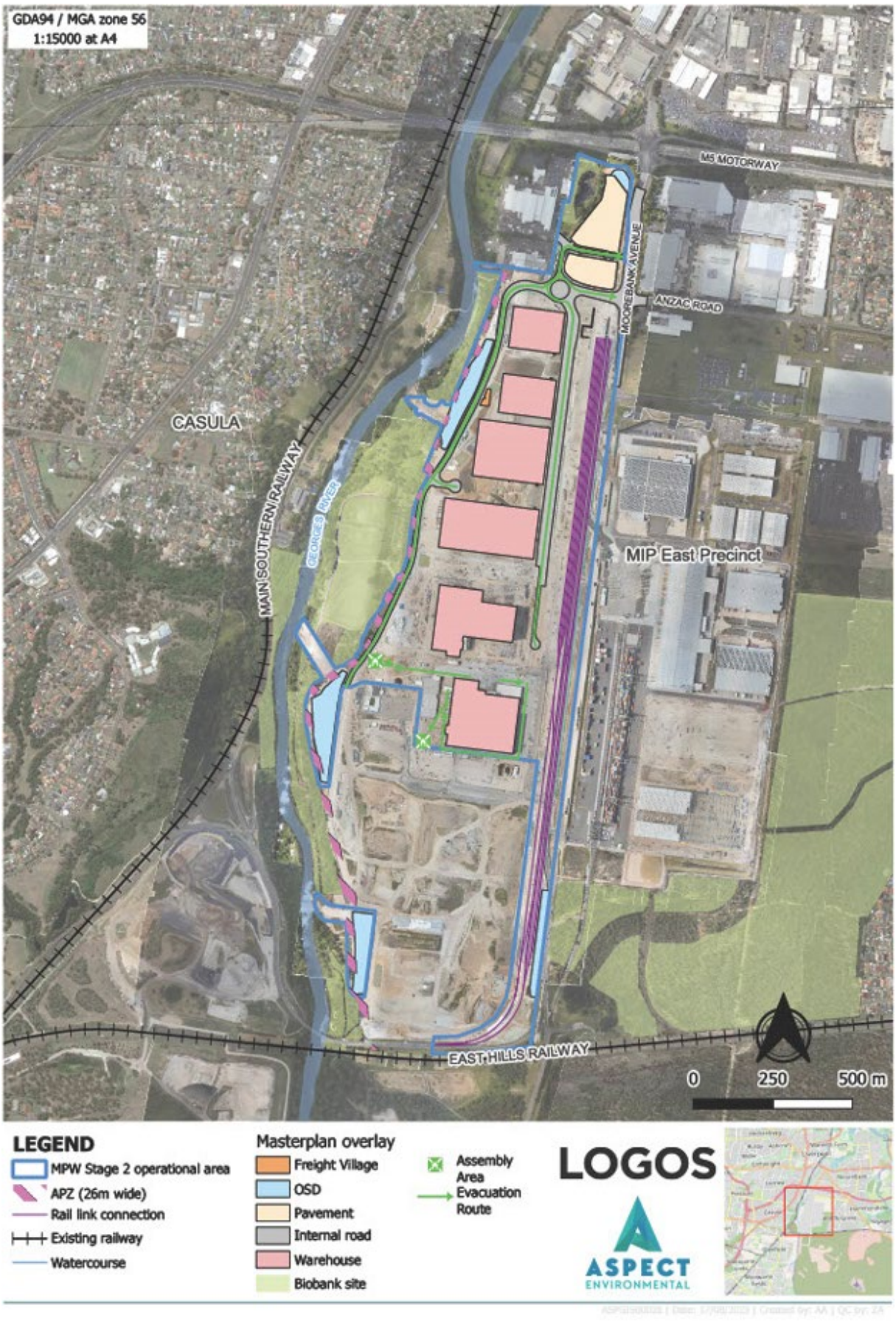
5. Evacuation Diagram

5.1. Emergency Evacuation Routes and Assembly Points

The assembly points and emergency evacuation routes for the operation of the MPW Stage 2 are shown in Figure 5-1.

[Note: The EPC will consult with ABB to ascertain a secondary evacuation route for ABB in the event that Bapaume Road is not accessible, and Figure 5-1 will be updated accordingly.]

Figure 5-1 Emergency evacuation routes and assembly points



6. Emergency Planning Committee

The EPC are the persons responsible for the documentation and maintenance of this ERP.

The EPC will consist of representatives from each warehouse and will likely consist of the following personnel:

- Operational Asset Manager / Development Manager
- Operational Area Manager / Terminal Manager
- Warehouse representatives.

Relevant experience and capacity for personnel to perform the role will be taken into consideration when assigning EPC representatives.

EPC members, once appointed, will familiarise themselves with *Australian Standard 3745-2010 Planning forEmergences in Facilities* and the responsibilities outlined in that document and the section of this ERP that follows. The EPC will arrange for training of its members in line with Section 8 of this ERP. The EPC will appoint and arrange for training of the ECO as detailed in Section 6.1.1 and Section 8 of this ERP. The EPCwill review the contents of this ERP for currency (especially the areas highlighted in yellow) and revise the document as required after initial implementation.

The current members of the EPC are detailed in Table 2-2. The EPC will review, update and implement the ERP and thereafter meet six-monthly as a minimum to review the Plan and undertake the responsibilities detailed in Section 6.1 as required.

6.1. Responsibilities of the EPC

6.1.1. General

The EPC will hold the following responsibilities:

- Identifying events that could reasonably produce emergency situations across the MPW stage 2 development
- Updating this emergency plan for currency prior to operations. Further guidance can be obtained in Section 3 of AS3745-2010
- Ensuring that resources are available to enable the development and implementation of the emergency plan including time, finance, equipment and personnel
- Nominating the validity period for the emergency plan and the evacuation diagrams
- Ensuring that the emergency plan is readily identifiable and available to the appropriate persons
- Establishing an ECO to operate in accordance with the emergency plan if necessary, establishing a specialist emergency response team (ERT).

At this stage, an ERT is not deemed necessary for the development. Current response procedures as carried out by the ECO are expected to suitably address the likely emergency situations without the need for a specially trained ERT. Once dangerous goods thresholds are exceeded, it would be responsibility of the tenant to establish an ERT in respect of dangerous and hazardous goods, and to interface with other warehouse ERTs and the Chief Warden.

Following release and implementation of the ERP, the EPC will:

- Ensure that all requirements of this ERP are implemented across the MPW Stage 2 development.
- Ensure that information about the procedures is communicated to occupants and workers within the development in a suitable format. Dispersal through site inductions is the simplest initial approach, with information being refreshed and emphasised during site toolbox talks and risk assessment reviews relevant to seasonal or weather risk factors, e.g. during the declared bushfire danger season and TOBANs.
- Establish training protocols in accordance with Section 8 of this ERP to ensure ECO members and occupants have relevant training.
- Ensure that the Chief Warden coordinates annual evacuation exercises.
- Establish an emergency exercise protocol in collaboration with the Chief Warden.
- Ensure that feedback from the ECO on the effectiveness of emergency response procedures is considered in making amendments to rectify deficiencies or inaccuracies identified in the procedures.
- Ensure the ECO has the relevant equipment, provisions and training to implement the procedures detailed in this ERP.
- Establish procedures as detailed in Section 8.3 of this ERP to ensure visitors are aware of the emergency response procedures.
- Ensure procedures remain viable and effective through at least annual review of the ERP.
- Ensure review of the ERP at end of validity period or after any changes that would affect the plan. The ERP will be reviewed when new areas within construction site become operational.
- Ensure that a permanent record of events for each emergency is compiled and retained.
- Identify and rectify deficiencies and opportunities for improvement in the emergency plan and emergency response procedures.

6.1.2. Appointment of an Emergency Control Organisation

The EPC is responsible for appointing an ECO for the development. The following positions will be included if they are deemed necessary by the EPC, in accordance with the requirements of AS 3745-2010:

a. Chief Warden (required as minimum)
b. Deputy Chief warden
c. Communications officer and deputy
d. Area wardens and deputies
e. Wardens and deputies
f. Additional positions as required.

The specific personnel can be determined by the EPC as required. For further information on the ECO requirements and responsibilities refer to Section 7.

The number of ECO members can vary depending on the specific requirements of the Emergency Response Procedures, the nature of the activities occurring onsite, the

size of the facility and the number of visitors and permanent occupants that would normally occupy the site.

6.1.2.1. Selection criteria for ECO members

Members of the ECO will be appointed in consideration of the following criteria for each role. All ECO members will:

- Be capable of performing their duties
- Have leadership qualities and the ability to command authority
- Display effective decision-making skills
- Demonstrate the capability to remain calm under pressure
- Be available on-site to undertake their appointed duties
- Be an effective communicator
- Be capable of working in other roles in the ECO if required
- Be able to undergo relevant training.

7. Emergency Control Organisation

The ECO is the group of persons, appointed by the EPC, responsible for implementing the Emergency Response Procedures of this ERP. The ECO is required to give top priority to the safety of occupants and visitors of the facility during an emergency. Life safety will take precedence over asset protection during an emergency.

7.1. Authority

The Chief Warden will take control in the event of an emergency, and all employees (including managers, supervisors and warehouse tenants) will be required to comply with the directions given by the Chief Warden and ECO members under command of the Chief Warden.

7.2. ECO Structure

For this ERP, the minimum number of ECO members will include (as applicable to operational areas):

- Chief Warden
- Additional area supervisors as nominated by the EPC or Chief Warden.

All ECO roles are to be filled during all shifts of the 24/7 operation of the MPW Stage 2 development, which has been considered as a requirement for appointing ECO members. As such, Shift Supervisors will be suitable candidates for Chief Warden or Area Warden roles during normal operations. During lighter work periods, when there are minimal staff, such as the weekend or night shifts, facility security may act as ECO wardens during an emergency situation and should be trained accordingly.

7.3. Responsibilities of the ECO

For the purposes of this ERP the ECO members will have the responsibilities detailed in Table 7-1.

Table 7-1 Responsibilities of the MPW Stage 2 development ECO members before, during and after emergency situations

Roles	Responsibilities
Chief Warden	**Pre-Emergency Responsibilities** • Maintain a current register of ECO members across the MPW Stage 2 development. • Replace ECO members when a position becomes vacant. • Conduct regular exercises (as detailed in Section 9). • Ensure the Emergency Response Procedures (detailed in Section 4) are kept up to date. • Attend meetings of the EPC as required. • Ensure personal ECO identification (as detailed in Section 7.4) is available. • Ensure that there are sufficient First Aid personnel onsite. • Ensure personal proficiency in operations of facility communication equipment (where available). • Maintain records and logbooks of communication equipment / warning systems and make them available for emergency response.

Roles	Responsibilities
	• Establish a roster of wardens and update (if required). • Establish arrangements to ensure continuing operation of the ECO through holidays and resignations of members and deputies etc. • Ensure that emergency contact details are kept up to date. • Attend training and emergency exercises as required by the EPC. • Obtain an annual exemption permit from RFS to undertake emergency hot works during total fire bans. **During Emergency Responsibilities** • Respond and take control, as appropriate. • Notify Emergency Services and ECO members where appropriate. • If necessary, action the appropriate Emergency Response Procedure as detailed in Section 4 and control access to the affected area. • Monitor the progress of the evacuation and record any actions taken in an incident log. • Brief the emergency services personnel upon arrival on type, scope and location of the emergency and status of the evacuation (if required) and thereafter, act on the Senior Emergency Services Officer's instructions. • Any other action as considered necessary or as directed by Emergency Services. **Post-Emergency Responsibilities** • When emergency incident is rendered safe or emergency services return control, notify the ECO members to advise occupants to return to their facility as appropriate. • Organise a debrief with the ECO members and, where appropriate, with any attending Emergency Service personnel. • Identify any deficiencies and opportunities for improvement in the emergency plan and emergency response procedures. • Compile a report for the EPC and detail any deficiencies in the emergency response procedures that were observed by ECO members or occupants. • Attend ECO debriefing session immediately following emergency or emergency exercise.
Area Wardens	**Pre-Emergency Responsibilities** • Ensure there are sufficient wardens in relevant area of responsibility to effectively carry out the emergency response procedures. • Coordinate the completion of PEEP documentation for relevant occupants in area / facility of responsibility. • Report on deficiencies of emergency equipment. • Ensure that all occupants within their nominated area / facility are aware of the emergency response procedures. • Ensure that occupants know the identity of their Area Warden and/or Wardens. • Coordinate and/or carry out safety practices (e.g. clear egress paths, access to first-attack firefighting equipment and disposal of rubbish) within area of responsibility. • Ensure personal ECO identification is available. • Attend training and emergency exercises as required by the EPC/Chief Warden. **During Emergency Responsibilities** • Implement the emergency response procedures for their area of responsibility as directed by alarm system or as directed by the Chief Warden.

Roles	Responsibilities
	• Direct warden to undertake check of area for any abnormality or carry out personally if required. • Follow directions of the Chief Warden. • Coordinate persons to assist Wardens as required. • Communicate with Chief Warden if there is any relevant change in area of responsibility. **Post-Emergency Responsibilities** • Compile a report of the actions taken and any deficiencies observed in the emergency response procedure and discuss with Chief Warden in the debrief. • Attend ECO debriefing session immediately following emergency or emergency exercise.
Wardens (if appointed)	**Pre-Emergency Responsibilities** • Carry out safety practices (e.g. clear egress paths, access to first-attack firefighting equipment and disposal of rubbish) within area of responsibility. • Ensure personal ECO identification is available. • Attend training and emergency exercises as required by the EPC/Chief Warden. **During Emergency Responsibilities** • Check that any fire doors / emergency doors are properly closed (if appropriate). • Ensure that access for emergency services is made available if directed by Area Warden or Chief Warden • In case of evacuation, ensure that area of responsibility has been cleared of all occupants. • Ensure orderly flow of people into protected areas. • Assist occupants with disabilities. • Lead groups of people to the nominated refuge area. • Communicate status to Chief Warden or Area Warden. **Post-Emergency Responsibilities** • Compile a report of the actions taken and any deficiencies observed in the emergency response procedure and discuss with Chief Warden in the debrief. • Attend ECO debriefing session immediately following emergency or emergency exercise.

