CONSTRUCTION BUSHFIRE MANAGEMENT PLAN

Moorebank Precinct East Stage 2

06 AUGUST 2020

SYDNEY INTERMODAL TERMINAL ALLIANCE MOOREBANK PRECINCT EAST STAGE 2

Construction Bushfire Management Plan

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REVISIONS

Revision	Date	Description	Prepared by	Approved by
001	05/02/2018	Draft for submission to ER	[redacted]	[redacted]
002	03/04/2018	Update to exclude Bushfire Evacuation and Emergency Plan	[redacted]	[redacted]
003	14/06/2018	Updated to address DPE comments on qualifications of author of this plan	[redacted]	[redacted]
004	27/09/2018	Updated to reflect issue of Moorebank Precinct EPL and RfMA 002.	[redacted]	[redacted]
005	21/12/2018	RfMA 007 – Update to compliance and non-compliance definitions and inclusion of cumulative impacts required by EPBC CoA (2011/6029)	[redacted]	[redacted]
006	24/10/2019	Minor updates associated with: • RfMA 02A – Additional construction compounds to support warehouse construction • RfMA 008 – MAUW construction compound • RfMA 012 – Additional temporary construction access points • RfMA 014 – Suitable spoil importation • RfMA 015 – Moorebank Precinct EPL • RfMA 019 – Clarification of definitions for Early Works and Construction Phase A activities • RfMA 021 – New parking area	[redacted]	[redacted]
007	21/11/2019	Update to address ER comments; removal of Construction Phase A updates associated with RfMA 019 and minor updates associated with RfMA 016 – Temporary access time extension.	[redacted]	[redacted]
008	20/12/2019	Updated to address ER comments, and the approved CTAMP-B	[redacted]	[redacted]
009	16/01/2020	Updated to address ER comments	[redacted]	[redacted]
010	06/08/2020	Minor updates associated with: • RfMA-018 – MAUW boundary change • SSD 7628-Mod 2 approval	[redacted] [redacted]	[redacted] [redacted]

ACRONYMS AND DEFINITIONS

Terms	Explanation
APZ	Asset Protection Zone
BEEP	Bushfire Emergency and Evacuation Plan
CBMP	Construction Bushfire Management Plan
CEMP	Construction Environmental Management Plan
CoCs	Conditions of Consent
CCoA	Commonwealth Conditions of Approvals
CMM	Commonwealth Mitigation Measures
Contractor's CLM	Contractor's Community Liaison Manager
Contractor's CM	Contractor's Construction Manager
Contractor's EM	Contractor's Environmental Manager
Contractor's PM	Contractor's Project Manager
CPCoC	Concept Plan Conditions of Consent
DJLU	Defence Joint Logistics Unit
DP&E	NSW Department of Planning & Environment
EIS	Environmental Impact Statement
ENM	Excavated natural material
EPA	Environment Protection Authority
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
EPL	Environment Protection Licence
ER	Environmental Representative
ERSED	Erosion and sedimentation
EWCDWMP	Early Works Construction Demolition and Waste Management Plan
EWEMP	Early Works Environmental Management Plan
EWMS	Environmental work method statements
FCMMs	Final Compilation of Mitigation Measures
GFA	Gross floor area

Terms	Explanation
IMEX	Import Export Terminal. Includes the following key components: • Truck processing, holding and loading areas - entrance and exit from Moorebank Avenue • Rail loading and container storage areas – installation of four rail sidings with adjacent container storage area serviced by manual handling equipment initially and overhead gantry cranes progressively. • Administration facility and associated car parking- light vehicle access from Moorebank Avenue.
IMT facility	The IMT facility includes the construction of the following key components together comprising the Intermodal Terminal (IMT): • Truck processing and loading areas • Rail loading and container storage areas • Administration facility and associated car parking.
IPA	Inner Protection Area
Km	kilometre
LGA	Local Government Area
M	metre
mg/L	Milligram per litre
Mm	millimetre
mAHD	metres Australian Height Datum
Moorebank Logistics Park	Encompasses both Moorebank Precinct East and Moorebank Precinct West Precincts
MPE	Moorebank Precinct East
MPE Concept EIS	The Environmental Impact Statement prepared to support the application for approval of the MPE Concept Plan under the Environmental Planning and Assessment Act 1979.
MPE Concept Plan Approval	MPE Concept Approval (MP 10_0193), granted by DP&E 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.
MPE EPBC Approval	Commonwealth Approval (No. 2011/6229) granted in March 2014 under the Environment Protection and Biodiversity Conservation Act 1999, for the impact of the MPE Project on listed threatened species and communities (sections 18 and 18A of the EPBC Act) and Commonwealth land (sections 26 and 27A of the EPBC Act).
MPE Project	The MPE Intermodal Terminal Facility as approved under the MPE Concept Approval (MP 10_0193) and the MPE EPBC Approval (2011/6229).
MPE site	Including the former DSNDC site and the land owned by SIMTA which is subject to the MPE Concept Plan Approval (Lot 1 DP1048263). The MPE site does not include the rail corridor, which relates to the land on which the rail link is to be constructed.
MPE Stage 1 Project	MPE Stage 1 Project (SSD 14-6766) for the development of the Intermodal terminal facility at Moorebank. This reference also includes associated conditions of approval and

Terms	Explanation
	environmental management measures which form part of the documentation for the approval.
MPE Stage 2 EIS	Moorebank Precinct East Stage 2 Proposal – Environmental Impact Statement publicly exhibited between 13 December 2016 and 24 February 2017.
MPE Stage 2 RtS	Moorebank Precinct East Stage 2 Proposal – Response to Submissions Report (July 2017), prepared in response to the submissions received regarding the MPE Stage 2 Proposal.
MPW	Moorebank Precinct West
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent SSD 7628 Conditions of Consent or EPBC Act Approval (EPBC 2011/6229) Conditions of Approval but is not an incident
Non-conformance	Observations or actions that are not in strict accordance with the CEMP and the aspect specific sub-plan
OEH	Office of Environment and Heritage
OEMP	Operations Environmental Management Plan
PAC	Planning Assessment Commission
Personnel	Construction Contractor and sub-contractor's staff
POEO Act	Protection of the Environment Operations Act 1997
RDO	Rostered Day Off
RtS	Response to Submissions
SIMTA	Sydney Intermodal Terminal Alliance
SSD	State significant development
The Project	Stage 2 of the MPE Concept Approval (MP 10_0193) approved as the MPE Stage 2 Project (SSD 7628) and the Modification 2 Approval under SSD 7628. It involves the construction and operation of warehousing and distribution facilities on the MPE site and upgrades to approximately 2.1 kilometres of Moorebank Avenue.
VENM	Virgin excavated natural material

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1 INTRODUCTION

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stage 2 of the Moorebank Precinct East (MPE) Project (SSD 7628), which comprises the second stage of development under the MPE Concept Consent (MP10_0193). This was subsequently modified and approved under SSD 7628 Modification 2 (SSD 7628-Mod 2). This Construction Bushfire Management Plan (CBMP) has been developed to manage bushfire risks during the construction phase of Stage 2 of the MPE Project ('the Project').

Within this plan, a strategy has been established to demonstrate the Construction Contractor's approach to the management of imported spoil. This CBMP addresses the relevant requirements of the Project Consent, including the Environmental Impact Statement (EIS), Response to Submissions (RtS) and Minister's Conditions of Consent (CoCs), and all applicable guidelines and standards specific to the management of bushfires during construction of the Project.

1.1 Background

The MPE site, including the Project site, is located approximately 27 kilometres (km) south-west of the Sydney Central Business District (CBD) and approximately 26 km west of Port Botany and includes the former Defence National Storage and Distribution Centre (DNSDC) site. The MPE site is situated within the Liverpool Local Government Area (LGA), in Sydney's South West subregion, approximately 2.5 km from the Liverpool City Centre.

The MPE Project involves the development of an intermodal facility including warehouse and distribution facilities, freight village (ancillary site and operational services), stormwater, landscaping, servicing and associated works on the eastern side of Moorebank Avenue, Moorebank.

Stage 2 of the Project involves the construction and operation of warehousing and distribution facilities on the MPE site and upgrades to approximately 2.1 km of Moorebank Avenue.

Key components of the Project include:

- Earthworks including the importation of 600,000 m^3 of fill and vegetation clearing
- Importation, stockpiling and placement of up to 250,000 m^3 of suitable spoil (separate to the 600,000 m^3 of imported clean general fill permitted for bulk earthworks)
- Approximately 300,000 m^2 gross floor area (GFA) of warehousing and ancillary offices
- Warehouse fit-out
- Freight village, 8,000 m^2 GFA of ancillary retail, commercial and light industrial land uses
- Internal road network and hardstand across the site
- Ancillary supporting infrastructure within the site, including:
  - Stormwater, drainage and flooding infrastructure
  - Utilities relocation/installation
  - Fencing, signage, lighting, remediation and landscaping
- Moorebank Avenue upgrade including:
  - Raising by about two metres and some widening
  - Embankments and tie-ins to existing Moorebank Avenue road levels
  - Signalling and intersection works
- Intersection upgrades along Moorebank Avenue including:
  - Moorebank Avenue/MPE Stage 2 access
  - Moorebank Avenue/MPE Stage 1 northern access
  - Moorebank Avenue/MPE Stage 2 central access
  - MPW Southern Access/MPE Stage 2 southern emergency access.

