CONSTRUCTION TRAFFIC AND ACCESS MANAGEMENT PLAN

Moorebank Precinct East Stage 1, Package 2

15 January 2025

Moorebank Precinct East, Stage 1, Package 2

Construction Traffic and Access Management Plan

Current Revision Author [redacted]

Checker [redacted]

Approver [redacted]

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Original Author Details

Original Author Details	Qualifications and Experience
[redacted] Arcadis [redacted]	MSc Applied Environmental Geology. Distinction (Cardiff University, United Kingdom) BSc Geology with Astronomy with a year in North America. First Class Honours. (University of Hertfordshire, United Kingdom) [redacted] has over 20 years of traffic engineering/transport planning experience and has worked on various traffic and transport planning projects in Australia, Malaysia, Singapore, Mauritius, United Arab Emirates and India.
[redacted] Arcadis [redacted]	B. Regional and Urban Planning (Hons. IIA) (University of the Sunshine Coast) Over 3 years' experience as a Transport Planner specialising in MCAs, SWOT analysis, data collection and analysis, intersection assessment and design, micro-simulation modelling, route strategy and planning and traffic impact assessments (TIA).

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REVISIONS

Revision	Date	Description
001	17/01/2017	For consultation
002	20/02/2017	For DP&E Approval
003	23/03/2017	Addressing DP&E comments
004	02/05/2017	Addressing DP&E comments
005	21/06/2017	Updated in response to DP&E Approval Letter dated 9 May 2017
006	13/10/2017	Updates to construction traffic volumes in accordance with MPE IMEX RFMA-001 and clarification relating to requirements for Road Occupancy Licences
007	26/10/2017	Revision to construction boundary associated with IMEX RfMA 003
008	04/05/2018	Revised EDO Conditions of Consent
009	16/08/2018	Revisions associated with the internal environmental and sustainability audit, RfMA 005 & 008
010	11/01/2019	Minor updates associated with ‘non-conformance,’ ‘non-compliance’ and ‘corrective and preventative actions’
011	9/07/2019	Revisions associated with RfMA 011
012	22/10/2019	Minor revisions associated with RfMA 018 – Additional construction compound to enable installation of gantry cranes for the IMEX terminal
013	31/10/2019	Revisions associated with DotEE review of the IMEX CEMP and subplans
014	7/11/2019	Revisions associated with additional DotEE comments on the IMEX CEMP and subplans
015	07/07/2021	Revision associated with Disused Rail Spur removal
016	15/01/2025	Revisions associated with RfMA 24 and minor administrative updates

ACRONYMS AND DEFINITIONS

Term	Explanation
CCoA	Commonwealth Conditions of Assessment
CEC	Community Engagement Consultant
CEMP	Construction Environmental Management Plan
CIAS	Community Information and Awareness Strategy
CoC	Conditions of Consent
Contractor	Principal Contractor
CMM	Commonwealth Mitigation Measures
CNVMP	Construction Noise and Vibration Management Plan
CPCoA	Concept Plan Conditions of Assessment
CTAMP	Construction Traffic and Access Management Plan
CTIA	Construction Traffic Impact Assessment
EDO	Environmental Defenders Office
DPE	Department of Planning and Environment
DURS	Disused Rail Spur
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	• Environment Protection Authority
FCMM	• Final Compilation of Mitigation Measures
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.
IMEX Terminal No. 1	Moorebank Precinct East - Stage 1 - IMEX Terminal No. 1
IMT facility	MPE Stage 1 Package 2 including the construction of the following key components together comprising the intermodal terminal (IMT):

Term	Explanation
	• Truck processing and loading areas. • Rail loading and container storage areas. • Administration facility and associated car parking • Rail Link.
LoS	Level of Service
MC	Managing Contractor
Minister, the	Minister of Department of Planning and Environment
MPE	Moorebank Precinct East
MPE Site	The site at Moorebank as approved by the Concept Plan (MP_10_0913)
MPE Stage 1, Package 1	The construction of the Rail Link connecting the Southern Sydney Freight Line to the IMEX, traversing across the Boot land, RailCorp Land, Moorebank Avenue, the MPW Golf Course, Georges River, and Glenfield Waste Facility
MPE Stage 1, Package 2	Construction of the IMEX Terminal (Figure 1) including the following key components: 1. Truck processing, holding and loading areas - entrance and exit from Moorebank Avenue 2. 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
MPE Stage 1 Project	The whole of the land to which the MPE Stage 1 Project approval SSD 14-6766 relates including both MPE Stage 1 Package 1, and MPE Stage 1 Package 2.
Non-compliance	An occurrence, set of circumstances, or development that results in a non-compliance or is non-compliant with Development Consent SSD 6766 Conditions of Consent or EPBC Act Approval (EPBC 2011/6229) Conditions of Approval but is not an incident
Non-conformance	Non-conformances are observations or actions that are not in strict accordance with the CEMP and the aspect specific sub-plan.
PCTAMP	Preliminary Construction Traffic Management Plan
Project, the	The Project is the MPE Stage 1 Package 2 Project i.e. the IMEX Terminal construction site as depicted in Figure 1.
RMS	Road and Maritime Services
RSoC	Revised Statement of Commitments
RTS	Response to Submissions
SIMTA	Sydney Intermodal Terminal Alliance
TCP	Traffic Control Plan
TMP	Traffic Management Plan

COMPLIANCE MATRICES

Table 1-Ministers Conditions of Consent (CoC)

CoC	Requirement	Document Reference
B4.	The design of the main access gate shall preclude heavy road freight vehicles from using Moorebank Avenue south (no left turn from the terminal site onto Moorebank Avenue, and no right turn from Moorebank Avenue into the terminal site). Detailed plans are to be submitted to the satisfaction of the Certifying Authority and provided to the Secretary for information.	Noted. Addressed separately as part of Design Process
B5.	The Applicant shall ensure that: a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the Development are constructed and maintained in accordance with the latest versions of *AS 2890.1 – 2004, AS 2890.6-2009* and *AS 2890.2 – 2002* for heavy vehicle usage; b) the swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, is in accordance with AUSTROADS; c) The layout of the site shall be designed to ensure heavy vehicles associated with the operation of the intermodal terminal can be accommodated on site in the event of an incident blocking access to the M5 Motorway/ Moorebank Avenue to avoid queuing on public roads. d) The layout of the site shall be designed so that heavy vehicles are not required to select reverse gear.	Noted. Addressed separately as part of Design Process
	e) heavy vehicles and bins associated with the SSD do not park or stand on local roads or footpaths in the vicinity of the site; i) all vehicles are wholly contained on site before being required to stop; f) all loading and unloading of materials is carried out on site; and g) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times. Detailed plans demonstrating compliance with a)-h) shall be prepared in consultation with RMS and to the satisfaction of the Certifying Authority.	Table 10, TR9, TR10, TR11
B6.	The Applicant shall include provision for emergency access to the site. Plans demonstrating compliance shall be submitted to the satisfaction of the Certifying Authority and provided to the Secretary for information.	Table 10, TR20
B8.	The SSD shall be designed to ensure a bus stop on Moorebank Avenue (including direct pedestrian access from the terminal site to the bus stop), and associated turnaround facility suitable for a 14.5 metre long non-rear steer bus is not precluded.	Noted. Addressed separately as part of Design Process