7.4. ECO Identification Apparel

ECO members will be identified through coloured apparel that will be at least one of the following:

- Helmets
- Caps
- Hats
- Vests
- Tabards.

The development ECO will be identified by coloured helmets as shown in Table 7-3.

Table 7-2 ECO identification colours

Role	Identification Colour
Chief Warden	White Helmet
Warden	Red Helmet
First Aid Officer	Green Helmet with a white cross

Table 7-3 Standard ECO colours (Source: AS 3745-2010)

ECO position	Colour	AS 2700	RGB	CMYK
Chief Warden	White	N14	255, 255, 255	0, 0, 0, 0
Deputy Chief Warden	White	N14	255, 255, 255	0, 0, 0, 0
Communications officer	White	N14	255, 255, 255	0, 0, 0, 0
Floor/ area warden	Yellow	Y26	255, 215, 0	0, 16, 100, 0
Warden	Red	R13	227, 66, 52	0, 71, 77, 11
First aid officers	Green†	G21	14, 171, 114	62,0,22,33

† White cross on a green background

8. Training Arrangements

The EPC will arrange training for the following personnel to be provided:

- For at least one member of the EPC, to enable the EPC to competently execute its obligations as detailed in Section 8.1
- For the ECO in accordance with Section 8.2
- For facility occupants and visitors in accordance with Section 8.3.

8.1. EPC Training

The EPC will ensure that all members of the EPC are competent to perform their responsibilities.

EPC training can be attained via an external educational organisation that specialises in fire safety and emergency training. EPC training courses are available in online and face-to-face contexts through registered training organisations. Beyond the general EPC training provided by an external training organisation, EPC training will also include reviewing this ERP and the relevant emergency response procedures. This training will be conducted when members are appointed to the EPC.

The training provided to EPC members will address:

- Developing, managing and maintaining an emergency plan
- The duties of the EPC (Section 6.1) and ECO (Section 7.3) as detailed in the Emergency Response Procedures (Section 4)
- Undertaking site-specific emergency identification and analysis
- Management of appropriate documentation
- Management and development of assessment activities
- Development and implementation of a training program
- Emergency mitigation, emergency preparedness and emergency prevention
- Emergency exercises / drills
- Life and fire safety systems, communication systems, notifications and warnings
- Liaison with Emergency Services
- Post-evacuation management.

Allowance needs to be made for departure, resignation, and retirement of members and the training of new members. Consideration should also be given to refresher training being provided on a no-greater than two-yearly interval.

8.2. ECO Training

The EPC will make arrangements for all ECO members, including nominated deputies, to be trained to develop the skills and knowledge necessary to undertake the duties set out in the emergency response procedures as detailed in Section 4 of this ERP. This training may include the transfer of knowledge fromcurrent ECO members to newer members, or where appropriate may include an external training course provided by a registered training organisation.

The EPC and/or Chief Warden will ensure that sufficient personnel are trained in all positions within the ECOto allow for projected absences due to illness, personal leave.

8.2.1. All ECO members

The training for all ECO members will address:

- The emergency response procedures detailed in Section 4 of this ERP
- The roles and responsibilities outlined in Section 7.3 of this ERP
- Responding to alarms and reports of emergencies
- Reporting emergencies
- Training Programs
- Communication during emergencies
- Pre-emergency activities – emergency exercises / drills
- Emergency activities
- Post-emergency activities
- Personnel and visitors with disabilities and PEEPs
- Human behaviour during emergencies
- Use of installed emergency response equipment.

Wardens that are required to have a role in traffic control will undergo appropriate training and be certified as competent prior to their assignment to undertake traffic management. The minimum requirement is to have satisfactorily completed the RMS's training package – Traffic Control Using a STOP / SLOW bat.

8.2.2. Chief Wardens and deputies

Chief Warden(s) and their deputies will undertake additional training for the following:

- Their specific role in the emergency response procedures
- Duties of the EPC as detailed in Section 6.1 of this ERP
- Decision-making, command and control and record keeping
- Actions for the specific emergencies contained in this ERP
- Effectively communicating during emergencies
- Liaison with Emergency Services
- Emergency exercises / drills
- Coordination of evacuation activities
- Implementation of post-emergency activities in accordance with the emergency plan
- Requirements to monitor Fire Danger Ratings in accordance with the bushfire emergency response (Section 4.11)
- Requirements to monitor daily weather forecasts using the BoM website to enable advanced preparation of potential flooding on site.

The use of formal training through a registered training organisation will be considered as necessary.

8.3. Occupants and Visitors Training

All working occupants and visitors are required to undergo training as detailed in Table 8-1. Initially, this training will be provided as a part of the general induction to site and will be carried out by the relevant staff responsible for new occupant inductions.

Retention of this training will be provided through appropriate signage and notices situated within the MPW Stage 2 development.

Table 8-1 General Emergency Response Training Requirements

Level	Topics / Emergency Procedures Covered	Relevant persons
Visitors induction	• Examples of emergencies that could occur • Emergency / evacuation procedures including emergency response procedures • Recognising actual or potential incidents • Incident reporting protocols • PEEPs	Visitors
General induction for occupants and workers within the MPW Stage 2 development	• Incident management and emergency response procedures, including: – Emergency response and evacuation procedure – Classification of emergency incidents based on their severity – Relevant emergency procedures/ plans to be followed – What emergency services are required – What incidents are reportable to the authorities – Incident reporting procedures in accordance with the OEMP, including internal notification and external notification to authorities – PEEPs.	All staff occupying the MPW Stage 2 development
Emergency Exercises	• All occupants will be involved in Emergency Exercises as required by the EPC. This will include, at minimum, one Emergency Evacuation exercise annually as detailed in the Emergency Evacuation Response Procedure in Section 4.4 and Section 9.3 of this ERP • Additional exercises as arranged by the EPC and ECO	All occupants of the MPW Stage 2 development from all shifts

8.3.1. Personal emergency evacuation plan

A PEEP is a tailored ‘escape plan’ for any employee, contractor, subcontractor or visitor who may not be able to reach a place of safety unaided, or within a satisfactory timeframe during an emergency situation.

The PEEP will determine the best escape plan for the employee, contractor, sub-contractor or visitor in an emergency. This will be developed and reviewed together with the Chief Warden on an annual basis, or as required, when matters affecting the emergency preparedness of the development are deemed necessary.

A PEEP may be required for people with:

- Mobility impairments
- Sight impairments
- Hearing impairments

- Cognitive impairments
- Other circumstances.

Additionally, a temporary PEEP may be required for:

- Short term injuries
- Temporary medical conditions
- Other circumstances.

All employees, contractors, sub-contractors and visitors will be notified about the requirement for a PEEP during their induction training. If any person(s) require assistance evacuating, even temporarily, they will need to complete a PEEP with the Chief Warden at the earliest opportunity. Where a PEEP is required for an extended period of time, the PEEP will be maintained with this ERP or facility specific Warehouse Operation Emergency Plan (whichever is more appropriate for the specific person involved) (refer to Section 2-5).

A PEEP template can be found in Appendix C – Personal Emergency Evacuation Plan Template.

8.4. Skills Retention

8.4.1. ECO skills retention

ECO members will attend skills retention activities at intervals not greater than six months. Activities will be determined by the EPC and in the ERP as required for the facility. Training will include revision of roles and responsibilitiesas set out in the ERP and instructions on operation of the communications system (if installed). This training can include tabletop and evacuation exercises.

Table 8-2 outlines the schedule of training required to keep all ECO members up to date with changing legislative requirements and updated procedures or changes across the MPW Stage 2 development.

Table 8-2 ECO Training Schedule

Type	Initial Training	Skills retention exercise
Responsibilities and procedures	On appointment	Every six months, or in accordance with any relevant updates to the emergency responseprocedures (whichever is sooner). Will include refresher on roles and responsibilities and include emergencyresponse procedures. Could also include Emergency Response Exercises.
First Aid	On appointment	Every three years, or as required
Fire Extinguisher Training	On appointment	Every two years, or as required
Assisting people with disabilities evacuate	On appointment	As required

Type	Initial Training	Skills retention exercise
RMS training package – Traffic Control Using a STOP / SLOW bat	On appointment	Every three years, or as required
Communications System (if installed)	On appointment	As required

8.4.2. Occupants skills retention

Occupant skills retention will occur annually. Occupant skills retention training will address:

- Responding to alarms and reports of emergencies
- Personal emergency evacuation plans (where in place)
- Procedures for specific emergencies as contained in the emergency response procedures
- Emergency response exercises
- Identification of ECO members.

8.5. Training Materials

The ECO and occupants will be supplied with training materials appropriate to each person's role and level of responsibility as determined by this ERP. Training materials will be site specific. Materials will be supplied in formats that can be comprehended by the recipient including, printed, electronic, braille, as specified in Section 6.7 of AS 3745-2010.

As a minimum, training materials will include the information contained in the Emergency Response Procedures and any relevant evacuation diagrams.

9. Emergency Response Exercises

A program of site-specific emergency response exercises will be developed by the EPC to determine the effectiveness of the emergency response procedures, ECO actions and occupants' response, both when first developed and on an ongoing basis.

Emergency response evacuation drills will be held at least once yearly. A whole of MPW Stage 2 development evacuation exercise will be carried out annually as detailed in Section 9.3.1. Other response procedures will be reviewed and refreshed with the ECO as required to maintain skills retention as detailed in Section 8.4.1.

The involvement of general workers in the other emergency response exercises (other than the evacuation) can be determined at the discretion of the EPC and/or Chief Warden on an as needs basis as detailed in Section 9.3.2.

9.1. General Emergency Response Exercise Requirements

The following will apply for all emergency response exercises:

- Emergency response exercises will be consistent with the identified emergencies in Section 4 of this ERP.
- Simple objectives and outcomes for emergency response exercise will be identified. (e.g. gauge ECO response and to identify any deficiencies in communication system, training, emergency procedures or their implementation).
- The ECO will be briefed in advance of the exercise so that they are appropriately prepared to carry out their respective duties.
- Observers will be appointed for all exercises and they will use a checklist to record details of the response exercise (observers will employ the checklist provided at Appendix D – Emergency Evacuation Exercise Observers' Checklist to take notes on the action of the ECO members and occupants during an exercise).
- Debriefing will be conducted by the Chief Warden immediately following exercise with the ECO members and other key participants. The observer's checklists will be analysed, and deficiencies reported to the EPC.
- A report will be forwarded to the EPC following each emergency response exercise. It will detail any deficiencies in the exercise that were identified at debriefing session.
- Should an actual emergency occur during an emergency response exercise, a pre-determined word or phase, such as "THIS IS NOT A DRILL", will be communicated to all ECO members. The word or phrase will signify that the exercise has been terminated and that the ECO are to stand by for further instruction.

9.2. Initial Testing and Implementation

Once the EPC has established that the emergency response procedures are satisfactory and workable and the ECO has been trained, the emergency response procedures will be tested within the first 12 months. The first emergency response exercise will be an evacuation exercise as detailed in Section 4.4 (given the size of the MPW Stage 2 development, a partial evacuation may take place in the first place to test the response procedures and the ECO members). Where possible, all occupants and ECO members will have participated in an evacuation exercise in the first 12 months of the implementation of the emergency response procedures.

9.3. Ongoing Program

9.3.1. Emergency evacuation exercises

Emergency evacuation drills will be conducted to ensure that all occupants are aware of, trained and proficient in the emergency response procedures, assembly points and evacuation routes relevant to their working areas of the development.

Additionally, any person(s) with a PEEP will also participate in the evacuation exercise, following the procedure outlined in their individual plans.

At a minimum, one full site evacuation exercise will be held in a 12-month period. Evidence of the exercise and the reports from the debriefing sessions will be kept by the EPC and any deficiencies will be addressed in a review of the relevant ERP procedures.

9.3.2. Other emergency response procedure exercises

In addition to the annual emergency evacuation exercise detailed in Section 9.3.1, the EPC and Chief Warden will establish a schedule for carrying out the other Emergency Response Procedures detailed in Section 4.

9.3.3. ECO briefing prior to emergency exercises

In advance of any emergency response exercise, the Chief Warden will brief the remainder of the ECO. The briefing may address, but not be limited to the following:

- The location of the planned scenario
- The identity of the wardens
- The identity of person(s) with PEEPs
- The type of alarms and alarm system
- Actions that the ECO is to take in response to the alarm signals
- The method of reporting emergencies
- The location of the staging area on the occupants' area if applicable
- The evacuation routes to be taken
- The location of assembly or designated alternative areas that provide safe refuge, internally or externally
- Occupants who have approved exemptions prior to the exercise
- Notification of any current temporary hazards with the facility and known systems failure relating to relevant systems and equipment
- What is required at completion of the exercise (e.g. debriefing and reporting).

10. Review and Routine Servicing

The EPC will ensure that this ERP and associated elements are inspected, tested and routinely serviced.

Any deficiency in the ERP or associated elements will be reported to management or the EPC at the completion of the inspection or testing and will be rectified with the minimum of delay. Records will be kept of all inspection, testing and routine servicing activities as outlined in the tables below.

Elements which require six-monthly review are detailed in Table 10-1.