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

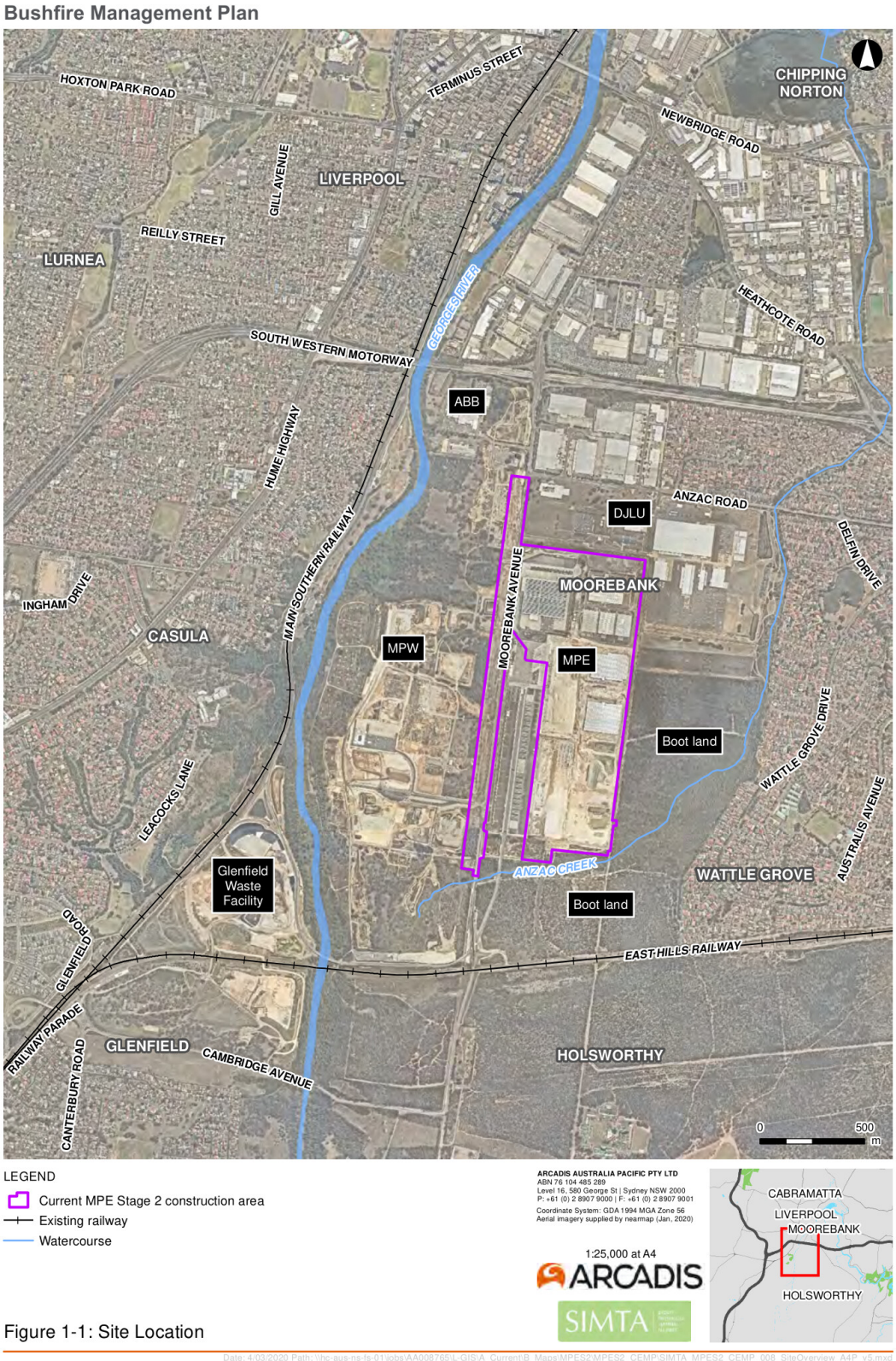

Figure 1-1: Site Location

Figure 1-1 Site Location

1.2 Development Consent

The MPE Stage 2 Project has been assessed by the Department of Planning and Environment (DP&E) under Part 4, Division 4.7 (previously Division 4.1 prior to 1 March 2018) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as State Significant Development (SSD). The Planning Assessment Commission (PAC) granted consent for the MPE Stage 2 Project on 31 January 2018 and is subject to the Minister's CoCs (ref SSD 7628). The Project has been subsequently modified and approved under Modification 2 (SSD 7628-Mod 2) on 31 January 2020. The Project, including its potential impacts, consultation and proposed mitigation and management, is documented in the following suite of documents:

- State significant development (SSD) Consent (SSD 7628) and Modification 2(SSD 7628-Mod 2)
- Moorebank Precinct East – Stage 2 – Environmental Impact Statement (Arcadis Australia Pacific Pty Limited, December 2016)
- Moorebank Precinct East – Stage 2 – Response to Submissions (Arcadis Australia Pacific Pty Limited, July 2017)
- Moorebank Precinct East – Stage 2 (Modification 2) – Environmental Impact Statement (Aspect Environmental Pty Limited, July 2019)
- Moorebank Precinct East – Stage 2 (Modification 2) – Response to Submissions (Aspect Environmental Pty Limited, September 2019)
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Approval (No. 2011/6229) granted on March 2014
- Consolidated assessment clarification responses issued on 10 November 2017.

1.3 Project Delivery Phases

The Project construction period is anticipated to be approximately 24 to 36 months, which will be generally divided into three works phases, as detailed in the following sections.

The terminology for the project phases or periods has developed from the preparation of the EIS and RtS documentation in response to the language of the CoCs and the need to stage the delivery of the environmental management documentation required by the CoCs. Current terminology, and the equivalent terminology from the CoCs and RtS are included in Table 1.

Table 1 Project Delivery Phase Terminology

Project Delivery Phase	CoC A18 Phase Equivalent	MPE Stage 2 RtS Works Period Equivalent
Early Works	Early Works Fill importation (to 60,000 m^3)	Works Period A: Pre-construction Works Period B: Site preparation
Construction Phase A	Fill importation Construction	Works Period B: Site preparation Works Period E: Bulk Earthworks Works Period F: Construction and internal fit out of warehousing Works Period G: Miscellaneous construction works
Construction Phase B	Fill importation Construction	Works Period C: Construction of Moorebank Avenue Diversion Road Works Period D: Pavement and intersection works along Moorebank Avenue

1.3.1 Early Works

Early Works is generally described as site preparatory works including utilities adjustments and relocations, clearing and stripping of topsoil (top 100 millimetre of topsoil), heritage salvage and fill importation (including virgin excavated natural material [VENM] and excavated natural material [ENM], up to 60,000 m^3), establishment of site access, temporary fencing and compound establishment, asbestos and hazardous material removal and the preparation of demolition of buildings.

The Early Works includes but is not limited to:

- Geotechnical and utilities investigation works including potholing to confirm the location of existing services, disconnection of non-critical services (with retention in place), grout filling of disconnected draining lines, and adjustment and relocation where applicable
- Clearing of non-native vegetation, stripping of topsoil and stockpiling of topsoil on site for later re-use within site landscaping
- Stabilisation of areas where topsoil has been stripped with imported clean hard fill or by other methods determined by the Environmental Representative (ER) to have minimal environmental impact
- Removal of asbestos from heating equipment and fire-resistant building elements (e.g. fire doors) by a licenced asbestos removalist followed by clearance by a certified occupational hygienist
- Hazardous material cleaning and decontamination in Buildings 67, 69, 81 and 83
- Heritage salvage works in Buildings 37, 75 and 80 on the Project site to recover architectural elements for adaptive re-use
- Importation, stockpiling and placement of up to 60,000 m^3 (not exceeding a total of 22,000 m^3 of material per day) of imported clean general fill material by truck-and-dog and / or semi-trailer
- Establishment of a site access point at the existing MPE site northern access and construction of associated access road, utilising existing paved areas with minor pavement extensions required, to provide for access and manoeuvrability of vehicles into and through the site in accordance with CoC B10
- Establishment of temporary site fencing, a site compound(s) and temporary car parking areas to support Early Works and construction of the Project in accordance with CoC B10, B11 and B12
- Other activities determined by the ER to have minimal environmental impact.

Any of the activities defined in SSD Consent 7628 as ‘Early Works’ may be undertaken during the Early Works. All works during Early Works will be undertaken in accordance with the Early Works Management Plan (EWEMP) and required sub-plans. Upon the commencement of construction, the Project’s CEMP will supersede the EWEMP.

1.3.2 Construction Works Phase A (excluding Moorebank Avenue Upgrade Works)

Construction Works Phase A will include all works described in Early Works in addition to bulk earthworks, drainage and utilities, construction and internal fit-out of warehousing and finishing works.

Construction Works Phase A excludes Moorebank Avenue works described in Section1.3.3. Construction Works Phase A includes, but is not limited to:

Completion of Site Preparation Activities

- Demolition of existing structures
- Clearing of remaining vegetation
- Adjusting the building formation of the site (to final operational levels) within which the Warehousing Compound will be located
- Establishment of temporary batch plant and materials crushing plant.

Bulk Earthworks, Drainage and Utilities

- Importation, stockpiling and placement of up to 600,000 m^3 of imported clean general fill for bulk earthworks
- Importation, stockpiling and placement of up to 250,000 m^3 of suitable spoil (separate to the 600,000 m^3 of imported clean general fill permitted for bulk earthworks)

- Installation of on-site detention (OSD) and drainage infrastructure within the MPE Stage 2 site
- Construction of retaining walls
- Creation of internal road formation by general earthworks (by constructing fill embankments)
- Bulk earthworks and adjusting the building formation of the Project site to final level, including the terminal hardstand
- Utilities relocation and installation
- Establishment of hardstand areas.

Construction and Internal Fit-out of Warehousing

- Foundation and floor slab installation
- Erection of framework and structural walls
- Installation of roof
- Internal fit-out of warehouses (racking and associated services).

Miscellaneous Construction and Finishing Works

- Pavement construction (internal transfer roads and perimeter road), including forming of new kerbs, gutters, medians (where required) and other structures
- Line marking, lighting and sign posting
- Installation of road furniture, including traffic signs and pavement markers
- Miscellaneous structural construction
- Finishing works, including landscaping and general site rehabilitation, where required
- Commissioning of the Project
- Decommissioning/demobilisation of the Project site, including removal of construction compound(s) and temporary construction environmental controls.

1.3.3 Construction Works Phase B (including Moorebank Avenue Upgrade Works)

Construction Works Phase B will include all works described in Early Works and Construction Works Phase A, in addition to the Moorebank Avenue upgrade works. Generally, the Moorebank Avenue upgrade works are described as construction of the Moorebank Avenue Diversion Road, bulk earthworks, drainage and utilities, and pavement works.

Construction Works Phase B includes, but is not limited to:

Construction of the Moorebank Avenue Diversion Road

- Stripping of topsoil within footprint of temporary diversion road
- Installation of temporary drainage
- Placement of fill and temporary road pavement (e.g. gravel)
- Construction of interface between temporary diversion road and existing Moorebank Avenue
- Installation of temporary road signage, street lighting and signalling
- Transfer of traffic onto temporary diversion road from Moorebank Avenue.