CoC	Requirement	Document Reference
C17.	Pre-Construction Dilapidation Report The Applicant shall engage a suitably qualified person to prepare a pre-construction dilapidation report prior to the commencement of construction. This report to ascertain the structural condition of: a) local public roads likely to be used by the project's construction traffic identified in the Construction Traffic and Access Management Sub-plan required under condition E34(a). b) local public roads, cycle ways, footpaths and other utilities identified in the Construction Traffic and Access Management Sub-Plan required under condition E35(a). c) The report shall be submitted to the satisfaction of the Certifying Authority and a copy is to be forwarded to Campbelltown City Council, Liverpool City Council, RMS and the Secretary.	Table 10, TR3
C18.	The Applicant shall undertake road pavement deflection testing of the construction truck routes at 20 metre intervals along all wheel paths where feasible and reasonable to the extent required by Condition E34 (a), prior to commencement of construction.	Table 10, TR3
C19.	The Applicant shall ensure that the construction and operation of the proposed development will not prevent the existing use of Moorebank Avenue as a public road to a standard commensurate to its current use prior to the development.	Table 10, TR4 and TR8
C24.	Prior to the commencement of construction, the Applicant shall undertake a Road Safety Audit in consultation with TfNSW and the relevant Council for the proposed construction vehicle access points on public roads. The audit shall be undertaken by an independent TfNSW accredited road safety auditor in accordance with the relevant Austroads guidelines to identify any safety issues for the proposed construction vehicle access. The audit shall recommend corrective actions for any identified safety issues and propose appropriate traffic management measures (i.e. temporary traffic signals).	Table 10, TR3
C25.	The design of new traffic signals (including modification of existing traffic signals) along Moorebank Avenue shall be designed to meet RMS requirements, Austroads Guide to Road Design and relevant RMS supplements (available on www.rms.nsw.gov.au). Plans shall be and prepared in consultation with RMS, be submitted to the satisfaction of the Certifying Authority and provided to the Secretary for information.	Table 10, TR3
D1	Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Applicant shall prepare and implement a Community Communication Strategy to the satisfaction of the Secretary. The Strategy shall provide mechanisms to facilitate communication between the Applicant (and its contractor(s)), the Environmental Representative (see condition E4), the relevant Council and community stakeholders (particularly adjoining landowners) on the design and environmental management of construction. The Strategy shall include, but not be limited to: a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners, key community and business groups, and community and social service organisations;	IMEX Terminal No. 1 Community Consultation Strategy (Community and Stakeholders Liaison Plan)

CoC	Requirement	Document Reference
	b) procedures and mechanisms for the regular distribution of accessible information to community stakeholders on construction progress and matters associated with environmental management, including provision of information in appropriate community languages;	
	c) procedures and mechanisms through which the community stakeholders can discuss or provide feedback to the Applicant and/or Environmental Representative in relation to the environmental management and delivery of the SSD;	
	d) procedures and mechanisms through which the Applicant can respond to enquiries or feedback from the community stakeholders in relation to the environmental management and delivery of the SSD; and	
	e) procedures and mechanisms that would be implemented to resolve issues/disputes that may arise between parties on the matters relating to environmental management and the delivery of the SSD, including but not limited to disputes regarding rectification or compensation for impacts to third party property and infrastructure. These procedures and mechanisms may include the use of a suitably qualified and experienced independent mediator.	
D2	Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Applicant shall ensure that the following are available for community enquiries and complaints for the duration of construction:	Section 6.6
	a) a 24-hour telephone number(s) on which complaints and enquiries about the SSD may be registered;	
	b) a postal address to which written complaints and enquires may be sent;	
	c) an email address to which electronic complaints and enquiries may be transmitted; and	
	d) a mediation system for complaints unable to be resolved.	
	The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.	
E2	A site notice(s) shall be prominently displayed at the boundaries of the site for the purposes of informing the public of project details including, but not limited to the details of the Contractor, Certifying Authority and Structural Engineer. The notice(s) is to satisfy all but not be limited to, the following requirements:	Table 10, TR12
	a) Minimum dimensions of the notice are to measure 841mm x 594mm (A1) with any text on the notice to be a minimum of 30 point type size;	
	b) The notice is to be durable and weatherproof and is to be displayed throughout the works period;	
	c) The approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries, including	

CoC	Requirement	Document Reference
	construction/noise complaint are to be displayed on the site notice; and d) The notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.	
E3	The Applicant shall ensure that the 24-hour contact telephone number is continually attended by a person with authority over the works for the duration of the development.	Section 6.6 Contractor Community and Stakeholder Liaison Plan
E23	The Applicant is to ensure that construction vehicles operate so as to minimise any construction noise impacts from the construction site. Measures that could be used include toolbox talks, contracts that include provisions to deal with unsatisfactory noise performance for the vehicle and/or the operator, and specifying non-tonal movement alarms in place of reversing beepers or alternatives such as reversing cameras and proximity alarms, or a combination of these, where tonal alarms are not mandated by legislation.	CNVMP and Sections 5, Table 10, TR14 and TR15
E24	No use of compression brakes shall be permitted for construction vehicles associated with construction in the vicinity of the subject site.	Table 10, TR15 and Drivers Code of Conduct
E26	A Road Occupancy Licence (ROL) must be obtained from the Transport Management Centre (TMC) for any activity likely to impact on the operational efficiency of the road network, allowing the use of specified public road space at approved times. The Applicant must allow a minimum of 10 working days for processing from date of receipt and include a Traffic Control Plan with any application.	Noted.
E27	Construction shall be carried out, where feasible and reasonable, to avoid the use of local roads (through residential streets) by heavy vehicles to gain access to the site and/or ancillary facilities.	Section 4.3
E28	Construction vehicles (including staff vehicles) shall be managed to: a) minimise parking or queuing on public roads; b) minimise idling and queuing in local residential streets where practicable; c) adhere to the nominated haulage routes identified in the Construction Traffic and Access Management Plan required under condition E34(a); and d) ensure access and egress from construction compounds is undertaken in a safe and lawful manner.	Table 10, TR7, TR8, TR9, TR10
E29	Safe pedestrian and cyclist access through or around worksites shall be maintained during construction. In circumstances where pedestrian and cyclist access is restricted due to construction activities, a satisfactory alternate route shall be provided and signposted, including provision of temporary footpaths where pedestrian access is reliant on grassed verges.	Table 10, TR19
E30	Access to all properties affected by the carrying out of construction shall be maintained, where feasible and reasonable, unless otherwise agreed by the relevant property owner or occupier. Any access physically affected by construction shall be reinstated to	Table 10, TR18