Table 10-1 Six-monthly inspection, test and records schedule

Item	Action required and pass / fail requirement	Records		
		Result	Pass / Fail	Comments
ECO	INSPECT the ECO list and check for compliance with the emergency plan.			
Emergency Evacuation Equipment	INSPECT the emergency evacuation equipment and check for compliance with the emergency plan.			
Training	INSPECT training records and check for compliance with the emergency plan.			
ECO	TEST the ECO for relevance to the facility by initiating an alarm and checking the response for compliancewith the emergency procedures.			
Evacuation diagrams	INSPECT the emergency response diagrams for relevancy and check for compliance with the emergency plan.			
Assembly areas	INSPECT the nominated assembly area(s) and test for relevance to thefacility and compliance with the emergency plan.			
Emergency response procedures	INSPECT the emergency procedures testing for relevancy to the facility or to a nominated incident covered by the emergency procedures by conducting an evacuation exercise.			

Elements which require annual review are detailed in Table 10-2.

Table 10-2 Yearly inspection, test and records schedule

Item	Action required and pass / fail requirement	Records		
		Result	Pass / Fail	Comments
ERP (this plan)	INSPECT the emergency plan and check for relevancy to the facility.			
Evacuation Exercise	INSPECT evacuation exercise records and check for compliance with the emergency plan.			

10.1. Additional Triggers for Review

The following triggers will initiate a review of the ERP to check its ongoing relevance to the MPW Stage 2 development:

- A deficiency in the plan or emergency procedures has been reported to the EPC
- Commencement of new operational area within the development
- Following an emergency event
- At other times when matters affecting the emergency preparedness are deemed necessary
- Annual review period lapsed
- Expiration of the validity period of the ERP
- Changes in legislation, regulations and standards that may require amendments / revisions to the ERP.

The review of the ERP will consist of checking that the emergencies identified in the ERP, and the corresponding Emergency Response Procedures, remain current for the development. This review will also facilitate consideration and address of all potential emergencies.

10.2. Communication System Checks

Where a communication system is installed, regular monthly checks will be carried out to confirm appropriate functionality. The EPC will nominate the responsible person(s) for undertaking these checks. Records will beretained by the EPC.

Appendix A – Planning Context

1. Legal and Other Obligations

Details about the legislation, planning instruments and guidelines considered during development of this plan are listed below, with specific details provided in the Legislation Register within Appendix A of the CEMP.

- *Environment Protection and Biodiversity Act 1999* (Commonwealth) (*EPBC Act*)
- *Environmental Planning and Assessment Act 1979* (*EP&A Act*)
- *Environmental Planning and Assessment Regulation 2000*
- *Fisheries Management Act 1994*
- *Protection of the Environment Operations (Clean Air) Regulation 2010*
- *Protection of the Environment Operations Act 1997*
- *Protection of the Environment Operations (Waste) Regulation 2014*
- *Rural Fires Act 1997*.

The operation of the MPW Stage 2 development has been approved under both EP&A Act and the EPBC Act. Both these approvals have environmental conditions relevant to the emergency response during operation of the MPW Stage 2 development, which are discussed below.

1.1. EPBC Act Approval

The EPBC Act approval for the MPW Concept was granted by DotEE (now DCCEEW) in September 2016 (No. 2011/6086). This approval was provided for the impact of the MPW Project on listed threatened species and communities (Section 18 and 18A of the EPBC Act) and Commonwealth action (Section 28 of the EPBC Act).

The operation of the development will be consistent with the EPBC Act Approval (EPBC 2011/6086) conditions, where relevant. The EPBC Act Approval does not include any specific requirements for an ERP in the Conditions of Approval (CoA).

However, the EPBC Act Concept Approval Revised Environmental Management Measures (REMMs) have a group of mitigation measures relating to bushfire risk (REMM 7L – 7U), the majority of which are addressed in the MPW Stage 2 Bushfire Risk Management Plan (BRMP), The requirement for a fire safety and evacuation plan (as per REMM 7T) is addressed in Section 4.11 of this ERP.

This ERP is prepared in conjunction with the OEMP for MPW Stage 2 which is required under CoA 2 (EPBC 2011/6086).

1.2. EP&A Act Approval

The MPW Stage 2 was approved under Part 4, Division 4.7 of the EP&A Act. The MPW Stage 2 (SSD 7709) CoC include requirements to be addressed in this ERP. These requirements, and where they are addressed within the ERP are provided in Table A-1.

Table A-1 CoC of SSD 7709 (MPW Stage 2)

CoC	Requirement	Sections or documents where requirements addressed
B189	Bushfire asset protection zones must not be within the riparian corridor as defined in Condition B2 other than within areas greater than 40m from top of bank as determined in accordance with condition B2 where evidence is provided to the satisfaction of the Planning Secretary that riparian vegetation, and any trees over 3 m in height, will be retained.	**Appendix F** – Bushfire Management Plan
B190	The entire site must be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of the Planning for Bushfire Protection (RFS, 2006) and the NSW Rural Fire Service's document Standards for asset protection zones.	**Appendix F** – Bushfire Management Plan
B191	An updated Bushfire Risk Management Plan must be prepared by a suitably qualified person(s) demonstrating that the bushfire asset protection zones can be contained wholly within the development area and that management of the inner protection zone will not impact on the proposed Biodiversity Offset Area. The Bushfire Risk Management Plan must be submitted to the Planning Secretary prior to construction of permanent built surface works.	**Appendix F** – Bushfire Management Plan
B192	Public road access must comply with section 4.1.3(1) of Planning for Bushfire Protection (RFS, 2006) except for the requirement for through-access.	**Appendix F** – Bushfire Management Plan
B193	The provision of water, electricity and gas must comply with section 4.1.3 of Planning for Bushfire Protection (RFS, 2006).	**Appendix F** – Bushfire Management Plan
B194	Prior to the commencement of construction and operation, the Applicant must prepare an Emergency Response Plan(s) covering, but not limited to, flooding and bushfire. The Emergency Response Plan(s) must be consistent with Australian Standard AS3745 2010 Planning for Emergencies in Facilities and include details of:	This ERP follows the required layout as specified in Section 3 of AS3754 2010. Bushfire procedure addressed in Section 4.11. Flooding procedure addressed in Section 4.12.
B194 (a)	assembly points and evacuation routes;	Section 5, Figure 5-1
B194 (b)	evacuation and refuge protocols; and	Section 4.4, Section 4.11, Section 5

CoC	Requirement	Sections or documents where requirements addressed
B194 (c)	awareness training for employees and contractors.	Section 8
B195	The Bushfire Emergency and Evacuation Management Plan must:	**Appendix F** – Bushfire Management Plan
B195(i)	be prepared by a suitably qualified and experienced person(s),	**Appendix F** – Bushfire Management Plan
B195(ii)	be consistent with the Development Planning – A Guide to Developing a Bushfire Emergency Management and Evacuation Plan (RFS, 2014); and	**Appendix F** – Bushfire Management Plan
B195(iii)	a copy of the Operational Bushfire Emergency Evacuation Management Plan must be submitted to the Planning Secretary, NSW Rural Fire Service, Council and the Certifying Authority prior to occupation.	**For reference.**

A list of the Final Compilation of Mitigation Measures (FCMMs) relevant to this ERP are provided in Table A-2.

Table A-2 SSD 7709 (MPW Stage 2) FCMMs

FCMM	Requirement	Sections or documents whererequirements addressed
0C	The Operational Environmental Management Plan (OEMP), or equivalent, for the Proposal would be based on the following preliminary management plans:	Refer to OEMP
	Flooding and Emergency Response Plan (FERP)	This ERP (Section 4.12)
	Emergency Vehicle Response Plan	This ERP
1I	During operation, emergency vehicle access would be managed through an Emergency Vehicle Response Plan developed for the Proposal in consultation with the NSW Police Force, NSW Fire Brigade, NSW Rural Fire Service and the Ambulance Service of NSW, where appropriate.	Section 4

FCMM	Requirement	Sections or documents whererequirements addressed
5H	A Flood Emergency Response Plan (FERP) would be prepared and implemented for the operational phase of the Proposal. The FERP would take into consideration, site flooding and broader flood emergency response plans for the Georges River floodplains and Moorebank area. The FERP would also include the identification of an area of safe refuge within the Proposal site that would allow people to wait until hazardous flows have receded and safe evacuation is possible. The FERP would be prepared in consultation with the State Emergency Service.	Section 4.12
13B	The following mitigation measures would be implemented during the operation of the Proposal: • A bushfire management strategy, (including a fire safety and evacuation plan) or equivalent, would be prepared as part of the OEMP • Management of the landscaped areas within the Proposal site would be undertaken to maintain minimum dry fuels loads • The width, as required, of the Rail link connection would be maintained in a low fuel state • Protocols would be developed for the monitoring of train access/egress during high – catastrophic fire weather days, if required and in accordance with the bushfire management strategy.	**Appendix F – Bushfire Management Plan** Section 4.11

1.3. Additional standards and guidelines

Additional legislation, standards and guidelines relating to emergency response include:

- Australian Emergency Manuals Series, Manual 20: Flood Preparedness, Commonwealth of Australia 2009
- Australian Emergency Manuals Series, Manual 21: Flood Warning, Commonwealth of Australia 2009
- Australian Emergency Manuals Series, Manual 22: Flood Response, Commonwealth of Australia 2009
- Australian Standard AS3745:2010 – Planning for Emergencies in Facilities
- Australian Standard 2444:2001 – Portable fire extinguishers and fire blankets – Selection and location
- Australian Standard AS 1940 – The Storage and Handling of Flammable and Combustible Liquids
- Development Planning – A Guide to Developing a Bushfire Emergency Management and Evacuation Plan, December 2014
- Flood Emergency Response Planning Classification of Communities, Floodplain Risk Management Guideline, DPE (E&H) 2007

- New South Wales State Disaster Plan (DISPLAN 2010), State Emergency Management Committee,2010
- NSW Government's Floodplain Development Manual, DPE 2005
- Planning for Bushfire Protection 2006 – NSW RFS
- Standards for Asset Protection Zones – NSW RFS
- Stormwater and Flooding Report, MPE Stage 2 EIS, Arcadis, 2017.

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.

Appendix B – Preliminary Risk Assessment

This Risk matrix was prepared to identify the potential emergency threats that could endanger lives and property within the MPW Stage 2 development. The identified emergencies are listed in Section 3 and relevant emergency response procedures are identified in Section 4.

[NOTE: The EPC should review the risk matrix prior to implementation of the ERP. New threats should be considered in line with this approach and emergency response procedure should be developed for any threats]

Appendix C – Personal Emergency Evacuation Plan Template

Personal Emergency Evacuation Plan

Relevant Details

Occupant Name _____

Location _____

Work Area/Building/Facility _____

Floor _____

Room Number _____

Is an Assistance Animal Involved? ☐ Yes ☐ No

If yes, please describe (e.g., guide dog, etc.) _____

Have you been trained in, or made aware of, the emergency evacuation procedures?

Area Induction ☐ Yes ☐ No

Personalised Evacuation Procedure ☐ Yes ☐ No

Have you practiced the egress procedure? ☐ Yes ☐ No

Awareness of Emergency

How do you wish to be informed of a building evacuation?

- ☐ Existing alarm system
- ☐ In person communication
- ☐ Mobile Phone
- ☐ Visual alarm system
- ☐ Pager/vibrating device
- ☐ SMS
- ☐ Other device or method (please specify) _____

How would you like to receive evacuation procedure updates?

- ☐ Email
- ☐ Personal update
- ☐ Braille
- ☐ Text
- ☐ Other (please specify) _____

What type of assistance do you require?

☐ Walking guidance or aid

☐ Wheelchair assistance

☐ Other (please specify) _____

What equipment will you require that emergency services should be aware of?

☐ Manual wheelchair

☐ Harness

☐ Other (please specify) _____

Egress Procedure

By what method and by which evacuation route(s) will you be evacuated?

(Step-by-step details – add steps if required)

1. _____
2. _____
3. _____
4. _____

Where is your alternative safe refuge?

_____

If possible, please attach diagram of preferred route for assisted evacuation (location of person requiring assistance, alternative safe refuge and the path of travel to a place of safety to be shown).

Designated Assistance

Name: _____

Room: _____

Telephone Number: _____

Assistance Provided: _____

Name: _____

Room: _____

Telephone Number: _____

Assistance Provided: _____

Are your designated assistants trained in the emergency response procedures (including the evacuation procedures)?

☐ Yes ☐ No

Are your designated assistants trained in the evacuation equipment?

☐ Yes ☐ No

PEEP monitoring and review

Issue Date: ___/ ___/___ Review Date: __/ __/__

Occupant approved: _____. Date: ___/ ___/___

(signature)

Chief Warden: _____. Date: ___/ ___/___

(signature)

Appendix D – Emergency Evacuation Exercise Observers' Checklist

Emergency Evacuation Exercise Observer's Checklist

DATE:		
ADDRESS:		
AREA OF MIP WEST:		
EVACUATION SEQUENCE	**TIME**	
	HOURS	**MINUTES**
Alarm sounded		
Warden(s) respond		
Evacuation commenced		
Wardens report floor or area cleared		
Persons with disabilities accounted for		
Arrive at assembly area, safe place		
Wardens check personnel present (where appropriate)		
Evacuation completed		
Exercise terminated		
COMMENTS:		
OBSERVER NAME:		
SIGNED:		

Appendix E – Bomb Threat Checklist

Telephone Bomb Threat Checklist

REMEMBER KEEP CALM- DO NOT HANG UP

Name (print): _____

Telephone number: _____

Signature: _____

General Questions to Ask:

1. What is it?
2. When is the bomb going to explode?
3. Where did you put the bomb?
4. When did you put it there?
5. What does the bomb look like?
6. How will the bomb explode?
7. Why did you place the bomb?
8. Did you place the bomb?
9. What is your name?
10. Where are you?
11. What is your address?

Caller's Voice:

Accent (specify):

Impediments (specify):

Voice (loud, soft etc):

Speech (fast, slow etc):

Diction (clear, muffled):

Manner (calm, emotional):

Did you recognise the caller? If so, who do you think it is?