Bulk Earthworks, Drainage and Utilities

- Removal of existing pavement and stripping of topsoil within Moorebank Avenue
- Importation, stockpiling and placement of approximately 600,000 m^3 of imported clean general fill for bulk earthworks
- Importation, stockpiling and placement of up to 250,000 m^3 of suitable spoil (separate to the 600,000 m^3 of imported clean general fill permitted for bulk earthworks)
- Creation of a road formation by general earthworks (by constructing fill embankments)
- Utilities relocation and installation.

Pavement Works along Moorebank Avenue

- Placement of select layer of earthworks material on top of the road formation
- Placing and compacting the pavement later (concrete, or concrete and asphalt) over the select layer (consisting of a sub-base and base) and potential sealing with bitumen
- Traffic switching from diversion road onto final, upgraded Moorebank Avenue
- Removal of construction traffic management and progressive opening of the internal road and warehouse access roads to traffic
- Removal of road surface, road signage, street lighting and signalling from temporary diversion road
- Commissioning of Moorebank Avenue.

1.4 Purpose and Application

This CBMP has been developed to address the CoCs and the FCMMs, and is based on the Bushfire Protection Assessment (Appendix U of the MPE Stage 2 EIS). This plan aims to demonstrate how bushfire risk will be managed during the construction phase of the Project.

This plan provides methods to measure and reduce bushfire risk to the Project by the Construction Contractor during construction activities, including all sub-contractors and consultant partners.

The specific requirements of the CoCs for compilation of the CBMP, as identified in the CoCs and FCMMs are identified in the Compliance Matrices in Section 2.1.1.

The most recent, approved version of the CBMP will be implemented to manage the Project activities.

1.5 Objectives and Targets

The following high-level objectives and targets are set for the Project for the management of bushfire risks (refer to Table 2). These objectives and targets were developed by the Principal's Representative in consultation with technical specialists based on collective industry experience and best practice.

Table 2 Objectives and Targets

Objective	Target	Timeframe	Accountability
• Afford personnel onsite adequate protection from exposure to bushfire and minimise adverse impacts of bushfire	• No death or injury to personnel during bushfire event	Duration of construction	Contractor's PM
• Minimise adverse environmental consequences of bushfire • Mitigate on-site landscaping contributing to precinct bushfire via installation of appropriate flora species and management devices (as per approved Landscape Plan)	• No avoidable contribution to fire via landscaping fuel loads during bushfire event	Duration of construction	Contractor's EM
• Compliance with all conditions of relevant approval conditions	• No avoidable breach of management/mitigation measures in Section 3.6	Duration of construction	Contractor's EM

1.6 Consultation

This CBMP has been prepared in consultation with Australian Bushfire Protection Planners Pty Ltd and the NSW Rural Fire Services as outlined below in Table 3. Supplementary information to support the consultation undertaken is included in Appendix A.

Table 3 Consultation Summary

Agency	Date	Person Contacted	Comment	Status
NSW Rural Fire Services	05/04/18	RFS representative	SIMTA representative contacted NSW RFS emailing the plan and requesting comment on the plan	Open
	10/05/18	SIMTA representative	NSW RFS indicated that they would not provide comment on the BMP and referred to their letter dated 20 September 2017 as a post response to submissions as part of the environmental assessment in which they did not recommend that a BMP be developed.	Closed

2 ENVIRONMENTAL MANAGEMENT

2.1 Legal and Other Requirements

Table 4 below details the legislation, planning instruments and guidelines considered during development of this plan. Further details concerning the legislation, planning instruments and guidelines identified below are provided in the Legislation Register within the CEMP (Appendix B).

Table 4 Legislation, Planning Instruments and Guidelines

Legislation	Description	Relevance to this CBMP
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals for the State.	Key sections of this Act that are relevant to this plan include, but are not limited to: • Section 4.15 - General matters for consideration (previously Section 79C (1) prior to 1 March 2018) • Section 4.14 - Consultation and development consent steps to be taken for development on bush fire prone land (previously Section 79BA prior to 1 March 2018).
Rural Fires Act 1997	This Act describes the specific requirements for development on land that has been declared as bush fire prone.	Key sections of this Act that are relevant to this plan include, but are not limited to: • Section 63 - Duty of public authorities and owners and occupiers of land to prevent bushfires • Section 64 - Occupiers to extinguish fires or notify firefighting authorities • Division 4 - Bushfire Danger Periods: Applicability to the performance of hot works in open areas • Division 6 - Total Fire Bans; Applicability to performance of hot works in open areas • Division 7 - Offences for starting fires.
Planning for Bush Fire Protection 2006 – NSW RFS	Provides aims and objectives for development on bush fire prone land.	Development applications on bush fire prone land must be accompanied by a Bush Fire Assessment Report demonstrating compliance with the aim and objectives of Planning for Bush Fire Protection 2006. In particular: • The provision of Asset Protection Zones/Defendable Spaces to buildings located in bushfire prone areas • Section 4.1.3(1) - Public road access compliance, with the exception of through-access. • Section 4.1.4 - Water, electricity and gas compliance.
Standards for Asset Protection Zones – NSW RFS	Provides a six-step guide to create and maintain an Asset Protection Zone (APZ) on the Project site.	Guides the establishment and maintenance of APZs under this plan.
Australian Standards AS3959-2009 – Construction in Bushfire Prone Areas	Covers the bushfire safety requirements of building in a bushfire prone area, as well as providing the methodology for calculating your bushfire attack level.	Identifies levels of bushfire attack and construction standards to buildings located in bushfire prone areas

2.1.1 Compliance Matrices

The Project is being delivered under Part 4, Division 4.7 (previously Division 4.1 prior to 1 March 2018) of the EP&A Act. The CoCs include requirements to be addressed in this plan and delivered during the Project. These requirements and how they are addressed are provided within Table 5 and are prepared in accordance with CoC C21.

Table 5 Conditions of Consent (CoCs)

CoC	Requirement	Document Reference	How Addressed
A1	In addition to meeting the specific performance measures and criteria established under this consent all reasonable measures must be implemented to prevent, and if prevention is not reasonable, minimise, any harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	Section 3 Section 4	Section 3 of this plan identifies the management measures to be implemented to prevent and minimise environmental harm. Section 4 sets out the processes for monitoring and reviewing the effectiveness of these management measures. Opportunities to further minimise environmental harm will be identified through the ongoing evaluation of environmental management performance and effectiveness of this plan.
A2	The development may only be carried out: (a) in compliance with the conditions of this consent; (b) in accordance with all written directions of the Secretary in relation to this consent; (c) in accordance with the EIS, Submissions Report, Consolidated assessment clarification responses, and updated Biodiversity Assessment Report; (d) in accordance with all Modification Assessments (if any); (e) in accordance with the amended Development Layout Plans and Design Plans, amended WSUD plans and amended architectural plans to be submitted for the Secretary's approval as part of this consent; and (e) in accordance with the management and mitigation measures at APPENDIX B of this consent.	This plan	This CBMP has been developed to comply with the CoCs, amended development layout and management and mitigation measures outlined in Appendix B of the CoCs. No written directions have been received from the Secretary either directly or indirectly relating to the content expectations of this CBMP.
A20	All licences, permits, approvals and consents as required by law must be obtained and maintained as required for the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits, approvals and consents.	CEMP	All applicable licences, permits and approvals will be obtained as required. Approvals, permits and licences required for the Project are discussed in Appendix B and C of the CEMP. An Environmental Protection Licence (EPL) (No. 21054) was issued by the EPA on 4 June 2018 (variation issued

CoC	Requirement	Document Reference	How Addressed
			on 18 April 2019). The licence applies to the Moorebank Precinct (excluding the MPE Stage 1 Rail Access Land Package (RALP) which has a separate EPL licence (No. 20966) and authorises > 100,000 – 500,000 tonnes crushing, grinding or separating processing capacity per annum and > 500,000 – 2,000,000 tonnes extraction, processing or storage capacity per annum. The licence applies to all other activities carried on at the premises, including road construction, bulk earthworks 'cut and fill' and importing fill. Approval of this plan by the NSW RFS will be completed prior to construction of permanent access or buildings, unless otherwise agreed by the Secretary.
B1	The Applicant must: (a) prepare each plan, program and other documents in consultation with the specified stakeholders; (b) not commence each phase of the project until the plans, programs and other documents required under this consent are approved by or, where not required to be approved, submitted to the Secretary specified within the timeframes; and (c) implement the most recent version of the required plans and programs approved by the Secretary for the duration of the development	Section 1.3 Section 1.4 Section 1.6	(a) The CBMP has been prepared in consultation with the NSW RFS. (b) Section 1.3 confirms that construction of permanent access or buildings will not commence until the CBMP has been approved by the NSW Rural Fire Service and submitted to the Secretary. (c) Section 1.4 confirms that the most recent version of the CBMP will be implemented for the duration of construction.
B111	Bushfire asset protection zones are to be contained wholly within the site boundary and management of the inner protection zone and must not impact on the Boot Land.	Figure 3-4	Bushfire asset protection zones are contained wholly within the site boundary and management of the inner protection zone would not impact on the Boot Land as shown in Figure 3-4
B144	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 Bush Fire Protection 2006* and the NSW Rural Fire Service's document *Standards for asset protection zones*. An updated **Bushfire Management Plan** must be prepared by a suitably qualified person(s) having regard to the amended final plans and demonstrating that the bushfire asset protection zones can be contained wholly within the site boundary and that	This plan	The CBMP has been prepared to address the requirements of this condition. This plan has been prepared by a suitably qualified person (refer to author details are the start of this plan). Section 1.6 and Appendix A demonstrates consultation with NSW RFS.