CoC	Requirement	Document Reference
	at least an equivalent standard, unless agreed with by the property owner.	
E32	The existing mature trees located on the eastern side of Moorebank Avenue shown on Drawing LA01 (Landscape Master plan) dated 30.3.2015 shall be retained, unless where required to be removed for construction of a permanent access point to the terminal site. Trees to be retained shall be protected and maintained during preconstruction and construction activities in accordance with AS4970-2009 Protection of trees on development sites. Details of tree protection must be provided to the Certifying Authority prior to the commencement of construction.	Contractors Demolition Plan and related drawings
E34	As part of the CEMP for the SSD, the Applicant shall prepare and implement: a) a Construction Traffic and Access Management Plan to ensure traffic and access controls are implemented to avoid or minimise impacts on traffic, pedestrian and cyclist access, and the amenity of the surrounding environment. The Plan shall be developed in consultation with the relevant Council, emergency services, road user groups, and relevant pedestrian and bicycle user groups, and include, but not necessarily be limited to:	This Plan
E34a	(i) identification of construction traffic routes and construction traffic volumes (including heavy vehicle/spoil haulage) on these routes;	Section 4.3
E34a	(ii) details of vehicle movements for construction sites and ancillary facilities including parking, dedicated vehicle turning areas, and ingress and egress points;	Section 4.3
E34a	(iii) discussion of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, access to public land, property access, including details of oversize load movements, and the nature and duration of those impacts;	Section 4.2
E34a	iv) details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion and measures to ensure safe pedestrian and cycle access;	Section 5
E34a	(v) details of measures to maintain or provide alternative safe and accessible routes for pedestrians throughout the duration of construction;	Table 10, TR19
E34a	(vi) details of measures to maintain connectivity for cyclists, with particular emphasis on providing adequate access between key existing cycle routes for commuter cyclists;	Table 10, TR19
E34a	(vii) details of measures to manage traffic movements, parking, loading and unloading at ancillary facilities during out-of-hours work;	CNVMP and TR1
E34a	(viii) details of methods to be used to communicate proposed future traffic changes to affected road users, pedestrians and cyclists, consistent with the Community Communication Strategy required under condition D1.	CIAS and Table 10, TR6
E34a	(ix) an adaptive response plan which sets out a process for response to any traffic, construction or other incident; and	Table 10, TR14

CoC	Requirement	Document Reference
E34a	x) mechanisms for the monitoring, review and amendment of this plan.	Section 6.4 and Section 6.7
E34b	a **Construction Noise and Vibration Management Plan** to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the Interim Construction Noise Guidelines (Department of Environment and Climate Change 2009). The plan shall be developed in consultation with the EPA and shall include, but not be limited to:	CNVMP
E34b (i)	identification of the work areas, site compounds and access points;	Figure 3
E34b (ii)	identification of sensitive receivers and relevant construction noise and vibration goals applicable to the SSD and stipulated in the conditions above;	CNVMP
E34b (iii)	details of construction activities and an indicative schedule for works, including the identification of key noise and/or vibration generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers, particularly residential areas;	CNVMP
E34b (iv)	an **Out-of-Hours Work Protocol** for the assessment, management and approval of works outside of standard construction hours as defined in condition E19 of this approval, for the Secretary's approval. The Out-of-Hours Work Protocol must detail:	CNVMP Appendix B
	a) assessment of out-of-hours works against the relevant noise and vibration criteria;	
	b) detailed mitigation measures for any residual impacts (that is, additional to general mitigation measures), including extent of at receiver treatments; and	
	c) proposed notification arrangements.	
E34b (v)	identification of feasible and reasonable measures proposed to be implemented to minimise and manage noise impacts (including construction traffic noise impacts), including, but not limited to, acoustic enclosures, erection of noise walls (hoardings) and respite periods;	CNVMP Section 6 CTAMP Table 9 TR1, TR15
E34b (vi)	identification of feasible and reasonable procedures and mitigation measures to ensure relevant vibration criteria are achieved, including applicable buffer distances for vibration intensive works, use of low vibration generating equipment/ vibration dampeners or alternative construction methodology, and pre- and post-construction dilapidation surveys of sensitive structures where blasting and/ or vibration is likely to result in damage to buildings and structures (including surveys being undertaken immediately following a monitored exceedance of the criteria);	CNVMP
E34b (vii)	(vii) a description of how the effectiveness of mitigation and management measures would be monitored during construction, clearly indicating how often this monitoring would be conducted, the locations where monitoring would take place, how the results of this monitoring would be recorded and reported, and, if any exceedance is detected, how any noncompliance would be rectified; and	CNVMP

CoC	Requirement	Document Reference
E34b (viii)	mechanisms for the monitoring, review and amendment of this plan.	CNVMP
F1	The Applicant shall engage a suitably qualified person to prepare a post-construction dilapidation report at the completion of the construction works:	Table 10, TR3
F1 a)	This report is to ascertain whether the construction works created any structural damage to footpaths, roads, buildings and other utilities in the vicinity of the development.	
F1 b)	The report is to be submitted to the Certifying Authority. In ascertaining whether adverse structural damage has occurred to adjoining buildings, infrastructure and roads, the Certifying Authority must:	
	(i) compare the post-construction dilapidation report with the pre-construction dilapidation report; and	
	(ii) have written confirmation from the relevant authority that there is no adverse structural damage to their infrastructure and roads as a result of construction.	
F1 c)	The report shall be submitted to the satisfaction of the Certifying Authority and a copy is to be forwarded to Campbelltown City Council, Liverpool City Council, RMS and the Secretary.	