Was the caller familiar with the area?

Threat Language:

Well Spoken ☐

Incoherent ☐

Abusive ☐

Spontaneous ☐

Tape Recording ☐

Read from Script ☐

Did you tape the threat?

Exact wording of threat:

Chemical/ Biological Threat Questions:

1. What kind of substance is it?
2. How much of the substance is there?
3. How will the substance be released?
4. Is the substance liquid, powder or gas?

Bomb Threat Questions:

1. What type of bomb is it?
2. What is in the bomb?
3. What will make the bomb explode?

Background Noises:

Street Noise:

House Noise:

Aircraft:

Voices:

Music:

Machinery:

Other:

Local Call:

STD Call:

Call:

Date: _____

Time: _____

Duration: _____

Number Called: _____

*Obtained from Australian Standard (AS) 3745-2010 Planning for emergencies in facilities

Appendix F – Bushfire Management Plan

1. Introduction

This Bushfire Management Plan (BMP) identifies the bushfire protection measures that will be implemented for the development to reduce the risk from bushfire to an acceptable level.

An assessment of bushfire risk and bushfire threat was undertaken for the operation of the MPW Stage 2 development (Appendix W of the EIS, Bushfire Report- Arcadis, October 2016- Appendix A of this BMP).

Bushfire is a key external risk for the development as it is immediately adjacent to bushfire prone land. The vegetation to the west and east of the development, and to the south of the East Hills Railway Line, are bushfire prone lands and present a bushfire threat for the development and its occupants.

The bushfire evacuation procedure, specified in Section 4.11, has been completed in accordance with NSW Rural Fire Service Guide to Developing a Bushfire Emergency Management Plan (2014). In following the RFS guideline the adopted emergency response procedure (Section 4.11) involves the Chief Warden deciding the primary action based on fire danger rating and conditions on site (i.e. shelter in place or evacuate) and includes details on the shelter in place and evacuation procedures to be employed. Additionally, as specified in the RFS guideline, training of all occupants will be carried out in accordance with Section 8 of this Operational ERP.

The Bushfire Danger Period generally starts on 1 October and extends through to the following April. However, bushfires can occur at any time of the year. Prevailing weather conditions associated with the bushfire season are north-westerly winds accompanied by high daytime temperatures and low relative humidity.

Risk treatment is considered within the Bushfire Hazard Assessment (Section 3 of Bushfire Report- Arcadis, October 2016- Appendix A of this BMP) and addresses a range of bushfire mitigation measures including separation from the hazard, establishment and maintenance of asset protection zones, the provision of access, and water supply within the site.

Bushfires of low or moderate intensity often pose little threat to life, property and assets, but the potential for changes in wind direction can be a significant hazard. Bushfires that burn in heavy fuels, steep terrain or on hot, dry and windy days often spread rapidly, crown in forests, produce powerful convection columns and create extensive spot fires ahead of the fire front, often making their control impossible until weather conditions moderate.

As the fire danger reaches “extreme’, bushfires are often described as firestorms and become impossible to control. When the fire danger reaches ‘Catastrophic”, the risk of serious injury or death to people in the path of a bushfire increases significantly, and many properties and other community infrastructure can become difficult or impossible to defend.

In the event of a bushfire adjacent to the site, bushfire attack may be in the form of embers, radiant heat, smoke and direct flame in unmanaged areas of vegetation.

1.1. Planning for Bushfire Protection (2006)

The MPW Stage 2 development has been developed in consideration of RFS *Planning for Bushfire Protection (PBP) 2006* guideline. Section H5 and Section H6 detail how the asset protection zones and management measures within these zones comply with PBP 2006.

The final design of the MPW Stage 2 development includes a perimeter road running adjacent to the western boundary of the MPW Stage 2 development, which forms part of the APZ. All internal roads of the development have been designed to accommodate vehicles larger than employed by firefighting crews (Category 1 tanker) and will therefore be sufficient to provide the necessary width, turning circle radii and height clearance for emergency services access. Turning circles sufficient for B-doubles are provided at intervals along the perimeter road to allow safe egress.

A reticulated ring main system is installed along the western perimeter road for the MPW Stage 2 development. Hydrants valves will be accessible throughout the facility such that access is available for firefighting use in general areas of the site, as well as within the built facilities. The hydrant system performance has been designed to exceed the requirements of AS2419-2005 and as such meets the requirements of PBP 2006.

All electrical transmission lines within the MPW Stage 2 development installed underground, and gas infrastructure, are maintained in accordance with AS 1596 and in line with the requirements of PBP 2006.

2. Bushfire Hazard Rating

The bushfire Hazard Score and Bushfire Hazard Rating for the land to the north, east, south and west of the MPW Stage 2 development is described in Table F-1. Figure F-1 shows an extract of the Certified Liverpool Bushfire Prone Land Map showing the MPW Stage 2 development and the surrounding vegetation mapping.

Table F-1 Summary of Bushfire Threat and Hazard for the MPW Stage 2 development

Aspect	Vegetation within 140m of the MPW site	Vegetation Index Score	Slope Index Score	Bushfire Hazard Score	Bushfire Hazard Risk	Bushfire Threat	Explanation
North	The northern aspect to the site does not contain bushfire prone vegetation within 140m of the site.						
South	Slashed grassland & Dry Sclerophyll Low Open Forest	2.8	2	5.6	High	Moderate	
East	Managed land on MPE site; Dry Sclerophyll Low Open Forest	2.8	2	5.6	High	Moderate	The MPE site to the east does not contain bushfire pone vegetation, however, the Commonwealth land to the east contains Category 1 Bushfire Prone Vegetation.
West	Rehabilitated riparian corridor	2.8	2	5.6	High	High	

As discussed in the Bushfire Report (Arcadis, October 2016- Appendix A of this BMP), the potential bushfire threat during the operational stage of the MPW Stage 2 development will come from the rehabilitated forest vegetation within the Conservation Area west of the MPW Stage 2 development, adjacent to Georges River (see Figure F-1).

The bushfire threat to the development from the vegetation in the Conservation Zone is deemed to be high due to the potential for this vegetation to be involved in a fire event which occurs under a northwest, west or southwest wind influence. The threat will be expressed in the form of ember attack, radiant heat and possible flame contact – the latter depending on the separation width to buildings and other assets.

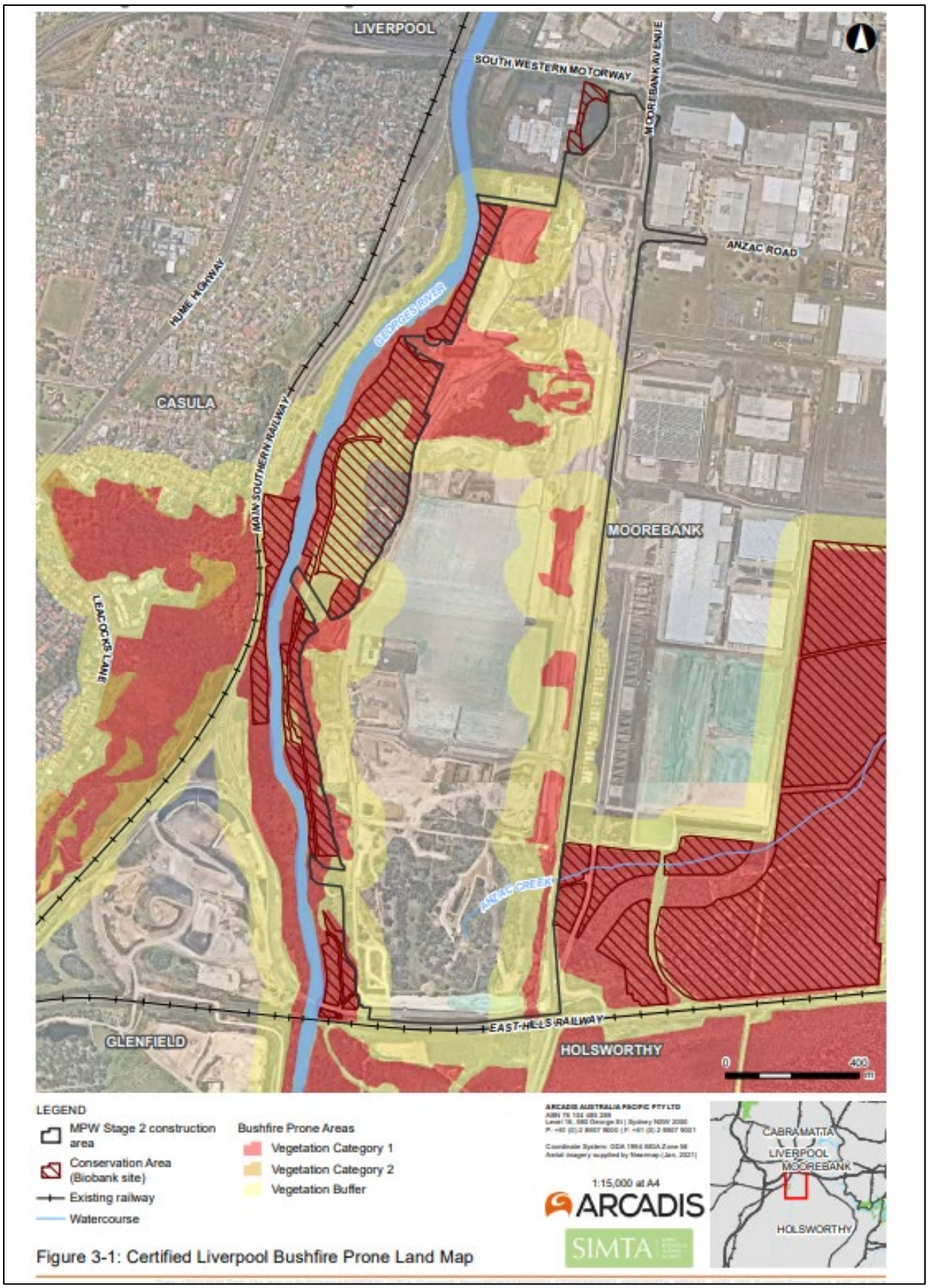
A potential threat also exists from the forest vegetation on the Commonwealth Land to the east of Moorebank Avenue and to the south of the East Hills Railway Line. The

separation provided by Moorebank Avenue to the east and the East Hills Railway Line to the south reduces the threat from these directions to moderate. The threat from the east and south would be moderate in terms of levels of potential ember attack and radiant heat. The Bushfire Report (Arcadis, October 2016- Appendix A of this BMP), determined that flame contact from the south is unlikely to occur. This remains the current case for the development.

The operation of the development is considered to be consistent with the objectives of Planning for Bushfire Protection 2006, in that it provides the following:

- Separation distances between fixed assets and bushfire prone vegetation which exceed the required defendable space widths
- Safe operational access and egress for emergency services and personnel is available
- Ongoing management and maintenance measures for bushfire protection
- Utility services have been provided to meet the needs of firefighters.

Figure F-1 Certified Liverpool Bushfire Prone Land Map (Source: MPW Stage 2 BRMP, 2021)



3. Bushfire Response Options

Given the size of the MPW Stage 2 development, sufficient space exists away from bushfire prone areas to limit the effects of bushfire attack. It is the position of Australian fire agencies that the safest action to protect life is for people to be away from the bushfire or threat of bushfire as early as possible. As such, there are two main responses to a bushfire event at or near the MPW Stage 2 development as prescribed by *Development Planning –A Guide to Developing a Bushfire Emergency Management and Evacuation Plan* (RFS 2014). These are described below and are dependent on the Fire Danger Rating and fire activity affecting or likely to affect the MPW Stage 2 development.

Where the Fire Danger Rating is "Low/Moderate or High" and a bushfire is observed in proximity to the site, the primary response will be to shelter on site. Where the Fire Danger Rating is greater than "High" and a bushfire is observed in proximity to the site, the primary response will be to evacuate. The Bushfire Emergency Response Procedures are detailed in Section 4.11.

Table F-2 Responses in relation to fire danger rating

RFS Fire Danger Rating	Action
Low / Moderate or High	1. Sheltering (Primary) 2. Evacuation (Secondary)
Very High, Severe, Extreme, Catastrophic Total Fire Ban declared	1. Evacuation (Primary) 2. Sheltering (Secondary)

4. Asset Protection Zones (APZs)

A landscape sub-contractor will be appointed to carry out the management measures to maintain Asset Protection Zones.

The facility APZs (Defendable Spaces) will be managed in accordance with the recommendations for an IPA as defined by Appendix 5 of *PBP 2006* and the Rural Fire Service publication "*Standards for Asset Protection Zones*".

4.1. Facility APZs

The APZ for the west side of the site was determined with a Fire Danger Index of 100 and a vegetation type of Forest wetlands and Riverine forest Keith category being used for calculation. A minimum APZ of 26m is required between the fixed assets (i.e. warehousing) and the bushfire prone vegetation within the Conservation Area (Table F-3). As shown in Figure F-2 the APZ will be situated wholly within the development and does not impact the riparian corridor within the Conservation Area.

Information was obtained from the Bushfire Protection Assessment for the MPW Stage 2 development, Moorebank Avenue, Moorebank (Australian Bushfire Protection Planners 2016) and MPW Stage 2 BRMP, 2021.

Table F-3 APZ/ minimum defendable space requirements

Aspect	Vegetation Type	Minimum defendable space / APZ	Defendable space provided in the final design
North	Managed curtilage	N/A	N/A
East	Managed curtilage	N/A	N/A
South	Managed curtilage	N/A	N/A
West	Forest wetlands and Riverine Forest	26m	Minimum 37m

As identified in Table F-3 and shown in Figure F-2, a minimum distance of 37m comprises the defendable space between the warehouse and edge of the development boundary. The separation between the warehouses and the bushfire prone vegetation exceeds the required defendable space of 26m, as such, the risk of flame contact, high levels of radiant heat and ember attack on the warehouses and buildings within the development is reduced.