CoC	Requirement	Document Reference	How Addressed
	management of the inner protection zone will not impact on the Boot Land. The **Bushfire Management Plan** must be approved by the RFS and submitted to the Secretary prior to construction of permanent access or buildings, unless otherwise agreed by the Secretary.		
B145	Public road access must comply with section 4.1.3(1) of *Planning for Bush Fire Protection 2006* except for the requirement for through-access.	Section 3.1.1	Primarily operational requirement. During construction, suitable access for emergency vehicles will be available via the alignment of the future internal road network which runs east/west and connects to a north/south road extending along the eastern side of the site.
B146	The provision of water, electricity and gas must comply with section 4.1.3 of *Planning for Bush Fire Protection 2006*.	Section 3.6	Primarily operational requirement. Risk associated with the provision of electricity services during construction are addressed by management measures BM26, BM27, BM28, BM29 and BM30 in Section 3.6.
C7	The Applicant must ensure that the environmental management plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data;	Section 3.2	Section 3.2 and Figure 3-2 provide information related to detailed baseline data for the Project.
	(b) a description of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures/criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 2 Section 1.5	(i) Section 2 lists the legal and other requirements for the Project site. (ii)(iii) Section 1.5 details the objectives (performance measures) and the targets (performance indicators).
	(c) a description of the management measures to be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;	Section 3.6	Section 3.6 sets out the management measures required to be implemented under this plan.
	(d) a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of any management measures (see (c) above);	Section 4	A monitoring and report program is outlined in Section 4 for imported spoil management.

CoC	Requirement	Document Reference	How Addressed
	(e) a contingency plan to manage any unpredicted impacts and their consequences;	Section 3.3	Section 3.3 includes measures to address emergencies related to bushfires.
	(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Section 4.4	Programs to investigate and implement ways to improve the environmental performance of the development over time will be conducted in accordance with Section 4.4.
	(g) a protocol for managing and reporting any: (i) incidents and non-compliances; (ii) complaints; (iii) non-compliances with statutory requirements; and	CEMP	The CEMP outlines a protocol for addressing any incidents, non-compliances and complaints.
	(h) a protocol for periodic review of the plan. *Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for a particular management plan.*	Section 4.4	Periodic review of the plan will occur and is outlined in Section 4.4 and the CEMP.

The FCMMs were prepared as part of the MPE Stage 2 Submissions Report (Arcadis 2017). A list of the FCMMs as relevant to the Project and how they have been complied with in this plan are provided in Table 6 and the Compliance Tracking Program, prepared in accordance with CoC C21.

Table 6 Final Compilation of Mitigation Measures (FCMMs)

FCMM	Requirement	Document Reference
0B	The Construction Environmental Plan (CEMP), or equivalent, for the amended Proposal would be based on the PCEMP (Appendix G of the EIS), and include the following preliminary management plans: • Bushfire Management Plan	This plan has been prepared to satisfy this requirement.
7B	The following measures would be included in the CEMP (or equivalent) to minimise hazards and risks: Safe operational access and egress for emergency service personnel and workers will be provided at all times, and specified in the CEMP.	This condition is addressed in management measures BM17 in Section 3.6.
13A	A bushfire management strategy, or equivalent, will be prepared as part of the CEMP for the Amended Proposal. The strategy will include: • Emergency response plans and procedures • Restrictions on activities (namely hot works) that cannot be undertaken on total fire ban days within areas of high Bushfire Hazard Rating, unless otherwise advised by the NSW Rural Fire Service.	This CBMP has been prepared to satisfy this requirement. These conditions are addressed in management measures BM10, BM12, and BM16 in Section 3.6.

FCMM	Requirement	Document Reference
	• All construction site offices and temporary buildings will be located outside buffer areas to ensure minimum setbacks of 10 m. All construction site offices will be accessible via access roads suitable for firefighting appliances similar to NSW Rural Fire Service Category 1 Tankers.	

The Revised Statement of Commitments (RSoC) includes the most recent compilation of SIMTA commitments to mitigate the environmental impacts, monitor the environmental performance and/or achieve a positive environmentally sustainable outcome. These RSoC (June 2017) were presented in the Moorebank Precinct East – Concept Plan Modification 2 Response to Submissions. The RSoC that are relevant to this plan are identified in Table 7.

Table 7 Revised Statement of Conditions (RSoC)

RSoC	Requirement	Document Reference
Bushfire Management	The Proponent commits to incorporating the key objectives identified by the Rural Fire Service (RFS) into relevant future design stages, in accordance with the following principles: • Afford occupants of any building adequate protection from exposure to a bushfire. • Ensure safe operational access and egress for emergency service personnel and residents. • Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in asset protection zones (APZs). • Ensure that utility services are adequate to meet the needs of fire fighters.	Refer to management measures BM17, BM20 and BM30 in Section 3.6.
	The Proponent commits to the development of a Bushfire Management Plan for both the construction and operational phases of the SIMTA proposal that aligns with the requirements of the local RFS Bushfire Management Committee operational plans of management.	This CBMP has been prepared to satisfy this requirement.
Climate Change Risk	Incorporate appropriate strategic protection zones, including asset protection zones into design to limit bushfire risk to acceptable levels, where required.	Section 3.6.1 Figure 3-4
	Control of performance of hotworks on total fire ban days during construction and operation, particularly within any defined asset protection zones.	Refer to management measure BM10 in Section 3.6.

The MPE Concept Plan was originally approved on 14 September 2011. The most recent modification to the approval was granted on 31 January 2018 subject to the (modified) Conditions of Approval (CoA). MPE Concept Plan CoAs are provided in Table 8.

Table 8 MPE Concept Plan Conditions of Approval (CoA)

CoA	Requirement	Document Reference
Bushfire Management	Any future Development Application shall be accompanied by an assessment against the Planning for Bushfire 2006 (NSW Rural Fire Service).	This condition relates to future Development Application for individual buildings and not construction.
Biodiversity	Hot work not to be undertaken on declared total fire ban days.	This condition is addressed in management measure BM10 in Section 3.6.
	Vehicles and plant should not block fire trails.	This condition is addressed in management measure BM8 in Section 3.6.
	Bushfire awareness included in staff induction and in toolbox talks pre-commencement.	This condition is addressed in management measure BM1 and BM2 in Section 3.6.

No Commonwealth Conditions of Approval (CCoA) are applicable to this plan.

2.2 Roles and Responsibilities

Key roles and responsibilities associated with this CBMP are presented in Table 9.

Table 9 Roles and Responsibilities

Roles	Responsibilities
Contractor's Project Manager (Contractor's PM)	• Attend audit meetings and action results of any audit findings • Allocate Project resources to manage bushfire environmental issues • Oversee the implementation and maintenance of this CBMP • Endorse the CBMP • Provide support for the Contractor's EM • Undergo induction and training in environmental awareness specific to bushfire evacuation and evacuation • Enforce environmental requirements for suppliers and sub-contractors • Review audit corrective actions and take action as necessary to ensure timely close out of issues • Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm • Participate in ongoing consultation with relevant regulatory agencies regarding hazard reduction.
Contractor's Construction Manager (Contractor's CM)	• Communicating with all personnel and sub-contractors regarding compliance and conformance with this CBMP • Check and monitor the implementation of this CBMP • Undergo induction and training in environmental awareness specific to bushfire evacuation and evacuation • Identifying resources required for implementation of the CBMP • Ensure emergency services/personnel have safe access and egress to bushfire prone land • Clearly sign and communicate emergency assembly point and evacuation routes to Site personnel • Organise and manage site plant, labour and temporary materials for bushfire evacuation and emergency • Provide support for the Contractor's EM

Roles	Responsibilities
	• Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm • Manage response actions to RFS fire danger rating and actual fire emergency.
Contractor's Environment Manager (Contractor's EM)	• Oversee the overall implementation of this CBMP • Ensure that sufficient resources are allocated for the implementation of this CBMP • Assist and guide the respective personnel to meet their responsibilities for bushfire evacuation and emergency response • Develop environmental site induction and maintain a register of attendance • Present and participate in toolbox meetings specific to bushfire evacuation and emergency • Manage environmental document control, reporting, inductions and training relating to bushfire emergency and evacuation • Oversee site monitoring, inspections and internal audits • Manage all sub-contractors and consultants with regards to environmental matters • Undergo induction and training in environmental awareness specific to bushfire management • Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm • Ensure all relevant personnel have and understand the most up-to-date copy of this CBMP • Monitor weather conditions and fire alerts including from NSW RFS and BOM • Provide and maintain firefighting equipment • Co-ordinate bushfire emergency response.
Site Supervisor	• Provide site induction for staff including fire safety measures • Assist with implementation of bushfire emergency response • Implement environmental controls on-site required foe bushfire emergency and evacuation • Undergo induction and training in environmental awareness specific to bushfire management • Maintain emergency service access to bushfire prone land • Direct works to be performed in a more environmentally responsible manner that reduces impacts or stop works if there is a risk of environmental harm.
All Personnel	• Comply with the relevant Acts, Regulations and Standards relevant to this CBMP • Comply with the Project policies and procedures relevant to this CBMP • Take all feasible and reasonable steps to ensure compliance and conformance with the requirements of this CBMP • Undertake relevant training to implement the requirements of this CBMP

2.3 Training

Training will be undertaken in accordance with Section 2.7 of the CEMP. The contractor will provide all employees with environmental induction / training relevant to this CBMP to ensure that they are aware of their responsibilities and are competent to carry out the work.

As a minimum the induction will include the following:

- Familiarisation with this plan and the BEEP
- Location of firefighting equipment
- Fire safety such as fire management practices, emergency responses and procedures
- Potential ignition sources and subsequent risks

Toolbox meetings will also be undertaken, as and when required.

Competency training will be provided by the Construction Contractor as required and may include a certification, vocational qualification or a competency assessment.

Records of all training are to be filed in accordance with the document control system outlined in the CEMP.

2.4 Incident Response

Incidents will be classified and notified in accordance with Section 2.8 of the CEMP.

3 IMPLEMENTATION

3.1 Existing Environment

3.1.1 Construction Facilities

Temporary construction compounds will be required to support construction of the Project. The locations of these compounds are indicative and subject to confirmation by the construction contractor. Two primary construction compounds were identified in the MPE Stage 2 EIS, being:

- Warehousing Compound (located within the Project site)
- Moorebank Avenue Compound (located on the MPW site).

The location of these compounds and the internal road network is shown in Figure 3-1.