Table 2 Final Compilation of Mitigation Measures (FCMM)

FCMM	Requirement	Document Reference
FCMM 1A	A Road Safety Audit will be undertaken of Moorebank Avenue and Cambridge Avenue to identify the traffic safety risks associated with construction vehicles using these roads and to determine the appropriate traffic controls to be implemented to mitigate any risks identified as part of the preparation of the Construction Traffic Management Plan (CTMP). The effectiveness of any measures implemented will be monitored during the construction phase.	Table 10, TR3
FCMM 1B	A CTMP will be developed by the construction contractor construction contractor responsible for construction of the Proposal. The CTMP will be developed in accordance with the Preliminary Construction Traffic Management Plan (PCTMP), and will include the following requirements, at a minimum:	This Plan
	A traffic control mechanism will be located at each of the truck entry and exit points from the construction compounds to assist with vehicle movements and pedestrian/cyclist movements during construction, where necessary	Table 10, TR2, TR9
	In consultation with RMS, Liverpool City Council and Campbelltown City Council general signposting of the access roads will be undertaken with appropriate heavy vehicle and construction warning signs	Table 10, TR12
	Installation of specific warning signs at entrances/exits to the construction site to warn existing road users of entering and exiting construction traffic will be undertaken	Table 10, TR12
	Speed limits will be developed so as to minimise the potential for fauna to be struck by a vehicle within the construction areas.	Table 10, TR2 and TR5

FCMM	Requirement	Document Reference
	All vehicles and plant in operation during construction are to adhere to site rules relating to speed limits.	Table 10, TR5
	Pedestrian walking routes and crossing points will be established and clearly marked throughout the construction phase	Table 10, TR19
	Where required, appropriate traffic control and warning signs will be installed for areas identified where potential safety risk issues may exist, such as the Cambridge Avenue causeway	Table 10, TR12
	The promotion of carpooling for construction staff and other shared transport initiatives during the construction phase will be considered	Table 10, TR8
FCMM 1C	An Operational Traffic Management Plan (OTMP) (or equivalent) will be developed for the operational phase of the Proposal, in accordance with the Preliminary Operational Traffic Management Plan (POTMP). The OTMP will include the following measures to manage potential traffic impacts, at a minimum: • Use of short-range radios, GPS and/or wireless communications to maximise the efficiency of access and circulation of vehicles within the Stage 1 site • Provision of adequate truck holding capacity within the Stage 1 site • Provision of an information dissemination system to exchange information with truck drivers on live traffic conditions on the external network. • A driver code of conduct will be included to inform drivers of permissible access and egress routes to and from the Stage 1 site A survey of truck trip generate will be undertaken after 24 months of commencement of operation of the Proposal.	Not addressed within this CTAMP
FCMM 1D	Site entry and exit points to the Stage 1 site will be designed, to incorporate the following measures: • Design measures to minimise queuing on Moorebank Avenue during operation of the Proposal • The signalised T-intersection that will be provided for employee/visitor access and will be designed to include integrated pedestrian crossing facilities, to provide safe pedestrian access to/from the Proposal. • The truck entry and exit point will be a signalised intersection that will only allow for left in and right out movements. A “right turn ban” will apply on the Moorebank Avenue at this signalised intersection from south. A ‘No Left Turn’ sign will be installed on the approach to the exit. The truck entry and exit point will be designed to accommodate Super B-Doubles entering/exiting into the Stage 1 site to provide for the future scenario that Super B-doubles are permitted within the existing Sydney road network	Addressed separately within design reports and drawings
FCMM 1E	The Proponent will negotiate with relevant agencies and authorities regarding the funding apportionment of necessary road infrastructure upgrade works required to support the Proposal.	Not addressed within this CTAMP
FCMM 1F	Design of new or modified traffic signals would be in accordance with Roads and Maritime Services requirements and would be undertaken by a suitably qualified person. Designs would be submitted to Roads and Maritime Services for review and approval prior to commencement of works impacting Roads and Maritime Services infrastructure.	Addressed separately within design reports and drawings

FCMM	Requirement	Document Reference
	Decommissioning, modification and construction of traffic signals, including public utility adjustments necessitated by the traffic signalling works, for the Proposal would be undertaken by SIMTA.	
FCMM 16Aj	Where practical, trucks removing waste from the Proposal site or bringing materials to the Proposal site will be filled to the maximum amount allowable, depending on the truck size and load weight, to reduce the number of traffic movements required.	Table 10, TR8 GHGMP Section 6

Table 3 Concept Plan Conditions of Approval (CPCoA)

CPCoA	Requirement		Document Reference
Best Practice Review – Traffic and Transport	Any future Development Application shall include a Traffic Impact Assessment that assesses intersection and road network impacts, including impacts on Cambridge Avenue. The traffic assessment shall:	LOGOS	Addressed as part of EIS development – EIS Appendix L – Traffic and Accessibility Impact Assessment – Construction related impacts for Stage 1, package 2 are addressed in relevant sections of this CTAMP
	a) undertake detailed model analysis commensurate with the stage, to confirm network operation and identify intersection upgrade requirements;	LOGOS	Addressed as part of EIS development – EIS Appendix L – Traffic and Accessibility Impact Assessment
	b) consider the constructability constraints of proposed upgrade(s) at key intersections, such as vehicle sweep paths, geometry and sight lines;	LOGOS	Addressed as part of EIS development – EIS Appendix L – Traffic and Accessibility Impact Assessment
	c) assess construction traffic impacts, including:	Stage 1, Package 2 - Contractor	Section 4
	i. the identification of routes and the nature of existing traffic on these routes		Section 3.1
	ii. an assessment of construction traffic volumes (including spoil haulage/delivery of materials and equipment to the road corridor and ancillary facilities); and		Section 3.2
	iii. potential impacts to the regional and local road network (including safety and level of service) and potential disruption to existing public transport services and access to properties and businesses.		Section 4
	d) assess operational traffic and transport impacts to the local and regional road network, including:	LOGOS	Not addressed in this CTAMP – covered in EIS Appendix L
	i. changes to local road connectivity and impacts on local traffic arrangements, road capacity/safety;		