Figure F-2 APZ within the MPW Stage 2 development (source: MPW Stage 2 BRMP, 2021)

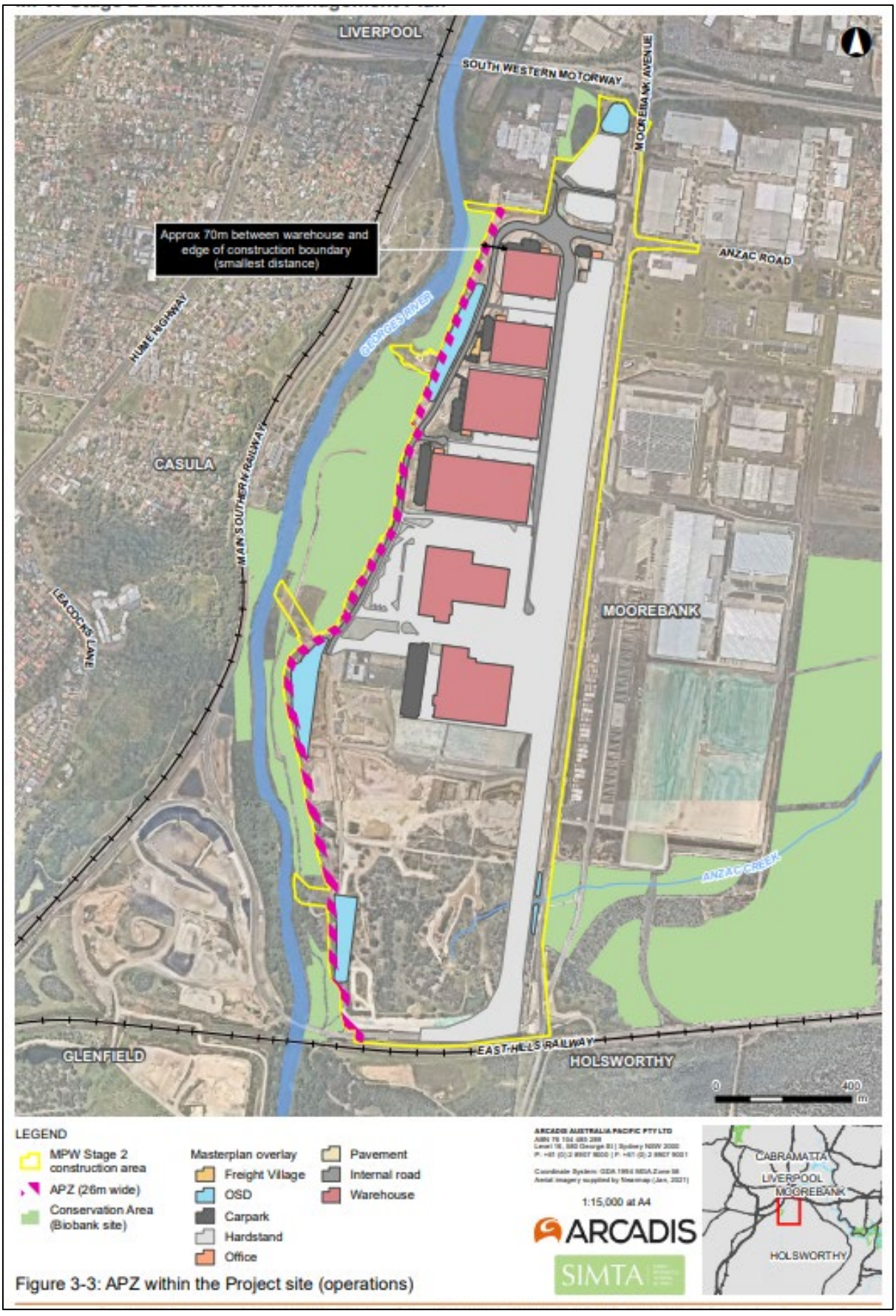


Figure 3-3: APZ within the Project site (operations)

4.2. Performance Standards of APZs

The entire development, in addition to the defendable space and APZ, will be managed as an Inner IPA in accordance with the Rural Fire Service publication *Standards for Asset Protection Zones (NSW RFS 2014)*.

Vegetation in IPAs should be managed to prevent flame contact and reduce radiant heat to buildings, minimise the potential for wind driven embers to cause ignition and reduce the effect of smoke on residents and fire-fighters. The RFS has established a series of performance standards and acceptable solutions to achieve this objective as detailed below.

The performance standards for the IPA as informed by Appendix 5 of PBP 2006 and RFS NSW *Standards for Asset Protection Zones* include the following:

4.2.1. Trees

- Canopy cover should be less than 15% (at maturity).
- Trees (at maturity) should not touch or overhang the building.
- Lower limbs should be removed up to a height of 2m above ground.
- Canopies should be separated by 2 to 5m.
- Preference should be given to smooth barked and evergreen trees.
- Trees and shrubs with the development will be maintained in such a manner that the vegetation is not continuous.

4.2.2. Shrubs

- Create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings.
- Shrubs should not be located under trees.
- Shrubs should not form more than 10% ground cover.
- Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.

4.2.3. Grass

- Grass should be kept mown (as a guide grass should be kept to no more than 100mm in height).
- Leaves and vegetation debris should be removed.

4.2.4. General

- Maintain a clear area of low-cut lawn or pavement adjacent to the buildings.
- Fuel loadings should be maintained to a maximum dry litter weight of less than 3 tonnes / hectares during the prescribed ‘Bushfire Danger Period’ (1 October – 31 March or as declared).
- Keep areas under fences, gates and trees, raked and clear of combustible fuels.
- Keep stormwater drainage pits free of leaf litter and combustibles.
- Maintain a policy of installing non-combustible fencing and retaining wall structures.
- Landscape species selection will be drawn from those that are considered to be species which are “fire retardant” and do not promulgate the spread of fire. Shrubs shall be placed so that they are clear of the facility by at least 5m, and introduced

trees and shrubs on site are not species that retain dead material. However, the removal of significant native species should be avoided.

- Avoid the use of flammable mulch in garden beds that adjoin the buildings.
- Any additional relevant hazard reduction measures as detailed in Step 4 of the *Standards for Asset Protection* (RFS NSW).
- Ongoing maintenance and landscaping measures as detailed in Step 6 of the *Standards for Asset Protection* (RFS NSW).

4.2.5. Weed Management

Where exotic species have naturalised or planted specimens have escaped garden beds into the bushland, they should be treated in accordance with the methods detailed Appendix C of MPW Stage 2 BRMP.

5. Management/ Maintenance Program

The bushfire risk throughout operations of the MPW Stage 2 development will be managed by taking practicable steps to prevent the occurrence of bushfires onsite, and to minimise the danger of the spread of a bushfire on or from any land under control or management of LOGOS. To achieve this objective, LOGOS will manage the development in accordance with the prescriptions outlined in Section H5.2, and any notice(s) issued by Liverpool Council or the Commissioner of the NSW Rural Fire Service, under the terms of Section 66 of the *Rural Fires Act 1997*.

Bushfire risk is currently being managed by the Contractor's Environmental Manager as part of the MPW Stage 2 Construction Bushfire Management Plan. As the operational stages progressively become operational, the maintenance of the bushfire protection measures will fall under the responsibility of the Site HSE Manager/Advisor

Table F-4 provides a management program and a guide to the timing of the works required to be implemented in the maintenance of the bushfire protection measures to the development.

Table F-4 Maintenance Program

Management Area		Management Prescription	Method	Timing
IPA	Landscaped Gardens	Minimise the accumulation of combustible fuels and accumulated ground litter to <3 tonnes / hectare	Manual removal of combustible fuels; pruning of shrubs.	Intervals not to exceed monthly in spring and summer
	Lawns and verges to roads	Minimise fine fuels to <3 tonnes / hectare	Mowing and slashing.	Intervals not to exceed monthly in spring and summer
	Trees	Provide 2m canopy separation between trees an maintain limbs 2m clear of ground and shrubs	Pruning	Annual Inspection with works undertaken in spring
Buildings	External surfaces / gutters	Check fire protection measures to buildings. Confirm placement and integrity of ember screening. Clean roof box gutters.	Visual check and repair if necessary. Manual removal of debris.	Annual Inspection Removal of combustible materials in gutters not to exceed monthly in spring and summer

6. Preparation for Bushfires

During the bushfire danger period including during periods of increased fire danger, the Operations Manager will monitor information sources for bushfire conditions by:

- Confirming and communicating the officially declared Bushfire Danger Period
- Checking Bushfire Danger Ratings and TOBAN declarations
- Listening to the local radio station, TV and/or monitoring the NSW Rural Fire Services website at www.rfs.nsw.gov.au for information on bushfire activity or fire danger ratings
- Knowing the daily Fire Danger Ratings for the area during declared Bushfire Danger Periods
- Staying alert for warnings such as Bushfire Alert levels issued by the RFS
- Watching for signs of fire, especially smoke or the smell of smoke
- Calling the RFS Bushfire Information Line on 1800 NSW RFS (1800 679 737)
- Downloading the free iPhone application from NSW Rural Services- Fires Near Me NSW and keeping aware of fire in the vicinity of the MPW Stage 2 development.

Information collected will be shared with site operations teams (nominated wardens) to facilitate any necessary preparations. This information would be co-ordinated through the Chief Warden in accordance with the Operations ERP.

7. Monitoring and Review

At the end of each bushfire season the Chief Warden will coordinate a meeting between the site wardens, the Asset Manager / Development Manager and the Site HSE Manager to review the effectiveness of relevant activities undertaken in preparation or response to a bushfire threat. Any opportunities for improvement will be canvassed and considered for inclusion in an update to this Operational BMP.

Records of the meeting and any consequential review would be maintained by the Asset Manager / Development Manager and documented in the revised Operational BMP.

Appendix A – Planning Context

1. Legal and Other Obligations

Details about the legislation, planning instruments and guidelines considered during development of this plan are listed below, with specific details provided in the Legislation Register within Appendix A of the CEMP.

- *Environment Protection and Biodiversity Act 1999* (Commonwealth) (*EPBC Act*)
- *Environmental Planning and Assessment Act 1979* (*EP&A Act*)
- *Environmental Planning and Assessment Regulation 2000*
- *Fisheries Management Act 1994*
- *Protection of the Environment Operations (Clean Air) Regulation 2010*
- *Protection of the Environment Operations Act 1997*
- *Protection of the Environment Operations (Waste) Regulation 2014*
- *Rural Fires Act 1997*.

The operation of the MPW Stage 2 development has been approved under both EP&A Act and the EPBC Act. Both these approvals have environmental conditions relevant to the emergency response during operation of the MPW Stage 2 development, which are discussed below.

1.1. EPBC Act Approval

The EPBC Act approval for the MPW Concept was granted by DotEE (now DCCEEW) in September 2016 (No. 2011/6086). This approval was provided for the impact of the MPW Project on listed threatened species and communities (Section 18 and 18A of the EPBC Act) and Commonwealth action (Section 28 of the EPBC Act).

The operation of the development will be consistent with the EPBC Act Approval (EPBC 2011/6086) conditions, where relevant. The EPBC Act Approval does not include any specific requirements for an ERP in the Conditions of Approval (CoA).

However, the EPBC Act Concept Approval Revised Environmental Management Measures (REMMs) have a group of mitigation measures relating to bushfire risk (REMM 7L – 7U), the majority of which are addressed in the MPW Stage 2 Bushfire Risk Management Plan (BRMP), The requirement for a fire safety and evacuation plan (as per REMM 7T) is addressed in Section 4.11 of this ERP.

This ERP is prepared in conjunction with the OEMP for MPW Stage 2 which is required under CoA 2 (EPBC 2011/6086).

1.2. EP&A Act Approval

The MPW Stage 2 was approved under Part 4, Division 4.7 of the EP&A Act. The MPW Stage 2 (SSD 7709) CoC include requirements to be addressed in this ERP. These requirements, and where they are addressed within the ERP are provided in Table A-1.

Table A-1 CoC of SSD 7709 (MPW Stage 2)

CoC	Requirement	Sections or documents where requirements addressed
B189	Bushfire asset protection zones must not be within the riparian corridor as defined in Condition B2 other than within areas greater than 40m from top of bank as determined in accordance with condition B2 where evidence is provided to the satisfaction of the Planning Secretary that riparian vegetation, and any trees over 3 m in height, will be retained.	**Appendix G** – Bushfire Management Plan
B190	The entire site must be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of the Planning for Bushfire Protection (RFS, 2006) and the NSW Rural Fire Service's document Standards for asset protection zones.	**Appendix G** – Bushfire Management Plan
B191	An updated Bushfire Risk Management Plan must be prepared by a suitably qualified person(s) demonstrating that the bushfire asset protection zones can be contained wholly within the development area and that management of the inner protection zone will not impact on the proposed Biodiversity Offset Area. The Bushfire Risk Management Plan must be submitted to the Planning Secretary prior to construction of permanent built surface works.	**Appendix G** – Bushfire Management Plan
B192	Public road access must comply with section 4.1.3(1) of Planning for Bushfire Protection (RFS, 2006) except for the requirement for through-access.	**Appendix G** – Bushfire Management Plan
B193	The provision of water, electricity and gas must comply with section 4.1.3 of Planning for Bushfire Protection (RFS, 2006).	**Appendix G** – Bushfire Management Plan
B194	Prior to the commencement of construction and operation, the Applicant must prepare an Emergency Response Plan(s) covering, but not limited to, flooding and bushfire. The Emergency Response Plan(s) must be consistent with Australian Standard AS3745 2010 Planning for Emergencies in Facilities and include details of:	This ERP follows the required layout as specified in Section 3 of AS3754 2010. Bushfire procedure addressed in Section 4.11. Flooding procedure addressed in Section 4.12.
B194 (a)	assembly points and evacuation routes;	Section 5, Figure 5-1
B194 (b)	evacuation and refuge protocols; and	Section 4.4, Section 4.11, Section 5

CoC	Requirement	Sections or documents where requirements addressed
B194 (c)	awareness training for employees and contractors.	Section 8
B195	The Bushfire Emergency and Evacuation Management Plan must:	**Appendix G** – Bushfire Management Plan
B195(i)	be prepared by a suitably qualified and experienced person(s),	**Appendix G** – Bushfire Management Plan
B195(ii)	be consistent with the Development Planning – A Guide to Developing a Bushfire Emergency Management and Evacuation Plan (RFS, 2014); and	**Appendix G** – Bushfire Management Plan
B195(iii)	a copy of the Operational Bushfire Emergency Evacuation Management Plan must be submitted to the Planning Secretary, NSW Rural Fire Service, Council and the Certifying Authority prior to occupation.	**For reference.**

A list of the Final Compilation of Mitigation Measures (FCMMs) relevant to this ERP are provided in Table A-2.