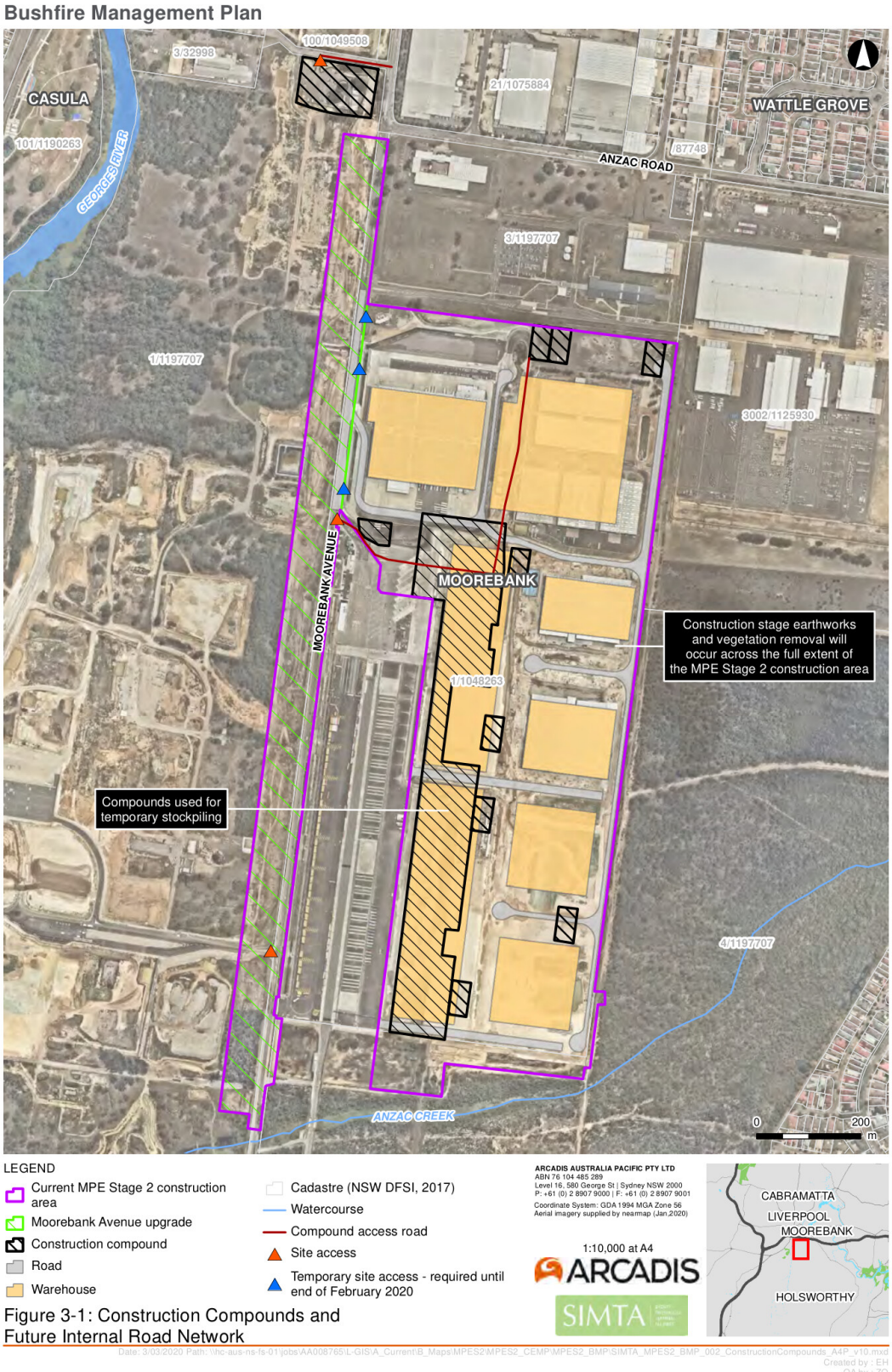

Figure 3-1: Construction Compounds and Future Internal Road Network

Figure 3-1 Construction Compounds and Internal Road Network

3.1.2 Warehousing Compound

The main construction compound for the Project (Warehousing Compound) will be located within the Project site. It is expected that some additional satellite compounds will be required during the construction of each individual warehouse on the Project site; however, the Warehousing Compound will be used for the majority of construction works.

The Warehousing Compound will include:

- Site office(s)
- Staff amenities
- Car parking
- Storage and laydown areas
- Materials testing facilities
- Material crushing facilities
- Concrete batching plant.

3.1.3 Moorebank Avenue Compound

The Moorebank Avenue Compound will be located on the western side of Moorebank Avenue, immediately south of Bapaume Road. Access will be directly off Bapaume road.

The Moorebank Avenue Compound will include:

- Site offices
- Car parking
- Amenities block
- Equipment storage and laydown areas.

Materials, such as pre-cast culverts, will be temporarily stored within the compound area on occasion. The entrance to this compound will be generally at the location of the existing intersection off Moorebank Avenue.

Access and egress to this compound for light vehicles will be via a left or right turn from Moorebank Avenue into Bapaume Road. Heavy vehicle access will be via a left turn from Moorebank Avenue into Bapaume Road. Heavy vehicles accessing the compound will travel southbound along Moorebank Avenue, will turn right into Chatham Avenue, turn around within the MPW site, turn left from Chatham Avenue (northbound) onto Moorebank Avenue and turn left into Bapaume Road.

3.2 Bushfire Rating

The MPE Stage 2 EIS identified construction of the Project as a having a low bushfire risk, with the Project more likely to be at risk from a bushfire rather than presenting as a potential ignition source for a bushfire. Bushfire risk is most likely to arise from the large area of native vegetation contained on the Commonwealth land adjoining the Project to the east and south. This vegetation is mapped as 'Vegetation Category 1' bushfire prone land (Liverpool City Council 2014) (see Figure 3-2).

Table 10 below provides a summary of the bushfire threat and hazard ratings for the Project site. Information obtained from the Bushfire Protection Assessment for the Moorebank Precinct East Project Stage 2, Moorebank Avenue, Moorebank (Australian Bushfire Protection Planners 2016).

Table 10 Summary of Bushfire Threat and Hazard for the Project Site

Aspect	Vegetation Within 140 m of the Project Site	Vegetation Index Score	Slope Index Score	Bushfire Hazard Score	Bushfire Hazard Rating	Bushfire Threat	Explanation
North	Managed curtilage	Nil	Nil	0	N / A	N / A	The north of the site is developed with no unmanaged vegetation
East	Dry Sclerophyll Low Open Forest	2.8	2.0	5.6	High	High	Large extents of unmanaged vegetation and a fire path under prevailing north east winds
South	Dry Sclerophyll Low Open Forest	2.8	2.0	5.6	High	Moderate	Fire path under south-east and south-westerly winds
West	Managed curtilage and isolated pockets of vegetation	The remnant vegetation on the land to the west of Moorebank Avenue is not contiguous with a large area of bushfire prone vegetation which could be involved in a fire spread from the northwest, west or southwest – the primary direction for severe/catastrophic bushfires.			Low	Low	Limited vegetation and buffers including Moorebank Avenue and MPE Stage 1

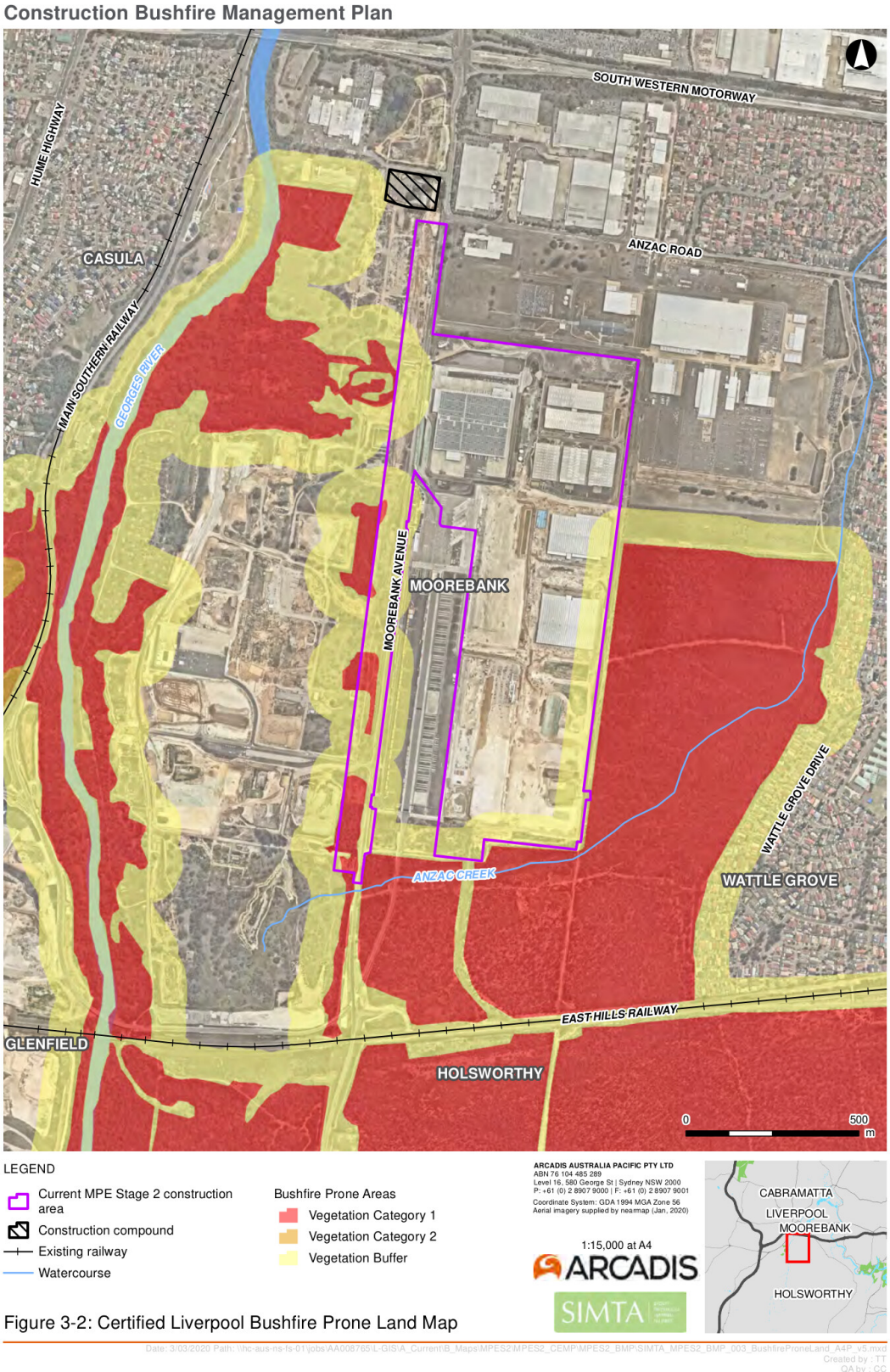

Figure 3-2: Certified Liverpool Bushfire Prone Land Map

Figure 3-2 Certified Liverpool Bushfire Prone Land Map

3.3 Emergency Response

Bushfire alert levels will be based on National Fire Danger Rating advice, available through the NSW Rural Fire Service (http://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans).