CPCoA	Requirement		Document Reference
	ii. traffic capacity of the road network and its ability to cater for predicted future growth and		
	iii. monitoring of vehicle numbers on Cambridge Avenue.		
	e) provide an updated Traffic Management and Accessibility Plan including:	Stage 1, Package 2 - Contractor	This Plan
	i. measures to prevent heavy vehicles accessing residential streets to maintain the residential amenity of the local community		Section 5
	ii. public transport;		Section 5
	iii. cyclist facilities; and		
	iv. driver code of conduct.		
	In particular, the Traffic Impact Assessment must identify upgrades and other mitigation measures required to achieve the objective of not exceeding the capacity of the following intersections and roads –	LOGOS and Contractor	Road Upgrades Covered in EIS Appendix L Other mitigation measures related to construction of Stage 1, package 2 works are covered in Section 5 of this plan
	(a) Moorebank Avenue/ Newbridge Road		
	(b) Moorebank Ave/ Heathcote Road		
	(c) Cambridge Ave		
	(d) M5 Motorway/ Moorebank Avenue		
	(e) M5 Motorway/ Heathcote Road		
	(f) M5 Motorway/ Hume Highway.		

Table 1 Revised Statement of Conditions (RSoC)

RSoC	Requirement	Timing	Document Reference
Traffic and Access	The Proponent commits to developing a Construction Traffic Management Plan to minimise the potential impacts of the construction stage(s), including: • Heavy vehicle access routes • Location of construction worker parking • Mitigation measures to avoid any unacceptable impacts on the surrounding land uses. Mitigation measures to avoid any unacceptable impacts on regular bus services and school bus services operating on roads within the vicinity of the site and pedestrian and cyclist access.	Construction	Section 5

Table 5 Commonwealth Conditions of Approval (CCoA)

Condition	Requirement	Document Reference
7	For the better protection of Commonwealth land, the person taking the action must engage a ***suitably qualified expert(s)*** to prepare a Construction Environment Management Plan (CEMP), for the approval of ***the Minister***. The CEMP must include in relation to construction of the proposed facility:	This CTAMP is a sub-plan to the CEMP
7 b)	identification and quantification of all potential impacts associated with noise, vibration, air quality, traffic, light spill, hydrological changes, contamination, and indigenous heritage (including cumulative impacts associated with the separately approved but related and adjacent intermodal terminal facility project, EPBC approval (2011/6086)) upon Commonwealth land. Consideration must be given to people and communities at SME, DNSDC, Defence housing, and the environment more generally in neighbouring bushland areas. Of note, the air quality assessment must quantify all emissions of $PM_{2.5}$ and PM_{10} arising from project-related sources identified in the EIS.	Section 3 Note: The School of Military Engineering (SME) and Defence housing have been relocated off the MPW Site to the Holsworthy Barracks and are no longer sensitive receivers to the MPE site. The Defence National Storage and Distribution Centre (DNSDC) formerly occupied the MPE site but relocated this operation to the Defence Joint Logistics Unit (DJLU) immediately north of the MPE Site.
7 d)	refined details (including implementation timeframes) for the mitigation measures outlined in the ***EIS*** (sections 7.4.2, 7.4.3, 7.4.6, 7.4.7, 7.4.8 and 7.4.9) and summarised at Annexure A.	Section 5
7 f)	dentification of the trigger values and criteria for all matters mentioned in condition 7(b) (excluding light spill, land contamination and indigenous heritage) that will be adopted for monitoring and managing potential impacts to Commonwealth land;	Section 4.1.3
7 g)	details of a comprehensive monitoring program (including locations, frequency and duration) for: i) validating the anticipated impacts associated with condition 7(b); and ii) determining the effectiveness of proposed mitigation/management measures;	Section 6.4
7 h)	provisions to revise the approved CEMP in response to monitoring associated with condition 7(g) including, details of response / contingency mechanisms to address any exceedances of the relevant trigger values;	Section 6.4
7 j)	details of a complaints handling procedure;	Section 6.6

Table 2 Commonwealth Approval (EPBC 2011/6229) Mitigation Measures (CMM)

Issue	Requirement	Document Reference
Traffic	A Construction Traffic Management Plan (CTMP) will be implemented prior to and during construction of the SIMTA proposal. Construction material will be sourced from within metropolitan Sydney and delivered to the SIMTA site primarily via the M5 Motorway, Hume Highway, M7 Motorway and Moorebank Avenue. Site access and egress for all construction traffic will be via Moorebank Avenue. Construction site entry is proposed just south of the existing signalised intersection, south of Anzac Avenue to minimise construction traffic impacts upon DNSDC. During later stages of construction, a separate egress point would likely be established to the south of the SIMTA site.	This Plan, specifically Section 4.2.1 and Section 4.3.2

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Figure 3 Construction Footprint and Site Access Route (Stage 1, Package