Table A-2 SSD 7709 (MPW Stage 2) FCMMs

FCMM	Requirement	Sections or documents whererequirements addressed
0C	The Operational Environmental Management Plan (OEMP), or equivalent, for the Proposal would be based on the following preliminary management plans:	Refer to OEMP
	Flooding and Emergency Response Plan (FERP)	This ERP (Section 4.12)
	Emergency Vehicle Response Plan	This ERP
1I	During operation, emergency vehicle access would be managed through an Emergency Vehicle Response Plan developed for the Proposal in consultation with the NSW Police Force, NSW Fire Brigade, NSW Rural Fire Service and the Ambulance Service of NSW, where appropriate.	Section 4

FCMM	Requirement	Sections or documents whererequirements addressed
5H	A Flood Emergency Response Plan (FERP) would be prepared and implemented for the operational phase of the Proposal. The FERP would take into consideration, site flooding and broader flood emergency response plans for the Georges River floodplains and Moorebank area. The FERP would also include the identification of an area of safe refuge within the Proposal site that would allow people to wait until hazardous flows have receded and safe evacuation is possible. The FERP would be prepared in consultation with the State Emergency Service.	Section 4.12
13B	The following mitigation measures would be implemented during the operation of the Proposal: • A bushfire management strategy, (including a fire safety and evacuation plan) or equivalent, would be prepared as part of the OEMP • Management of the landscaped areas within the Proposal site would be undertaken to maintain minimum dry fuels loads • The width, as required, of the Rail link connection would be maintained in a low fuel state • Protocols would be developed for the monitoring of train access/egress during high – catastrophic fire weather days, if required and in accordance with the bushfire management strategy.	Appendix G **– Bushfire Management Plan** Section 4.11

1.3. Additional standards and guidelines

Additional legislation, standards and guidelines relating to emergency response include:

- Australian Emergency Manuals Series, Manual 20: Flood Preparedness, Commonwealth of Australia 2009
- Australian Emergency Manuals Series, Manual 21: Flood Warning, Commonwealth of Australia 2009
- Australian Emergency Manuals Series, Manual 22: Flood Response, Commonwealth of Australia 2009
- Australian Standard AS3745:2010 – Planning for Emergencies in Facilities
- Australian Standard 2444:2001 – Portable fire extinguishers and fire blankets – Selection and location
- Australian Standard AS 1940 – The Storage and Handling of Flammable and Combustible Liquids
- Development Planning – A Guide to Developing a Bushfire Emergency Management and Evacuation Plan, December 2014
- Flood Emergency Response Planning Classification of Communities, Floodplain Risk Management Guideline, DPE (E&H) 2007

- New South Wales State Disaster Plan (DISPLAN 2010), State Emergency Management Committee,2010
- NSW Government's Floodplain Development Manual, DPE 2005
- Planning for Bushfire Protection 2006 – NSW RFS
- Standards for Asset Protection Zones – NSW RFS
- Stormwater and Flooding Report, MPE Stage 2 EIS, Arcadis, 2017.

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.

Appendix B – Preliminary Risk Assessment

This Risk matrix was prepared to identify the potential emergency threats that could endanger lives and property within the MPW Stage 2 development. The identified emergencies are listed in Section 3 and relevant emergency response procedures are identified in Section 4.

[NOTE: The EPC should review the risk matrix prior to implementation of the ERP. New threats should be considered in line with this approach and emergency response procedure should be developed for any threats]

Ref	Activity/Process/ Situation	Hazardous Event	Details/Context/Cause	Likelihood	Consequence	Inherent Risk Rating	Risk Control Measuresin Place	Likelihood	Consequence s	Residual Risk Rating
1	Hazardous substances and small quantity dangerous goods	Fire or chemical reaction	Small quantities of other general hazardoussubstances and dangerous goods onsite. Potential for incompatible goods to reactchemically.	Possible	Moderate	M15	• All materials to be listed in Hazardous Substances Register (including dangerous goods) and included in a folder with SDSfor all products • Fire extinguishers and spillkits onsite • Quantities stored onsite tobe kept to minimum • Items to be stored onbunding • Incompatible goods to beseparated. • Maintain the quantity of dangerous goods during operation in accordance with SSD approval.	Rare	Moderate	L6
		Spill	Small spill to ground due to inappropriatelystored or decanted – environmental contamination over time.	Possible	Minor	L9	• As above • Care to be taken when decanting products to avoidspills.	Possible	Minor	L9
2	Electrical equipment	Electrocution	Faulty electrical equipment Electrical equipment used in wet conditions.	Possible	Critical	H22	• All electrical equipment is tested in accordance with manufacturer specifications,and/or as required by legislation.	Rare	Critical	L12
		Fire	Faulty electrical equipment.	Possible	Moderate	M15	• As above.	Rare	Moderate	L6
3	Plant, heavy vehicle or or light vehicles operations including container handing operations	Fire	Malfunction of electrical parts Overheating of plant.	Unlikely	Moderate	L10	• Pre-start checks on mobile equipment and work requestsystem for faults • Preventative maintenanceprogram is in place.	Rare	Moderate	L6
		Plant collision	Reach stacker, forklifts, light vehicles and heavy vehicles are operating in the area. All vehicles are operating at low speeds.	Possible	Minor	H20	• Two-way communicationbetween all operators • MPW Stage 2 Operational Traffic and Access Management Plan • Driver's Code of Conduct. • Site induction in place • Heavy vehicles to stay within designated haulage routes and pathways.	Unlikely	Minor	L10

		Pedestrian Interactions	Drivers need to leave truck cabin to undo twistlocks on trailers. Plant operators walking to and from plant. Potential for unauthorised persons in area	Possible	Major	H20	• Two-way communicationbetween all operators • MPW Stage 2 OTAMP • Driver's Code of Conduct • Site induction in place • Heavy vehicles to stay within designated pathways • High Vis Personal Protective Equipment • Speed limited marked.	Unlikely	Major	M16
		Environmental Spill	Fuel/oil spill due to hose failure, maintenance activities onsite or refuelling of vehicles.	Likely	Minor	M13	• Preventative maintenanceprogram is in place • Pre-start checks on mobile equipment and work requestsystem for faults • Spill kits available.	Possible	Minor	L9
			Significant damage to a container resulting in a spill, for example if container was dropped or fell when loading/unloading truck or stacking/ unstacking from storage or traversing around development.	Unlikely	Minor	L5	• Site induction in plave • Spill kits available • Operator's competency verified and must hold high Risk ticket.	Rare	Minor	VL2
4	Personal Medical Emergency	Medical Emergency	Person collapses onsite or experiences apersonal medical emergency	Unlikely	Moderate	L10	• First aid trained personnel • First aid equipment.	Unlikely	Moderate	L10
5	General operation of facility	Derailment	A train derailment occurs within the MPW Stage 2 development	Rare	Critical	L16	• First aid trained personnel • Rail link to be maintained n accordance with all standards and legislation. • Best Practice technology to be implemented where feasible and reasonable..	Rare	Critical	L16
		Localised flooding event	Extended rainfall or significant rainfall event could cause localised erosion or flooding. In extreme event, the development may be temporarily isolated.	Rare	Major	L11	• Areas are graded if required to ensure good stormwater runoff. • Warehouse tenancies are to be built above the flood prone land and provide sufficient capacity for all occupants and visitors. • Assembly locations for gathering personnel in the event of flood nominated within this ERP as: • Within warehousing, or • Assembly within car park at Area Warden's instruction • Evacuation procedures and routes defined. • Occupants trained in evacuation procedures through site induction WHS procedures. Un-inducted	Rare	Moderate	L6

					personnel including delivery drivers/members of the public will be informed of the evacuation procedures and routes prior to evacuation. • Visual inspection to be undertaken following high rainfall event to identify potential safety risks.			
Bushfire event	Bushfire in surrounding vegetated land could impact on MPW Stage 2 development operations	Possible	Moderate	L10	• Asset protection zone in place • Appropriate landscaping to maintain a low surface fuel environment • BoM website to be monitored during periods of high bushfire risk	Unlikely	Moderate	L6
Lightning strike	Power pole or other extended structure hit by lighting. Potential for fire	Rare	Moderate	L6	• Fire extinguisher on site (if small fire/smoulder).	Rare	Moderate	L6
Strong winds	Container fall due to being stacked incorrectly	Possible	Moderate	M15	• Container will be stacked in accordance with all relevant standards.	Unlikely	Moderate	L10
Unauthorised access	Gates left open, site unsecured when unattended, break in.	Possible	Minor	L9	• Site is a 24/7 operation. • Securing fencing around development. • Secure access • Facility Security present onsite	Unlikely	Minor	L5
Drowning	Person entering an onsite detention (OSD) structure	Unlikely	Major	M16	• Fencing used to limit access. • Depth indicators and hazard signage provided. • Floatation devices are available to render assistance. • Design measures to allow people to walk or climb out of the OSD	Unlikely	Major	M16
Structural collaspe	Structural collapse of a warehouse, OSD walls or gantry crane	Rare	Critical	L12	• Site induction in place. • First aid trained personnel. • Best Practice technology to be implemented where feasible and reasonable. • Preventative maintenance program is in place.	Rare	Critical	L12

Appendix C – Personal Emergency Evacuation Plan Template

Personal Emergency Evacuation Plan

Relevant Details

Occupant Name _____

Location _____

Work Area/Building/Facility _____

Floor _____

Room Number _____

Is an Assistance Animal Involved? ☐ Yes ☐ No

If yes, please describe (e.g., guide dog, etc.) _____

Have you been trained in, or made aware of, the emergency evacuation procedures?

Area Induction ☐ Yes ☐ No

Personalised Evacuation Procedure ☐ Yes ☐ No

Have you practiced the egress procedure? ☐ Yes ☐ No

Awareness of Emergency

How do you wish to be informed of a building evacuation?

☐ Existing alarm system

☐ In person communication

☐ Mobile Phone

☐ Visual alarm system

☐ Pager/vibrating device

☐ SMS

☐ Other device or method (please specify) _____

How would you like to receive evacuation procedure updates?

☐ Email

☐ Personal update

☐ Braille

☐ Text

☐ Other (please specify) _____

What type of assistance do you require?

☐ Walking guidance or aid

☐ Wheelchair assistance

☐ Other (please specify) _____

What equipment will you require that emergency services should be aware of?

☐ Manual wheelchair

☐ Harness

☐ Other (please specify) _____

Egress Procedure

By what method and by which evacuation route(s) will you be evacuated?

(Step-by-step details – add steps if required)

1. _____
2. _____
3. _____
4. _____

Where is your alternative safe refuge?

_____

If possible, please attach diagram of preferred route for assisted evacuation (location of person requiring assistance, alternative safe refuge and the path of travel to a place of safety to be shown).

Designated Assistance

Name: _____

Room: _____

Telephone Number: _____

Assistance Provided: _____

Name: _____

Room: _____

Telephone Number: _____

Assistance Provided: _____

Are your designated assistants trained in the emergency response procedures (including the evacuation procedures)?

☐ Yes ☐ No

Are your designated assistants trained in the evacuation equipment?

☐ Yes ☐ No

PEEP monitoring and review

Issue Date: ___/ ___/___ Review Date: ___/ ___/___

Occupant approved: _____. Date: ___/ ___/___

(signature)

Chief Warden: _____. Date: ___/ ___/___

(signature)

Appendix D – Emergency Evacuation Exercise Observers' Checklist

Emergency Evacuation Exercise Observer's Checklist

DATE:		
ADDRESS:		
AREA OF MIP WEST:		
EVACUATION SEQUENCE	**TIME**	
	HOURS	**MINUTES**
Alarm sounded		
Warden(s) respond		
Evacuation commenced		
Wardens report floor or area cleared		
Persons with disabilities accounted for		
Arrive at assembly area, safe place		
Wardens check personnel present (where appropriate)		
Evacuation completed		
Exercise terminated		
COMMENTS:		
OBSERVER NAME:		
SIGNED:		

Appendix E – Bomb Threat Checklist

Telephone Bomb Threat Checklist

REMEMBER KEEP CALM- DO NOT HANG UP

Name (print): _____

Telephone number: _____

Signature: _____

General Questions to Ask:

1. What is it?
2. When is the bomb going to explode?
3. Where did you put the bomb?
4. When did you put it there?
5. What does the bomb look like?
6. How will the bomb explode?
7. Why did you place the bomb?
8. Did you place the bomb?
9. What is your name?
10. Where are you?
11. What is your address?

Caller's Voice:

Accent (specify):

Impediments (specify):

Voice (loud, soft etc):

Speech (fast, slow etc):

Diction (clear, muffled):

Manner (calm, emotional):

Did you recognise the caller? If so, who do you think it is?