The Bureau of Meteorology (BOM) also issue fire weather warnings when weather conditions are conducive to the spread of dangerous bushfires. Warnings are generally issued within 24 hours of the potential onset of hazardous conditions. Warnings are also broadcast on radio and television. However, the Bureau of Meteorology does not have the power to declare a total fire ban. This responsibility resides with the NSW RFS.

The closest Fire and Rescue NSW station is located on Anzac Road, Moorebank, approximately 1.2 km from the construction site access point. The second closest is located on Cartwright Avenue, Busby, approximately 7.6 km from the construction site access point.

During conditions of bushfire the initial response of all site personnel will be to relocate onsite (shelter), beyond the reach of bushfire, to the nominated bushfire emergency assembly areas. Each construction compound will have their own assembly point location shown in

Figure 3-3. In the event that an assembly point is deemed unsafe by the Chief Warden, the Chief Warden would arrange an alternative assembly point (i.e. an assembly point at another construction compound).

Where it is deemed unsafe for staff to remain sheltered onsite at the assembly points, staff will be instructed to individually relocate to their own personal refuge (personal residences). Staff will be responsible for their own transport and it is advised that staff travel 800 m (2 minutes) north towards the intersection of Moorebank Avenue and the M5 Motorway (South-West Motorway) when exiting the site from the construction site access point.

The M5 Motorway provides the main road link between the site, and the key employment and industrial areas within Sydney's West and South-Western subregions, the Sydney orbital network and the National Road Network. The M5 connects with the M7 Motorway to the west, providing access to the Greater Metropolitan Region and the NSW road network. Similarly, the M5 is the principal connection to Sydney's north and north-east via the Hume Highway.

A summary of bushfire response actions is provided in Table 11.

Table 11 Fire Danger Rating Alert and Activation Levels

Response Item	Action	Responsibility
Monitor	• Monitor daily weather / fire danger rating (Low Moderate, High)	Contractor's EM
RFS fire danger rating - Very High, Severe, Extreme	• Increase level of alert, prepare for activation of BEEP • Notify all on-site supervisors of fire danger rating • Prepare for activation of bushfire emergency response procedures • Monitor Bureau of Meteorology (BOM) website for fire weather warnings	Contractor's CM
RFS fire danger rating – Catastrophic OR Total Fire Ban declared	• Increase level of alert, prepare for activation of BEEP • Notify all on-site supervisors of fire danger rating • Prepare for activation of bushfire emergency response procedures • Monitor Bureau of Meteorology (BOM) website for fire weather warnings • Cease all hot works (unless permitted through Total Fire Ban Exemption) • Move plant and equipment out of bushfire prone land / vegetation buffer • Close site to external visitors	Contractor's CM Site Supervisor

Response Item	Action	Responsibility
ACTIVATION Bushfire imminent or bushfire present	• Alert emergency services • Close site to external visitors • Immediately notify all personnel of the activation of bushfire emergency response procedures • Mobilise site personnel to designated emergency assembly area/evacuation assembly area • Arrange for staff to evacuate the site in personal vehicles from the site access point • Ensure all persons are accounted for prior to departure • Advise the local emergency service that the all persons have been evacuated	Contractor's CM Site Supervisor

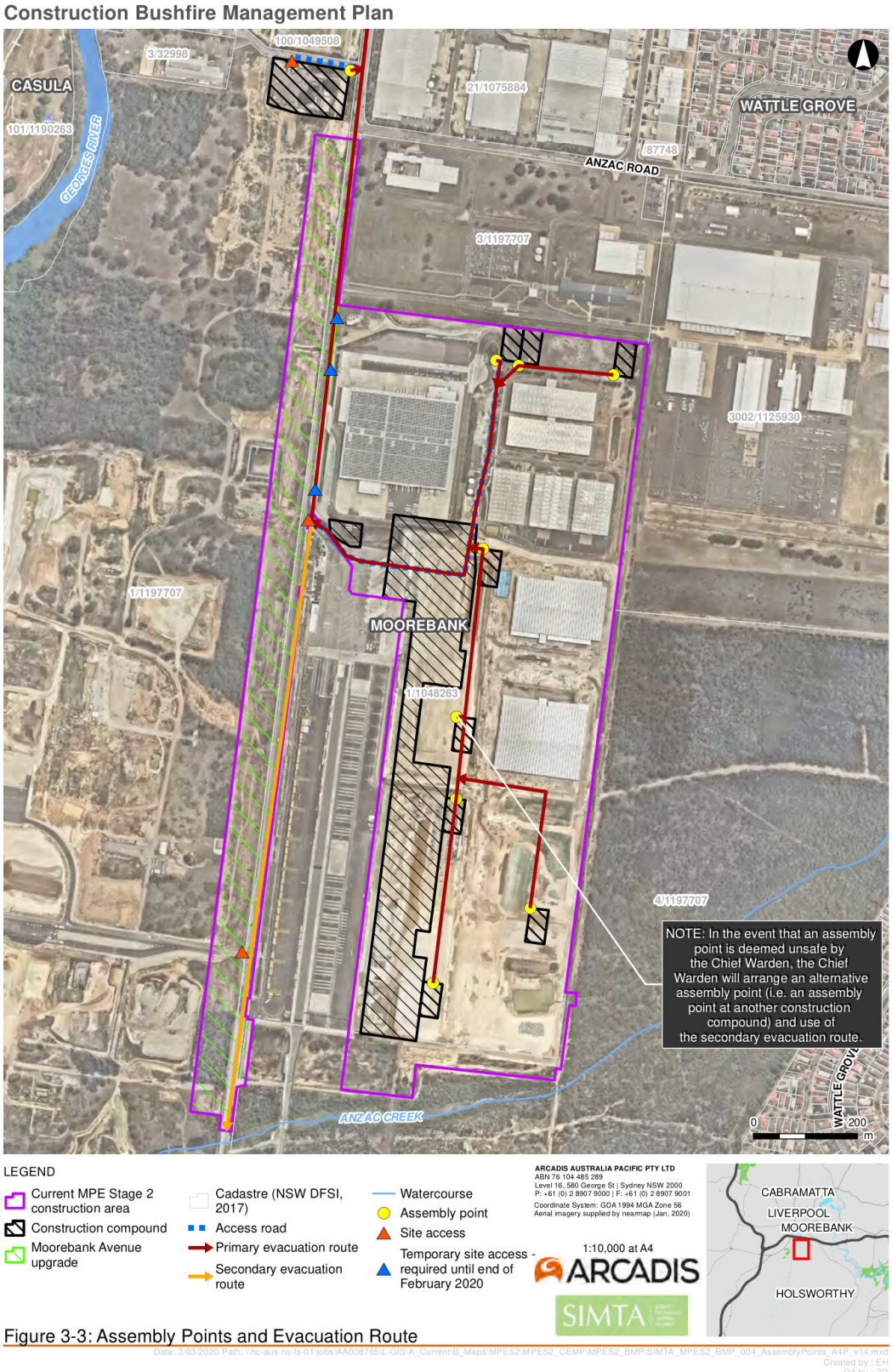

Figure 3-3: Assembly Points and Evacuation Route

Date: 3/03/2020 Path: \\hc-aus-ns-ts-01\jobs\AA008765\IL-GIS\A_Current\B_Maps\MPES2\MPES2_CEMP\MPES2_BMP\SIMTA_MPES2_BMP_004_AssemblyPoints_A4P_v14.mxd
Created by : EH
QA by : ZQ

Figure 3-3 Assembly Point Locations and Evacuation Route

3.3.1 Emergency Access / Egress

The arrangement for site access/egress during construction onto Moorebank Avenue is addressed in the Construction Traffic and Access Management Plan (CTAMP) and will vary per works period. There is one site access point, with traffic circulating through the site using future internal road bases.

Once vehicles have entered the site, heavy vehicles will generally travel along the future internal road network which runs east/west and connects to a north/south road that extends along the eastern side of the site, terminating in a cul-de-sac at each end. During construction, these roads will be comprised of a compacted gravel base, hardstand or similar material and will be two lanes (one lane in each direction).

These internal roads provide safe access for emergency service personnel and safe egress is available. Refer to Figure 3-1 for the internal road network.

3.3.2 Emergency Contacts

Project emergency contact numbers are included in Table 12. The site contact details will be confirmed following the appointment of a Construction Contractor prior to the commencement of construction.

Table 12 Emergency Contact Details

Name of Organisation	Details	Phone Number
NSW Rural Fire Service	Local Fire Control Centre (Liverpool LGA)	02 9603 7077
	Address	Cnr Alderney St and Townson Ave, Minto 2566
	Bushfire Information Line	1800 679 737 1800 NSW RFS
	Rural Fire Service Headquarters	02 8741 5555
	Website	www.rfs.nsw.gov.au
Fire and Rescue Ambulance Service of NSW NSW Police Force	Fire and Rescue Ambulance Police Emergency Services General	000
	Website	https://www.police.nsw.gov.au/
NSW State Emergency Service	General enquiries	02 4251 6111
Liverpool City Council	Customer Contact Centre	1300 36 2170
	National Relay Service (NRS) for hearing and speech impaired customers	133 677
	Address	Ground Floor, 33 Moore St, Liverpool NSW 2170
Liverpool Hospital	Contact	8738 3000

Name of Organisation	Details	Phone Number
	Address	Corner of Elizabeth and Goulburn Streets, Liverpool, NSW 2170
Environment Line	Contact	131 555
Ministry of Health	Contact	(02) 9391 9000
WorkCover	Contact	13 10 50
Site Contacts	Principal's Representative	To be confirmed and updated
	Contractor's Project Manger	To be confirmed and updated
	Contractor's CM	To be confirmed and updated
	Contractor's EM	To be confirmed and updated
	Contractor's CLM	To be confirmed and updated
	Contractor Health and Safety Manager	To be confirmed and updated
SIMTA	Hotline Number	1800 986 465

3.4 Aspect, Impacts and Risks

Both on-site and off-site sources have the potential to ignite a bushfire. A bushfire may result in significant social, economic and ecological impacts on the Project and surrounding environment. External sources of ignition include:

- Deliberate burning of bushland
- Car dumping
- Discarded cigarette butts
- Illegal burning
- Lightning strike.