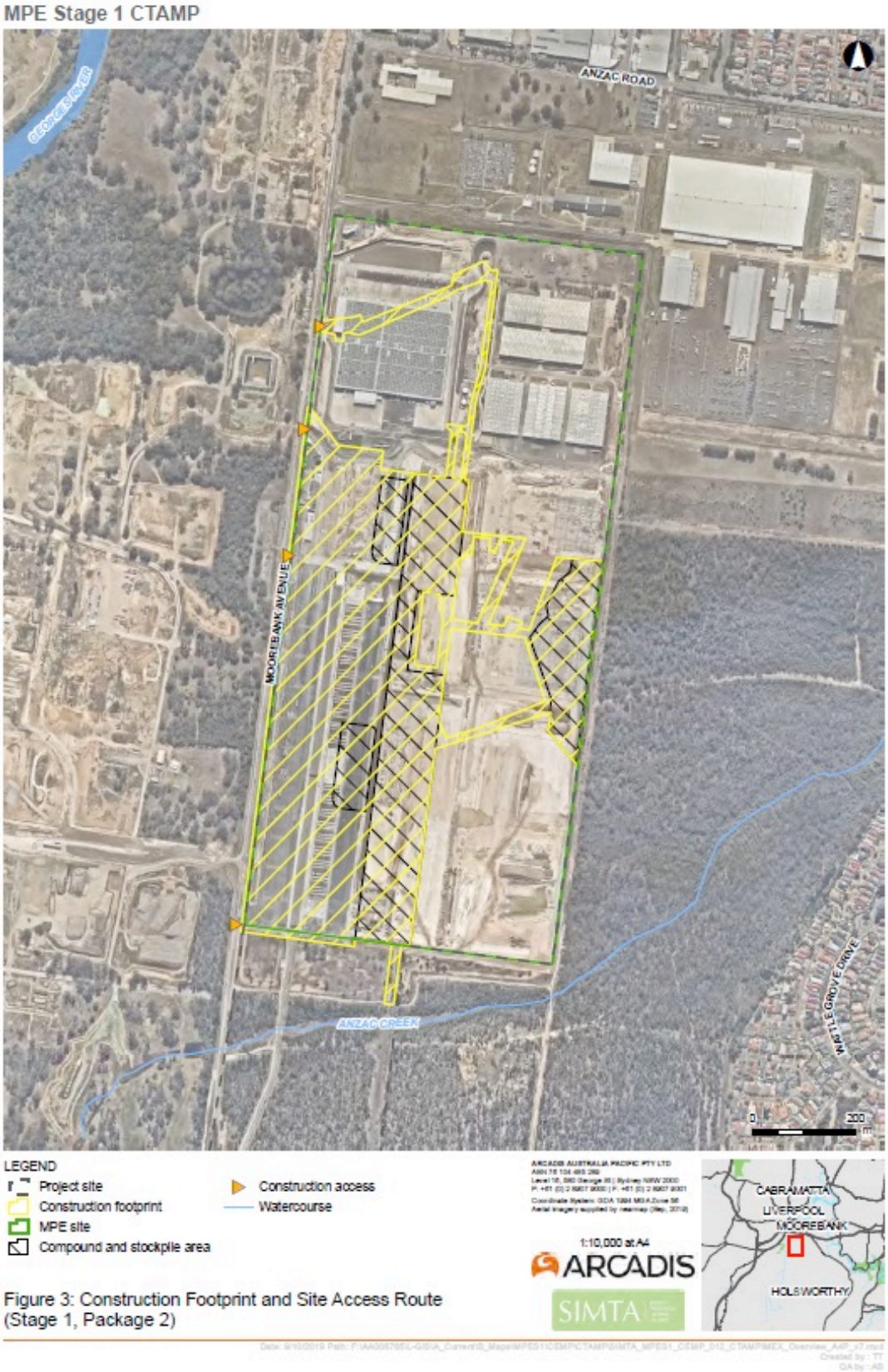

Figure 3: Construction Footprint and Site Access Route (Stage 1, Package 2)

1 INTRODUCTION

1.1 Development Ownership

In 2022, LOGOS joined the ESR group of companies and since August 2024, the LOGOS and ESR operations have been integrated to now operate under the name ESR Australia & NZ (ESR). The applicant/ approval holder entity remains unchanged at this stage until further notice and references to LOGOS and LOGOS authored documents and/or plans may continue and remains relevant where LOGOS and ESR are used interchangeably.

1.1.1 MLP Acquisition and Applicant Transfer

In December 2021, LOGOS acquired the warehousing and property components of Qube's Moorebank Logistics Park including taking over delivery of the development under the MPE Stage 1 SSD 6766 consent and resulting in a transition away from the Sydney Intermodal Terminal Alliance (SIMTA). In August 2024, LOGOS integrated its operations with ESR Group Limited. This report has been prepared on behalf of ESR Australia & NZ, part of ESR Group.

1.2 Development Overview

Approval for the construction and operation of Stage 1 of the Moorebank Precinct East (MPE) Project, comprising an Intermodal (IMT) Facility including a rail link (Package 1) and Import Export (IMEX) Terminal (Package 2) was received on 12 December 2016 (SSD 6766). The construction and operation of the MPE Stage 1 Project was subject to an appeal in September 2017 (Appeal Number 2017/00081889). The approval was upheld and the revised Conditions of Consent (CoC) were released on 13 March 2018.

This Construction Traffic and Access Management Plan (CTAMP) has been developed to manage impacts to traffic and access specific to the Intermodal Terminal (IMT) during the construction of Package 2 of the MPE Stage 1 Project (hereafter named "the Project").

Within this plan, a strategy has been established to demonstrate the contractor's approach to the management of traffic and access. The CTAMP also accounts for the requirements of the MPE Stage 1 Project Environmental Impact Statement (EIS) Appendix L SIMTA Stage 1 Traffic and Accessibility Impact Assessment.

This CTAMP addresses the relevant requirements of the Project Approvals, including the EIS, Submissions Report and Minister's Conditions of Consent (CoC), and all applicable guidelines and standards specific to the management of construction traffic and access during construction of the Project.

1.3 Background and Scope

The MPE 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, (see Figure 1).

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. It is to be developed in three key stages:

- Stage 1 - Construction of the IMT and rail link
- Stage 2 - Construction of warehouse and distribution facilities
- Stage 3 - Extension of the IMT and completion of warehouse and distribution facilities.

Stage 1 of the MPE Project comprises, and would be constructed across, two packages:

- Package 1 - The Rail Link (not included within this Plan) includes a connection to the IMT facility, and traverses across Moorebank Avenue, Anzac Creek and Georges River prior to connecting to the Southern Sydney Freight Line (SSFL)
- Package 2 - The IMT (subject of this Plan) 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
- Removal of the Disused Rail Spur (DURS) and rehabilitation of the land containing the DURS as required by CoC C23B of the MPE Stage 1 Consent (as amended by the court decision on 13 March 2018).

The layout of the IMT generally comprises operational areas, an administration area, rail sidings, utilities and drainage infrastructure, landscaping and signage. The operational areas of the IMT consist of the primary and secondary container loading / unloading areas and container storage areas, and the truck holding area. Within these areas containers would be stacked up to five high.

1.3.1 Removal of Disused Rail Spur

As a result of the NSW Land and Environment Court Order of 13 March 2018, the MPE Stage 1 Consent was amended to include the removal of the DURS as CoC 23B.The DURS removal works involve the removal of the DURS and associated infrastructure, followed by the remediation and rehabilitation of the DURS footprint. Remediation of the site will be covered by the existing “Boot Land” Environmental Management Plan (EMP) prepared by GHD and dated May 2016. This EMP includes procedures for managing unexpected finds, water and sediment monitoring, reporting and record keeping.

Management measures in this CTAMP are considered appropriate to manage the DURS construction activities.