Was the caller familiar with the area?

Threat Language:

Well Spoken ☐

Incoherent ☐

Abusive ☐

Spontaneous ☐

Tape Recording ☐

Read from Script ☐

Did you tape the threat?

Exact wording of threat:

Chemical/ Biological Threat Questions:

1. What kind of substance is it?
2. How much of the substance is there?
3. How will the substance be released?
4. Is the substance liquid, powder or gas?

Bomb Threat Questions:

1. What type of bomb is it?
2. What is in the bomb?
3. What will make the bomb explode?

Background Noises:

Street Noise:

House Noise:

Aircraft:

Voices:

Music:

Machinery:

Other:

Local Call:

STD Call:

Call:

Date: _____

Time: _____

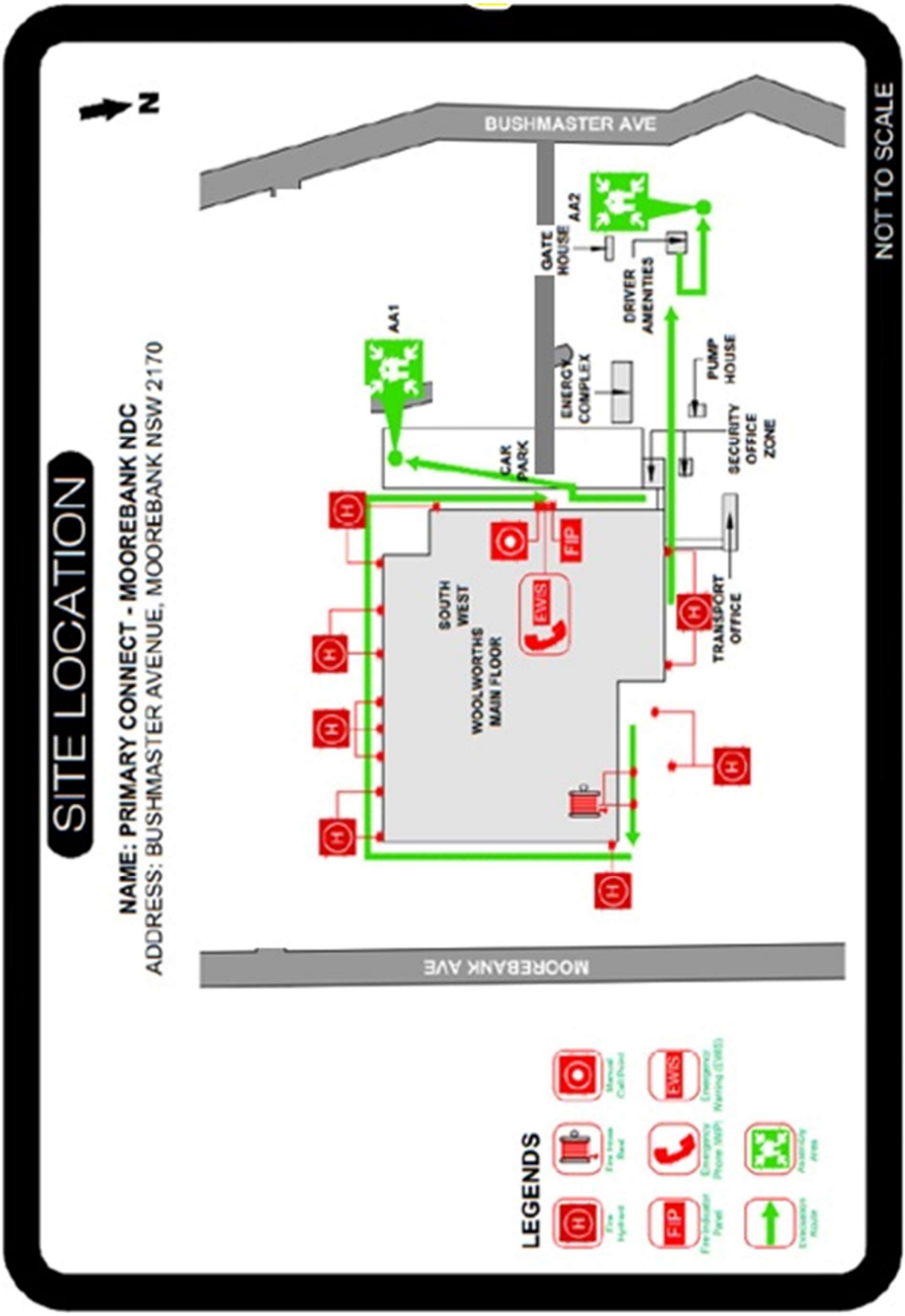
Duration: _____

Number Called: _____

*Obtained from Australian Standard (AS) 3745-2010 Planning for emergencies in facilities

Appendix F – Evacuation Diagrams

Evacuation Diagram – MONDC



Appendix G – Bushfire Management Plan

1. Introduction

This Bushfire Management Plan (BMP) identifies the bushfire protection measures that will be implemented for the development to reduce the risk from bushfire to an acceptable level.

An assessment of bushfire risk and bushfire threat was undertaken for the operation of the MPW Stage 2 development (Appendix W of the EIS, Bushfire Report- Arcadis, October 2016- Appendix A of this BMP).

Bushfire is a key external risk for the development as it is immediately adjacent to bushfire prone land. The vegetation to the west and east of the development, and to the south of the East Hills Railway Line, are bushfire prone lands and present a bushfire threat for the development and its occupants.

The bushfire evacuation procedure, specified in Section 4.11, has been completed in accordance with NSW Rural Fire Service Guide to Developing a Bushfire Emergency Management Plan (2014). In following the RFS guideline the adopted emergency response procedure (Section 4.11) involves the Chief Warden deciding the primary action based on fire danger rating and conditions on site (i.e. shelter in place or evacuate) and includes details on the shelter in place and evacuation procedures to be employed. Additionally, as specified in the RFS guideline, training of all occupants will be carried out in accordance with Section 8 of this Operational ERP.

The Bushfire Danger Period generally starts on 1 October and extends through to the following April. However, bushfires can occur at any time of the year. Prevailing weather conditions associated with the bushfire season are north-westerly winds accompanied by high daytime temperatures and low relative humidity.

Risk treatment is considered within the Bushfire Hazard Assessment (Section 3 of Bushfire Report- Arcadis, October 2016- Appendix A of this BMP) and addresses a range of bushfire mitigation measures including separation from the hazard, establishment and maintenance of asset protection zones, the provision of access, and water supply within the site.

Bushfires of low or moderate intensity often pose little threat to life, property and assets, but the potential for changes in wind direction can be a significant hazard. Bushfires that burn in heavy fuels, steep terrain or on hot, dry and windy days often spread rapidly, crown in forests, produce powerful convection columns and create extensive spot fires ahead of the fire front, often making their control impossible until weather conditions moderate.

As the fire danger reaches “extreme’, bushfires are often described as firestorms and become impossible to control. When the fire danger reaches ‘Catastrophic”, the risk of serious injury or death to people in the path of a bushfire increases significantly, and many properties and other community infrastructure can become difficult or impossible to defend.

In the event of a bushfire adjacent to the site, bushfire attack may be in the form of embers, radiant heat, smoke and direct flame in unmanaged areas of vegetation.

1.1. Planning for Bushfire Protection (2006)

The MPW Stage 2 development has been developed in consideration of RFS *Planning for Bushfire Protection (PBP) 2006* guideline. Section H5 and Section H6 detail how the asset protection zones and management measures within these zones comply with PBP 2006.

The final design of the MPW Stage 2 development includes a perimeter road running adjacent to the western boundary of the MPW Stage 2 development, which forms part of the APZ. All internal roads of the development have been designed to accommodate vehicles larger than employed by firefighting crews (Category 1 tanker) and will therefore be sufficient to provide the necessary width, turning circle radii and height clearance for emergency services access. Turning circles sufficient for B-doubles are provided at intervals along the perimeter road to allow safe egress.

A reticulated ring main system is installed along the western perimeter road for the MPW Stage 2 development. Hydrants valves will be accessible throughout the facility such that access is available for firefighting use in general areas of the site, as well as within the built facilities. The hydrant system performance has been designed to exceed the requirements of AS2419-2005 and as such meets the requirements of PBP 2006.

All electrical transmission lines within the MPW Stage 2 development installed underground, and gas infrastructure, are maintained in accordance with AS 1596 and in line with the requirements of PBP 2006.

2. Bushfire Hazard Rating

The bushfire Hazard Score and Bushfire Hazard Rating for the land to the north, east, south and west of the MPW Stage 2 development is described in Table G-1. Figure G-1 shows an extract of the Certified Liverpool Bushfire Prone Land Map showing the MPW Stage 2 development and the surrounding vegetation mapping.

Table G-1 Summary of Bushfire Threat and Hazard for the MPW Stage 2 development

Aspect	Vegetation within 140m of the MPW site	Vegetation Index Score	Slope Index Score	Bushfire Hazard Score	Bushfire Hazard Risk	Bushfire Threat	Explanation
North	The northern aspect to the site does not contain bushfire prone vegetation within 140m of the site.						
South	Slashed grassland & Dry Sclerophyll Low Open Forest	2.8	2	5.6	High	Moderate	
East	Managed land on MPE site; Dry Sclerophyll Low Open Forest	2.8	2	5.6	High	Moderate	The MPE site to the east does not contain bushfire pone vegetation, however, the Commonwealth land to the east contains Category 1 Bushfire Prone Vegetation.
West	Rehabilitated riparian corridor	2.8	2	5.6	High	High	

As discussed in the Bushfire Report (Arcadis, October 2016- Appendix A of this BMP), the potential bushfire threat during the operational stage of the MPW Stage 2 development will come from the rehabilitated forest vegetation within the Conservation Area west of the MPW Stage 2 development, adjacent to Georges River (see Figure G-1).

The bushfire threat to the development from the vegetation in the Conservation Zone is deemed to be high due to the potential for this vegetation to be involved in a fire event which occurs under a northwest, west or southwest wind influence. The threat will be expressed in the form of ember attack, radiant heat and possible flame contact – the latter depending on the separation width to buildings and other assets.

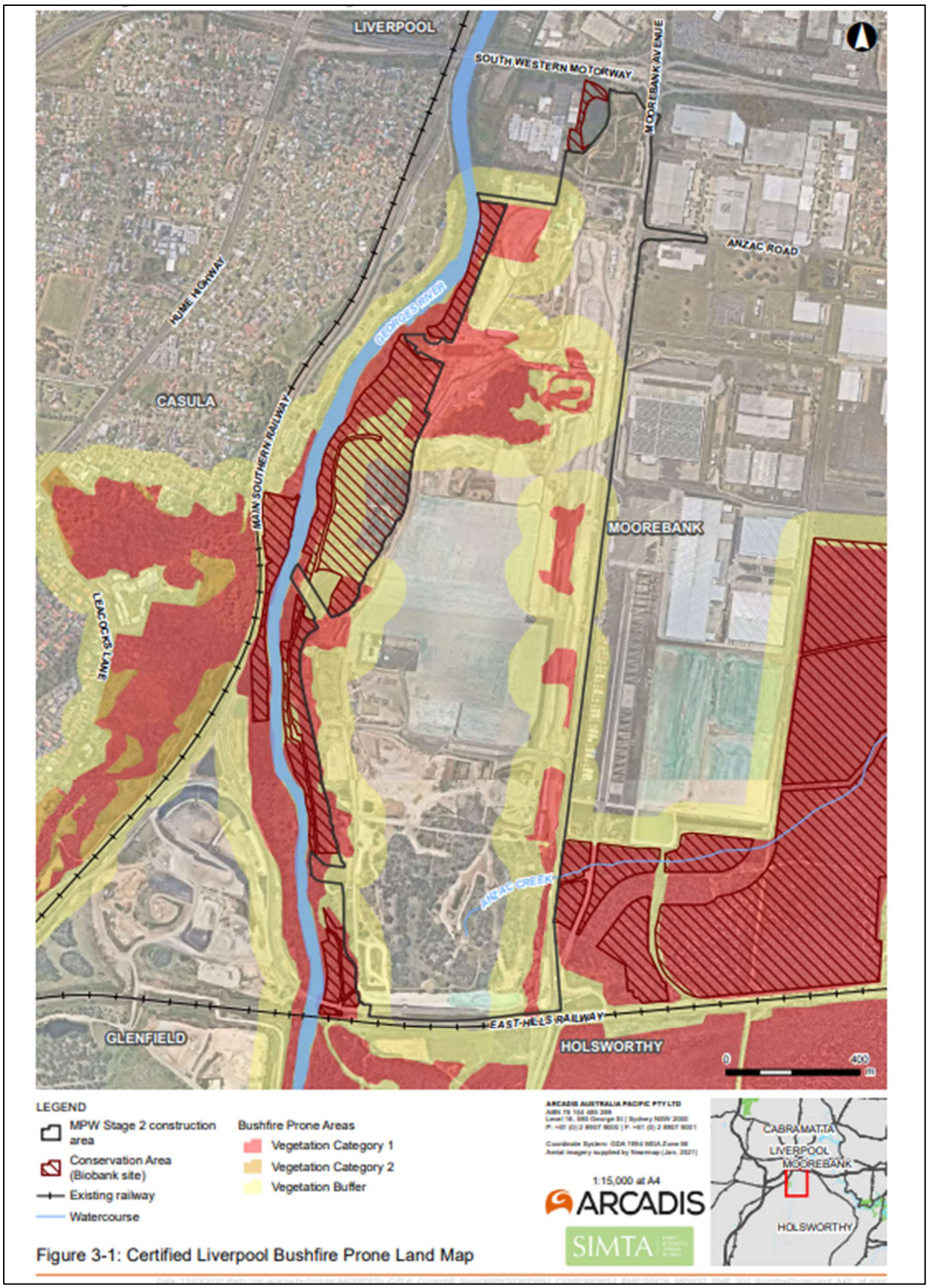
A potential threat also exists from the forest vegetation on the Commonwealth Land to the east of Moorebank Avenue and to the south of the East Hills Railway Line. The

separation provided by Moorebank Avenue to the east and the East Hills Railway Line to the south reduces the threat from these directions to moderate. The threat from the east and south would be moderate in terms of levels of potential ember attack and radiant heat. The Bushfire Report (Arcadis, October 2016- Appendix A of this BMP), determined that flame contact from the south is unlikely to occur. This remains the current case for the development.