Construction activities (including the activities of construction staff) which may have the potential to cause ignition of bushfires include:

- Hot works
- Vehicle exhaust
- Idling of vehicles on vegetated areas
- Sparks or flame sources such as grinders and welders
- Stockpiles of vegetation such as mulch
- Site staff discarding cigarette butts.

The impacts of the above include:

- Damage to site facilities, property and equipment
- Increased risk of safety to site staff, local residents and businesses and the environment
- Damage / destruction of threatened species.

3.5 Cumulative Impacts

A qualitative assessment of the cumulative hazard and risk impacts of the Project, including the consideration of bushfires, was undertaken during the preparation of the EIS for MPE Stage 2 (refer to Section 19 of the EIS).

The assessment concluded that, assuming standard controls are implemented at the MPE Stage 2 site during construction, bushfire was deemed not to be of increased risk. Standard controls includes the ban of undertaking hot works during declared bushfire seasons and on total fire ban days.

Management measures (see Section 3.6) will be implemented prior to, during and after construction to avoid and minimise bushfire on the Project site. Appropriate implementation of these measures will minimise the bushfire risk and hence cumulative impacts across the Moorebank Logistics Park, are considered to be unlikely.

3.6 Management Measures

3.6.1 Asset Protection Zones (APZs)

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

The management of the landscaped gardens on site shall also strictly adhere to the management prescriptions provided in this CBMP.

The management of the APZs shall include a requirement for maintenance by the owner, or their successors, in strict compliance and conformance with the management prescriptions of this CBMP or in accordance with any notice 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*.

3.6.1.1 Project APZs

The following Project site APZs include the following:

- 40 m between the warehouse and the construction boundary to the east side of the Project site.
- 45 m between the warehouse and cadastral boundary to the south side of the Project site
- 10 m managed area from the compound boundary to the vegetation to the west of the Moorebank Upgrade compound.
  - The managed area will not require vegetation clearing, but will be kept in a low fuel state.

Refer to

Bushfire Management Plan

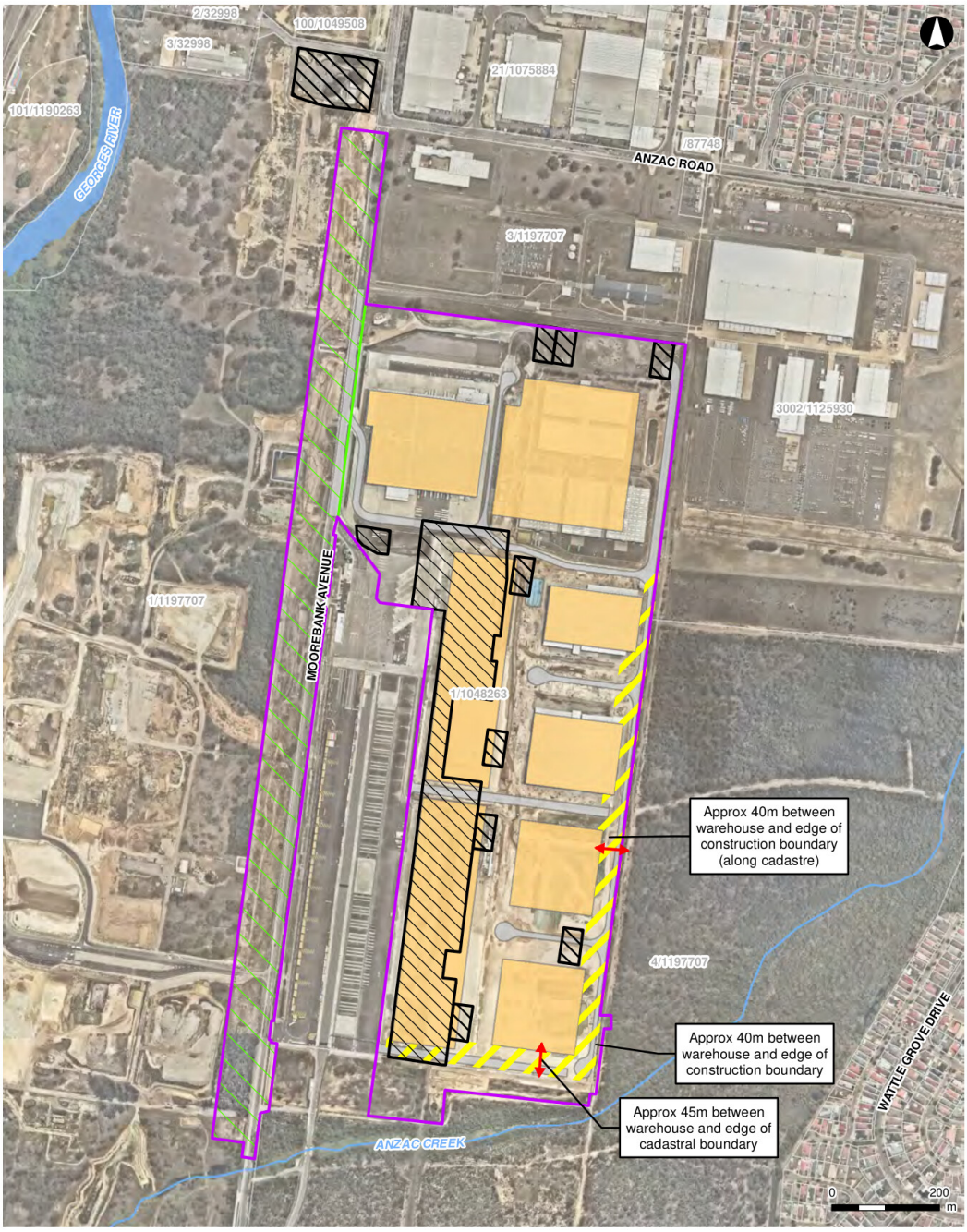

Figure 3-4: Defendable space

Figure 3-4 for the defendable space for the Project site. The APZs will be managed in accordance with the performance standards of APZs (Section 3.6.2).

Table 13 below outlines the APZ / defendable space for all directions of the Project site. Information was obtained from the Bushfire Protection Assessment for the Moorebank Precinct East Project Stage 2, Moorebank Avenue, Moorebank (Australian Bushfire Protection Planners 2016).

Table 13 APZ / Defendable Spaces for the Project Site

Aspect*	Vegetation Type	APZ / Defendable Space
North	Managed curtilage	N /A
East	Dry Sclerophyll Low Open Forest	40 m
South	Dry Sclerophyll Low Open Forest	45 m
West	Managed curtilage and isolated pockets of vegetation	10 m

*Note: Applicable to the MPE Stage 2 construction, but not MAUW compound on the MPW Site located immediately south of Bapaume Road. No APZ required at this location as per MPW Stage 2 EIS.

3.6.2 Performance Standards of APZs

The IPA is located adjacent to the asset, extending out from the buildings as shown on Figure 3-4 and ensures that the presence of combustible fuels, which could become involved in a fire, are minimised close to the building, therefore the impact of direct flame contact and radiant heat on the adjacent development is minimised. As evident in Figure 3-4, the zones are also contained wholly within the site boundary and does not impact on the Boot Land.

Within the IPA any trees and shrubs should be maintained in such a manner that the vegetation is not continuous and 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).

Management of the IPA shall also comply with the following:

- Maintain a clear area of low cut lawn or pavement adjacent to the buildings
- Keep areas under fences, gates & trees raked & clear of combustible fuels and keep strip and stormwater drainage pits free of leaf litter and combustibles generally
- Maintain a policy of installing non-combustible fencing and retaining wall structures
- Separate and maintain tree crowns by at least 2 m so that the canopy is not continuous and does not encroach closer than 5 m to the buildings
- Landscape species selection shall be drawn from those that are considered to be species which are “*fire retardant*” and do not promulgate the spread of fire and shrubs shall be placed so that they are clear of the facility by at least 5 m, and introduced trees and shrubs on site are not species that retain dead material
- Prune low tree branches 2 m from the ground to prevent a ground fire from spreading into the tree canopy
- Plant and maintain short green grass or provide paths around the buildings to slow the fire and reduce fire intensity
- Avoid the use of flammable mulch in garden beds that adjoin the buildings.