Figure 1 MPE Site Overview

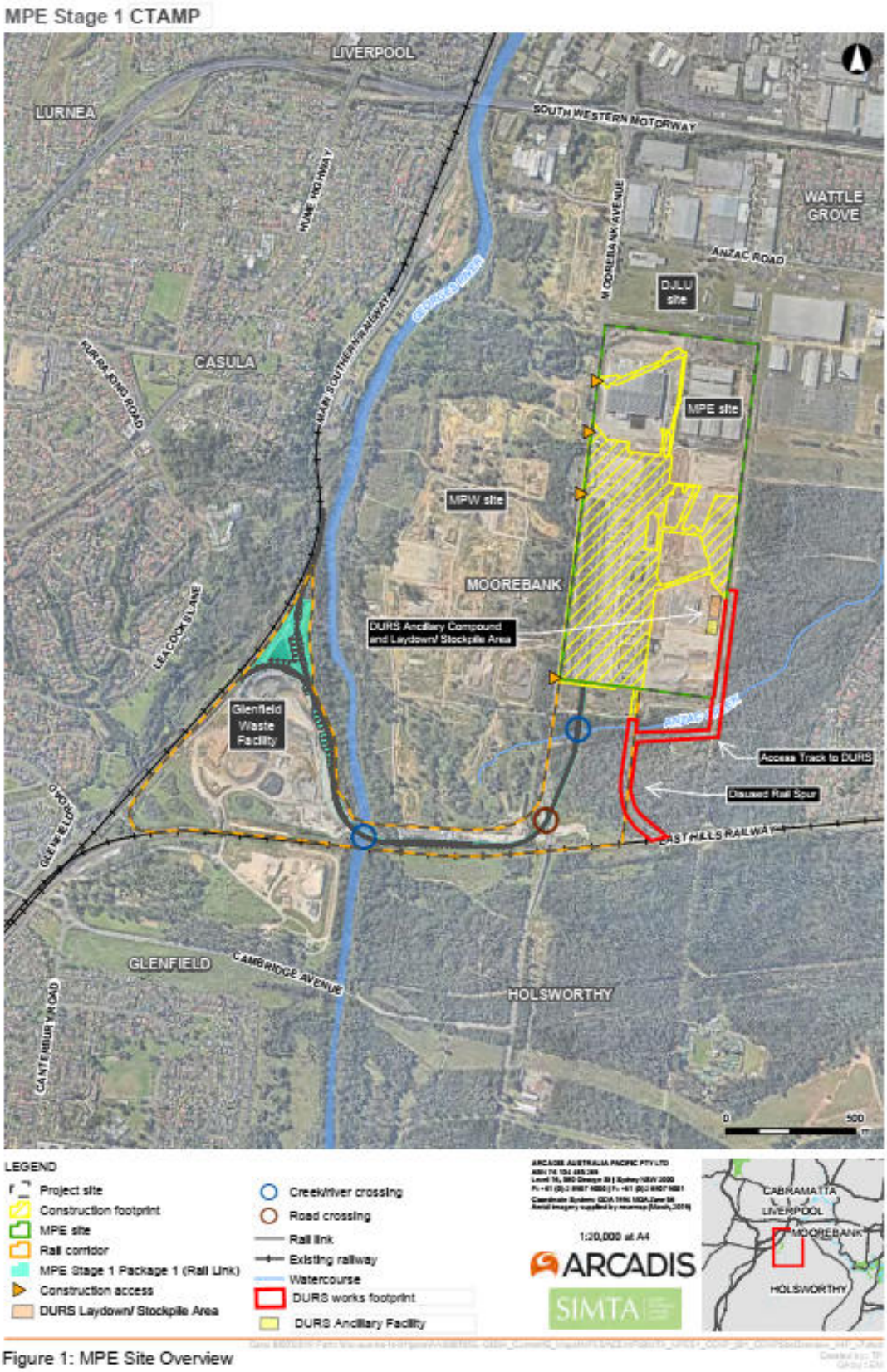

Figure 1: MPE Site Overview

1.3.2 Environmental Planning Approval

The MPE Stage 1 Project has been assessed by the Department of Planning and Environment (DP&E) under Division 4.7 (Division 4.1 prior to March 2018) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as State Significant Development (SSD). The Planning Assessment Commission (PAC) granted Approval for the MPE Stage 1 Project on 12 December 2016 and is subject to the Minister's Conditions of Approval (CoC, 18 December 2016 (ref SSD-6766)). The MPE Stage 1 Project, its impacts, consultation and mitigation were documented in the following suite of documents:

- State Significant Development Application SSD 6766 (as amended in the Land and Environment Court 13 March 2018)
- SIMTA Intermodal Terminal Facility – Stage 1 – Environmental Impact Statement (Hyder Consulting Pty Ltd, May 2014)
- SIMTA Intermodal Terminal Facility – Stage 1 – Response to Submissions (Hyder Consulting Pty Ltd, September 2015)
- Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) Approval (No. 2011/6229) granted on March 2014

1.4 Purpose and Application

As part of the submission for the planning approval for MPE Stage 1, Arcadis (then Hyder Consulting) prepared a Construction Traffic Impact Assessment (CTIA). This CTAMP has been developed based on the initial CTIA to address the Project approval documents.

This plan aims to demonstrate how traffic and access will be managed during construction of the Project and provides methods to monitor and reduce the impact to traffic and access by the contractor during the construction of the Project, including all contractor and consultant partners.

Specifically, the purpose of this CTAMP is to:

- Manage traffic and access in accordance with the Project approval documents
- Review and consider the CTIA (refer to Appendix L of EIS) during the construction phase of the Project
- Ensure that, using best practice, the impacts to traffic and access during construction are minimised.

1.5 Objectives and Targets

This CTAMP provides the basis for the management of traffic and access issues and to minimise risk of impact during the construction of the Project as outlined below, (Table *3*).