The operation of the development is considered to be consistent with the objectives of Planning for Bushfire Protection 2006, in that it provides the following:

- Separation distances between fixed assets and bushfire prone vegetation which exceed the required defendable space widths
- Safe operational access and egress for emergency services and personnel is available
- Ongoing management and maintenance measures for bushfire protection
- Utility services have been provided to meet the needs of firefighters.

Figure G-1 Certified Liverpool Bushfire Prone Land Map (Source: MPW Stage 2 BRMP, 2021)



3. Bushfire Response Options

Given the size of the MPW Stage 2 development, sufficient space exists away from bushfire prone areas to limit the effects of bushfire attack. It is the position of Australian fire agencies that the safest action to protect life is for people to be away from the bushfire or threat of bushfire as early as possible. As such, there are two main responses to a bushfire event at or near the MPW Stage 2 development as prescribed by *Development Planning –A Guide to Developing a Bushfire Emergency Management and Evacuation Plan* (RFS 2014). These are described below and are dependent on the Fire Danger Rating and fire activity affecting or likely to affect the MPW Stage 2 development.

Where the Fire Danger Rating is "Low/Moderate or High" and a bushfire is observed in proximity to the site, the primary response will be to shelter on site. Where the Fire Danger Rating is greater than "High" and a bushfire is observed in proximity to the site, the primary response will be to evacuate. The Bushfire Emergency Response Procedures are detailed in Section 4.11.

Table G-2 Responses in relation to fire danger rating

RFS Fire Danger Rating	Action
Low / Moderate or High	1. Sheltering (Primary) 2. Evacuation (Secondary)
Very High, Severe, Extreme, Catastrophic Total Fire Ban declared	1. Evacuation (Primary) 2. Sheltering (Secondary)

4. Asset Protection Zones (APZs)

A landscape sub-contractor will be appointed to carry out the management measures to maintain Asset Protection Zones.

The facility APZs (Defendable Spaces) will be managed in accordance with the recommendations for an IPA as defined by Appendix 5 of *PBP 2006* and the Rural Fire Service publication "*Standards for Asset Protection Zones*".

4.1. Facility APZs

The APZ for the west side of the site was determined with a Fire Danger Index of 100 and a vegetation type of Forest wetlands and Riverine forest Keith category being used for calculation. A minimum APZ of 26m is required between the fixed assets (i.e. warehousing) and the bushfire prone vegetation within the Conservation Area (Table G-3). As shown in Figure G-2 the APZ will be situated wholly within the development and does not impact the riparian corridor within the Conservation Area.

Information was obtained from the Bushfire Protection Assessment for the MPW Stage 2 development, Moorebank Avenue, Moorebank (Australian Bushfire Protection Planners 2016) and MPW Stage 2 BRMP, 2021.

Table G-3 APZ/ minimum defendable space requirements

Aspect	Vegetation Type	Minimum defendable space / APZ	Defendable space provided in the final design
North	Managed curtilage	N/A	N/A
East	Managed curtilage	N/A	N/A
South	Managed curtilage	N/A	N/A
West	Forest wetlands and Riverine Forest	26m	Minimum 37m

As identified in Table G-3 and shown in Figure G-2, a minimum distance of 37m comprises the defendable space between the warehouse and edge of the development boundary. The separation between the warehouses and the bushfire prone vegetation exceeds the required defendable space of 26m, as such, the risk of flame contact, high levels of radiant heat and ember attack on the warehouses and buildings within the development is reduced.

Figure G-2 APZ within the MPW Stage 2 development (source: MPW Stage 2 BRMP, 2021)

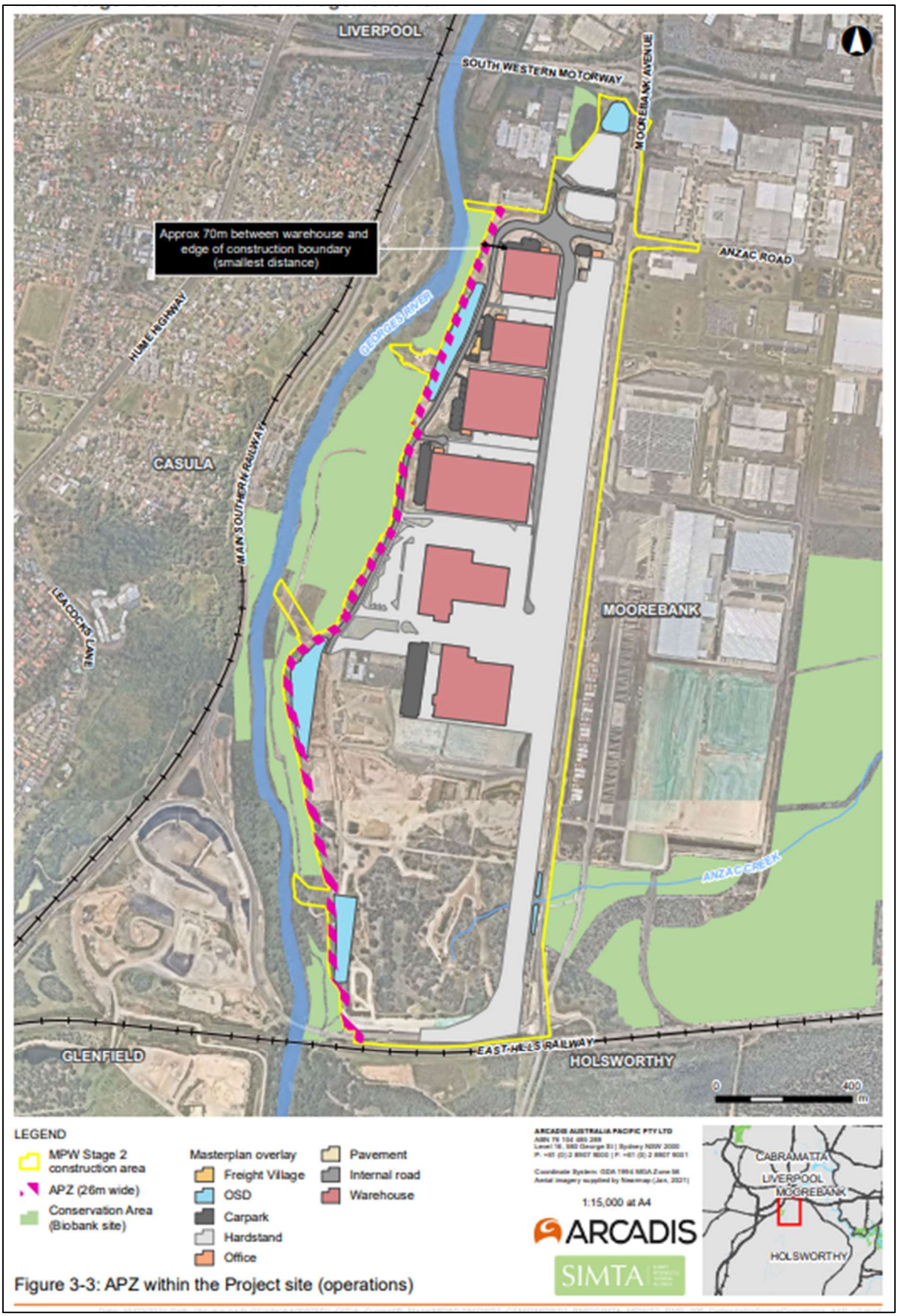


Figure 3-3: APZ within the Project site (operations)

4.2. Performance Standards of APZs

The entire development, in addition to the defendable space and APZ, will be managed as an Inner IPA in accordance with the Rural Fire Service publication *Standards for Asset Protection Zones (NSW RFS 2014)*.

Vegetation in IPAs should be managed to prevent flame contact and reduce radiant heat to buildings, minimise the potential for wind driven embers to cause ignition and reduce the effect of smoke on residents and fire-fighters. The RFS has established a series of performance standards and acceptable solutions to achieve this objective as detailed below.

The performance standards for the IPA as informed by Appendix 5 of PBP 2006 and RFS NSW *Standards for Asset Protection Zones* include the following:

4.2.1. Trees

- Canopy cover should be less than 15% (at maturity).
- Trees (at maturity) should not touch or overhang the building.
- Lower limbs should be removed up to a height of 2m above ground.
- Canopies should be separated by 2 to 5m.
- Preference should be given to smooth barked and evergreen trees.
- Trees and shrubs with the development will be maintained in such a manner that the vegetation is not continuous.

4.2.2. Shrubs

- Create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings.
- Shrubs should not be located under trees.
- Shrubs should not form more than 10% ground cover.
- Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.

4.2.3. Grass

- Grass should be kept mown (as a guide grass should be kept to no more than 100mm in height).
- Leaves and vegetation debris should be removed.

4.2.4. General

- Maintain a clear area of low-cut lawn or pavement adjacent to the buildings.
- Fuel loadings should be maintained to a maximum dry litter weight of less than 3 tonnes / hectares during the prescribed ‘Bushfire Danger Period’ (1 October – 31 March or as declared).
- Keep areas under fences, gates and trees, raked and clear of combustible fuels.
- Keep stormwater drainage pits free of leaf litter and combustibles.
- Maintain a policy of installing non-combustible fencing and retaining wall structures.
- Landscape species selection will be drawn from those that are considered to be species which are “fire retardant” and do not promulgate the spread of fire. Shrubs shall be placed so that they are clear of the facility by at least 5m, and introduced

trees and shrubs on site are not species that retain dead material. However, the removal of significant native species should be avoided.

- Avoid the use of flammable mulch in garden beds that adjoin the buildings.
- Any additional relevant hazard reduction measures as detailed in Step 4 of the *Standards for Asset Protection* (RFS NSW).
- Ongoing maintenance and landscaping measures as detailed in Step 6 of the *Standards for Asset Protection* (RFS NSW).

4.2.5. Weed Management

Where exotic species have naturalised or planted specimens have escaped garden beds into the bushland, they should be treated in accordance with the methods detailed Appendix C of MPW Stage 2 BRMP.

5. Management/ Maintenance Program

The bushfire risk throughout operations of the MPW Stage 2 development will be managed by taking practicable steps to prevent the occurrence of bushfires onsite, and to minimise the danger of the spread of a bushfire on or from any land under control or management of LOGOS. To achieve this objective, LOGOS will manage the development in accordance with the prescriptions outlined in Section H5.2, and any notice(s) issued by Liverpool Council or the Commissioner of the NSW Rural Fire Service, under the terms of Section 66 of the *Rural Fires Act 1997*.

Bushfire risk is currently being managed by the Contractor's Environmental Manager as part of the MPW Stage 2 Construction Bushfire Management Plan. As the operational stages progressively become operational, the maintenance of the bushfire protection measures will fall under the responsibility of the Site HSE Manager/Advisor

Table G-4 provides a management program and a guide to the timing of the works required to be implemented in the maintenance of the bushfire protection measures to the development.

Table G-4 Maintenance Program

Management Area		Management Prescription	Method	Timing
IPA	Landscaped Gardens	Minimise the accumulation of combustible fuels and accumulated ground litter to <3 tonnes / hectare	Manual removal of combustible fuels; pruning of shrubs.	Intervals not to exceed monthly in spring and summer
	Lawns and verges to roads	Minimise fine fuels to <3 tonnes / hectare	Mowing and slashing.	Intervals not to exceed monthly in spring and summer
	Trees	Provide 2m canopy separation between trees an maintain limbs 2m clear of ground and shrubs	Pruning	Annual Inspection with works undertaken in spring
Buildings	External surfaces / gutters	Check fire protection measures to buildings. Confirm placement and integrity of ember screening. Clean roof box gutters.	Visual check and repair if necessary. Manual removal of debris.	Annual Inspection Removal of combustible materials in gutters not to exceed monthly in spring and summer

6. Preparation for Bushfires

During the bushfire danger period including during periods of increased fire danger, the Operations Manager will monitor information sources for bushfire conditions by:

- Confirming and communicating the officially declared Bushfire Danger Period
- Checking Bushfire Danger Ratings and TOBAN declarations
- Listening to the local radio station, TV and/or monitoring the NSW Rural Fire Services website at www.rfs.nsw.gov.au for information on bushfire activity or fire danger ratings
- Knowing the daily Fire Danger Ratings for the area during declared Bushfire Danger Periods
- Staying alert for warnings such as Bushfire Alert levels issued by the RFS
- Watching for signs of fire, especially smoke or the smell of smoke
- Calling the RFS Bushfire Information Line on 1800 NSW RFS (1800 679 737)
- Downloading the free iPhone application from NSW Rural Services- Fires Near Me NSW and keeping aware of fire in the vicinity of the MPW Stage 2 development.

Information collected will be shared with site operations teams (nominated wardens) to facilitate any necessary preparations. This information would be co-ordinated through the Chief Warden in accordance with the Operations ERP.

7. Monitoring and Review

At the end of each bushfire season the Chief Warden will coordinate a meeting between the site wardens, the Asset Manager / Development Manager and the Site HSE Manager to review the effectiveness of relevant activities undertaken in preparation or response to a bushfire threat. Any opportunities for improvement will be canvassed and considered for inclusion in an update to this Operational BMP.

Records of the meeting and any consequential review would be maintained by the Asset Manager / Development Manager and documented in the revised Operational BMP.