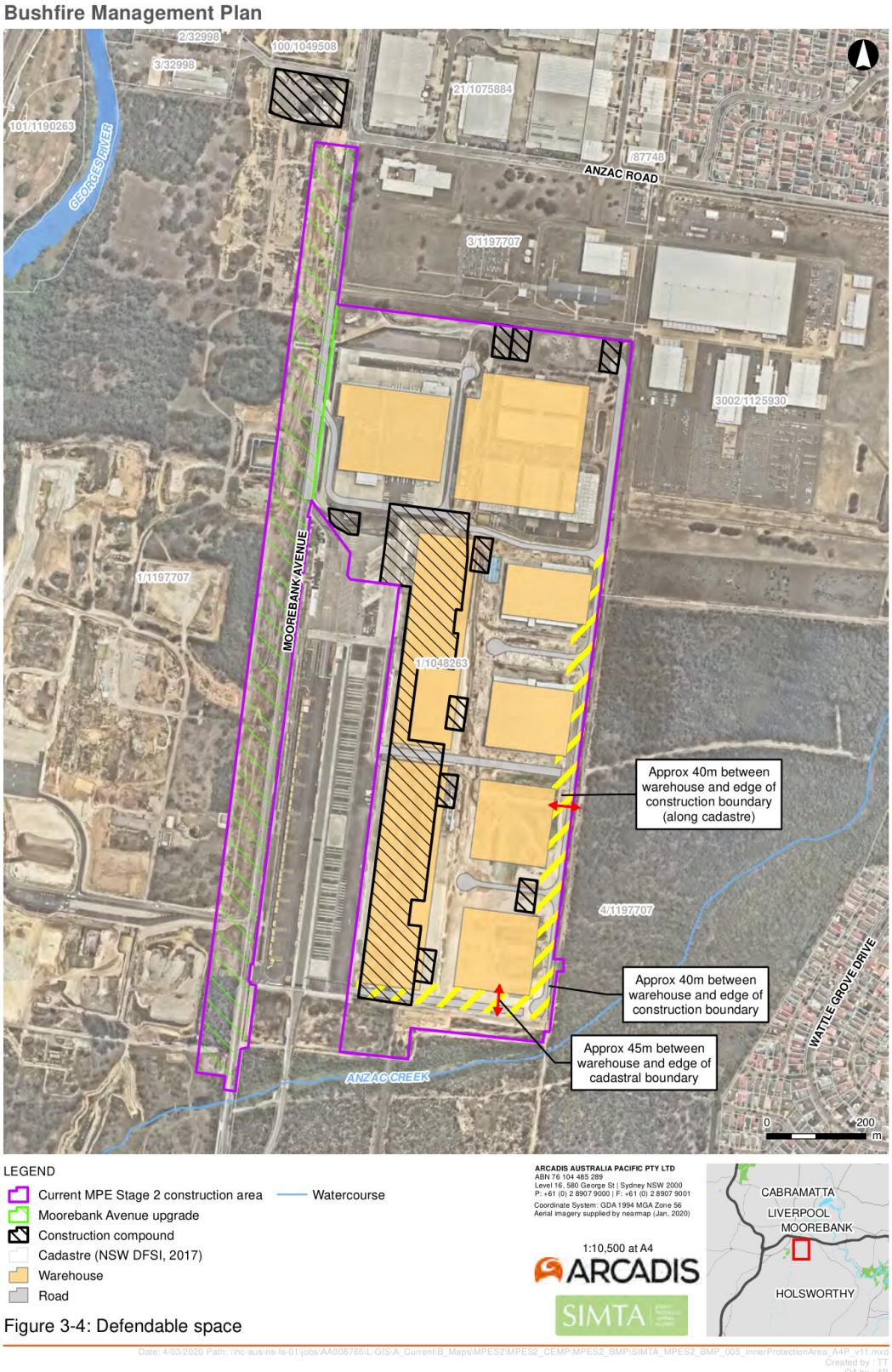

Figure 3-4: Defendable space

Figure 3-4 Defendable Space

3.6.3 Management Program

The following management program shall be implemented in the maintenance of the bushfire protection measures to the site. Table 14 provides a guide to the timing of the works required to maintain the APZs.

Table 14 Timing of Works within the IPA

Management Area		Management Prescription	Method	Timing
IPA	Landscaped Gardens	Minimize 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	Minimize Fine Fuels – to <3 tonnes/hectare	Mowing and slashing	Intervals not to exceed monthly in spring and summer
	Trees	Provide 2 m canopy separation between trees and maintain limbs 2 m 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 in August Removal of combustible materials in gutters not to exceed monthly in spring and summer

This section describes the overall approach to managing and mitigating bushfire risks during construction of the Project. Fire management or prevention practices include activities that land owners and communities implement to prepare for, and respond to, bushfire events. These include fire control line construction and maintenance, fuel reduction through burning or clearing (slashing, mowing etc.) and having the resources and equipment available to fight fires. The risk of fire is increased if these prevention and preparation activities are incomplete.

The management measures in Table 15 are based on *NSW RFS Guidelines - Planning for Bush Fire Protection (2006).*

Table 15 Management Measures

ID	Management Measures	Timing	Responsibility	Reference
Training				
BM1	Bushfire awareness and requirements of bushfire safety will be included in staff inductions and in toolbox talks pre-commencement	Prior to construction	Contractor's EM	Best practice
BM2	All staff will be required to undergo staff/site inductions and toolbox talks	During construction	Contractor's EM	Planning for Bushfire Protection 2006 (PBP 2006)
Plant and Equipment				
BM2	Firefighting equipment will be made available at designated locations in site offices and within site vehicles. These will be maintained in accordance with AS1851:2012.	During construction	Contractor's EM	PBP 2006
BM3	Fire hydrants will not be located within any road carriageway	During construction	Contractor's PM	PBP 2006
BM4	Fire hydrant spacing, sizing and pressures will comply with AS 2419.1-2005.	During construction	Contractor's PM	PBP 2006
BM5	Plant and equipment will be fitted with appropriate guards to minimise potential for sparks causing accidental ignition.	During construction	Contactor's CM	PBP 2006
BM6	Water trucks will be available on site at all times.	During construction	Contractor's CM	PBP 2006
BM7	Hazardous materials transport, containment and storage will comply with the relevant regulations of the Dangerous Goods Safety Act 2004. All hazardous materials will be stored in accordance with the relevant Australian Standards in designated areas.	During construction	Contractor's CM	PBP 2006
BM8	Vehicles and plant will not block fire trails.	During construction	Site Supervisor	Best practice
Construction Activities				
BM9	No vehicles will be permitted to idle while on vegetation to minimise risk of ignition.	During construction	Site Supervisor	PBP 2006

ID	Management Measures	Timing	Responsibility	Reference
BM10	No hot works will be permitted during total fire bans.	During total fire ban	Site Supervisor	FCMM 13A PBP 2006
BM11	All flammable material will be removed from the vicinity of hot works.	During hot works activities	Site Supervisor	PBP 2006
Access and Compounds				
BM12	All site offices will be accessible via access roads suitable for firefighting appliances similar to NSW RFS category 1 tankers.	During construction	Contractor's CM	FCMM 13A PBP 2006
BM13	Access roads will be well maintained and inspected to ensure that firefighting access is adequate.	During construction	Site Supervisor	PBP 2006
BM14	Public access roads will be two-wheel drive and all weather roads.	During construction	Contractor's CM	PBP 2006
BM15	The emergency assembly point and evacuation routes will be clearly signposted and communicated.	During construction	Contractor's CM	PBP 2006
BM16	All site offices and temporary buildings will be located at least 10 m outside vegetation buffer zone as shown on the Certified Liverpool Bushfire Prone Land Map.	During construction	Contractor's CM	FCMM 13A PBP 2006
BM17	Emergency services/personnel will have safe access and egress to bushfire prone land at all times.	During construction	Contractor's CM	PBP 2006 FCMM 7B RSoCs
BM18	Emergency services access to bushfire prone land will be adequately maintained at all times.	During construction	Site Supervisor	PBP 2006
Asset Protection Zones				
BM19	The Asset Protection Zone (APZ) will be contained wholly within the site boundary and management of the IPA in order to not impact the Boot Land.	During construction	Contractor's EM	CoC B111 CoC B144

ID	Management Measures	Timing	Responsibility	Reference
BM20	The APZs will be managed and maintained to prevent the spread of fire towards the building in accordance with the requirements of the *Standards for Asset Protection Zones* (RFS 2005).	During construction	Contractor's EM	CoC B144
BM21	Soil stability of the APZs will not be compromised and the APZs will be located on lands with a slope less than 18 degrees.	During construction	Contractor's EM	PBP 2006
BM22	Radiant heat levels at any point on the proposed buildings will not exceed 29 kW/m^2.	During construction	Contractor's EM	PBP 2006
Vegetation Management				
BM23	Vegetation buffer zone (as shown on the Certified Liverpool Bushfire Prone Land Map) will be clearly designated and shall not be used at any time for storage of materials during Construction.	During construction	Contractor's EM	PBP 2006
BM24	Stockpiles of mulch will be maintained and turned regularly to minimise potential for spontaneous combustion.	During construction	Site Supervisor Contractor's EM	PBP 2006
Consultation				
BM25	The Construction Contractor will actively engage in, and maintain, on-going consultation with RailCorp and the Rural Fire Service to facilitate hazard reduction activities in proximity to the Project.	During construction	Contractor's PM	PBP 2006
Services				
BM26	Electricity lines will be regularly inspected to ensure they are not fouled by branches.	During construction	Site Supervisors	CoC B146 PBP 2006
BM27	Electricity transmission lines will be located underground in the first instance where practicable to limit the possibility of ignition of surrounding bushland or the fabric of buildings.	During construction	Contractor's CM	CoC B146 PBP 2006
BM28	Trees and other vegetation in the vicinity of overhead electrical transmission lines will be managed and trimmed in accordance with the distance specifications in "Vegetation Safety Clearances" issued by Energy Australia (NS179, April 2002).	During construction	Contractor's CM Contractor's EM	CoC B146 PBP 2006
BM29	Overhead electrical transmission lines will be installed with short pole spacing (30 metres).	During construction	Contractor's CM	CoC B146 PBP 2006

ID	Management Measures	Timing	Responsibility	Reference
BM30	Utility services will be adequate to meet the needs of fire fighters. For example, firefighting water supply will be installed to comply with AS2419.1 – 2005.	During construction	Contractor's CM	RSoCs

4 MONITORING AND REVIEW

4.1 Environmental Monitoring

Monitoring under this plan will be undertaken by the Contractor's EM during weekly inspections of construction activities to monitor compliance and conformance with the requirements of the CoCs and this plan. Weekly inspections will focus on the following key issues:

- Maintenance of APZ / Defendable Spaces
- Provision of fire appliance access
- Storage of combustible materials in the APZ / Defendable Spaces
- Presence and maintenance of firefighting equipment
- Maintenance of plant and vehicles to minimise sparks and accidental ignition
- Maintenance of buffer zones.

An Environmental Inspection Checklist will be used to maintain compliance, conformance and effectiveness of controls. Items that require action will be documented during environmental inspection and notified to the relevant Site Supervisor. The relevant Site Supervisor will be responsible for providing appropriate resources in terms of labour, plant and equipment to enable the items to be rectified in the nominated timeframes.

Daily inspections and maintenance of controls will be made by the Site Supervisor and maintenance will be recorded in site diaries during active site works.

4.2 Environmental Auditing and Reporting

Auditing and reporting will be undertaken in accordance with Section 4.3 of the CEMP.

4.3 Non-compliances, Non-conformances and Actions

It is the responsibility of all site personnel to report non-compliances and non-conformances to the Site Supervisor and/or the Contractor's EM.

Non-conformances, non-compliances and corrective and preventative actions will be conducted in accordance with Section 4.4 of the CEMP.

4.4 Review and Improvement

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

A copy of the updated plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure.

The most recent approved version of the CBMP will be implemented for the duration of the development.

APPENDIX A EVIDENCE OF CONSULTATION

Addressing comments from NSW RFS dated 5 April 2018

Section of Comment	Comment	SIMTA Response	Section Amended
N/A	The preparation of a Bushfire Management Plan is not a recommendation from the NSW RFS in accordance with our response dated 20 September 2017.	Noted.	N/A