Table 3 Objectives and Targets

Objectives	Performance Indicators
• Ensure a safe environment for road users through traffic controls and isolation of work site hazards that comply with the best practice, RMS requirements/guides and the Australian Standard/s • Minimise disruption to traffic operation, road users, pedestrians, cyclists and access to adjoining properties (private and public) • Ensure safety of workers, by isolating work areas from traffic flows • Maintain the road network functionality • Ensure an adequate level of signage and community notification is in place where changes to existing road access conditions prevail • Ensure that any changes to road or pedestrian access does not adversely affect the ability of emergency services to respond to any incident Minimise complaints by implementation of the management measures in this plan	• No death or injury to workers and the public • Response to traffic related complaints in a timely manner as outlined in the Community Communication Strategy • No traffic related infringements or penalties

1.6 Consultation

The Minister's Conditions of Consent requires that the Traffic and Access Sub-Plan be prepared in consultation with the Liverpool City Council, Campbelltown City Council, emergency services, road user groups, relevant pedestrian and bicycle road user groups. A summary of consultation is provided in Table *4* , with supporting evidence in Appendix A.

Table 4 Consultation Summary

Agency	Date	Person Contacted	Comment	Status
Liverpool City council	25/01/17	[redacted]	Phone call made to inform of CEMP and sub plans that would be provided for comment from 1 February to 15 February. LCC indicated they would be happy to receive and provide comment.	Open
	01/02/17	[redacted]	Email sent containing briefing note, CEMP, CSWMP, CTAMP, CHMP, reiterating the two-week deadline for comments received.	Open
	08/02/17	[redacted]	Phone call made on 8 February to confirm delivery of documentation and review progress.	Open

Agency	Date	Person Contacted	Comment	Status
	15/02/17	[redacted]	Email received containing comments on the CEMP and CSWMP. No comments were made on the CTAMP. See appendix A.	**Open**
	22/02/17	[redacted]	Email sent to acknowledge receipt of comments on the CEMP and CSWMP. See appendix Z of the CEMP and Appendix E for response to comments. **Consultation complete**	**Closed**
Campbelltown City Council	24/01/17	[redacted]	Phone call made. Voice message left outlining provision of CEMP and sub-plans at the beginning of February. Follow up email was sent to [redacted] and [redacted] on 25 January.	Open
	1/02/17	[redacted]	Email sent containing briefing note, CEMP, CSWMP, CTAMP, CHMP, reiterating the two-week deadline for comments received.	Open
	08/02/17	[redacted]	Phone call and email sent to confirm receival of documentation and review progress. No answer, voicemail left.	Open
	15/02/17	[redacted]	Phone call made to notify comments deadline. Extension for comments deadline granted to 17 February	Open
	17/02/17	[redacted]	Email received with comments relating to plans. No comments were received regarding the CHMP.	**Open**
	20/02/17	[redacted]	Email sent detailing how the Councils comments had been addressed within the CTAMP. See appendix A for full details of consultation. **Consultation complete**	**Closed**
Emergency Services (Ambulance, Police and Fire Services)	25/01/17	[redacted]	Emails were sent to the following representatives on 25 January outlining the Project and details around their opportunity to provide CEMP input: • [redacted] (Ambulance NSW)	Open

Agency	Date	Person Contacted	Comment	Status
		[redacted]	• [redacted]	
	01/02/17	[redacted]	Emails were sent out containing Construction Traffic and Access Management Plan and Briefing Note.	Open
	01/02/17	[redacted]	Email received indicating that the plan had been reviewed without comment.	**Closed**
	08/02/17	[redacted]	Email sent to confirm document delivery and track progress of document review	Open
	16/02/17	[redacted]	Email sent indicating that consultation period had closed and to get in contact ASAP for late comment submission. No response received.	**Closed**
	15/02/17	[redacted]	Email sent confirming that no comment had been received, and to make contact ASAP should they still want to make comment. No response received.	**Closed**
	09/02/17	[redacted]	Phone call made to track review progress. She explained that she had been away on leave, and that no one had yet looked at the CTMP. She requested we fill out a request form for comment as this is a standard practice. Request for information/comment form completed and sent 9/2/17 in separate email.	
	16/02/17	[redacted]	Email sent 16/2/17 indicating that the deadline has passed and to	**Closed**

Agency	Date	Person Contacted	Comment	Status
		[redacted]	make contact ASAP if they intend to submit late comments. No response received. **Consultation complete**	
Pedestrian and cycle groups	25/01/17		Emails sent to representatives from three known cycle groups in the area with a general overview of the Project, timeframe for provision of documents and review windows.	
	01/02/17		Email sent containing Construction Traffic and Access Management Plan and Briefing Note. No response received **Consultation complete**	**Closed**
Road User Groups	31/01/17	Liverpool City Council Campbelltown City Council	LCC and CCC were contacted by email requesting information on any known road user groups in the area of the Project. No response from either LCC or CCC was received back. **Consultation complete**	**Closed**

2 ENVIRONMENTAL OBLIGATIONS

2.1 Legislation

Legislation relevant to traffic management for this Project includes:

- *Environmental Planning and Assessment ACT 1979*
- *Roads Act 1993*
- *Local Government Act 1993*
- *Road Transport (Safety & Traffic Management) Act 1999*

2.2 Project Approval Conditions

A compliance matrix against the relevant Conditions of Approval and other traffic and access requirements are detailed in Table 1. Additional guidelines and standards relating to the management of traffic and access include:

- RMS Traffic Control and Work Sites Manual
- RMS Specification DCM G10 – Control of Traffic
- RMS Roads Occupancy Manual
- NSW Speed Zoning Guidelines
- AS 1742: Manual of Uniform Traffic Devices:
  - Part 1 - General Introduction and Index of Signs
  - Part 2 - Traffic Control Devices for General Use
  - Part 3 - Traffic Control Devices for Work on Roads
  - Part 4 - Speed Controls
  - Part 10 - Pedestrian Control and Protection
  - Part 11 - Parking Controls
  - Part 13 - Local Area Traffic Management.
- NSW Government - The Guide to Traffic and Transport Management for Special Events
- NSW Bicycle Guidelines

2.3 Permits and Approvals

2.3.1 Road Occupancy Licences

On occasion, there may be a requirement to occupy part, or all, of a road. If this is the case, a Road Occupancy License (ROL) will be obtained from the relevant authority under Section 138 of the *Roads Act 1993.*

Liaison with Transport for NSW has indicated that the Transport Management Centre (TMC) issues ROLs for all State, Regional Roads and Local streets where a proponent is working within 100 m of a State Road and/or Traffic Signals (TCS).

Should works be undertaken along Moorebank Avenue in association with the Approved Project, ROLs and Council Permits may be required.

Figure *2* overleaf provides an overview of road ownership, permit and licence requirements associated with potential works along Moorebank Avenue as part of the Approved Project.

Figure 2 Road Ownership and Permit/licence Requirements

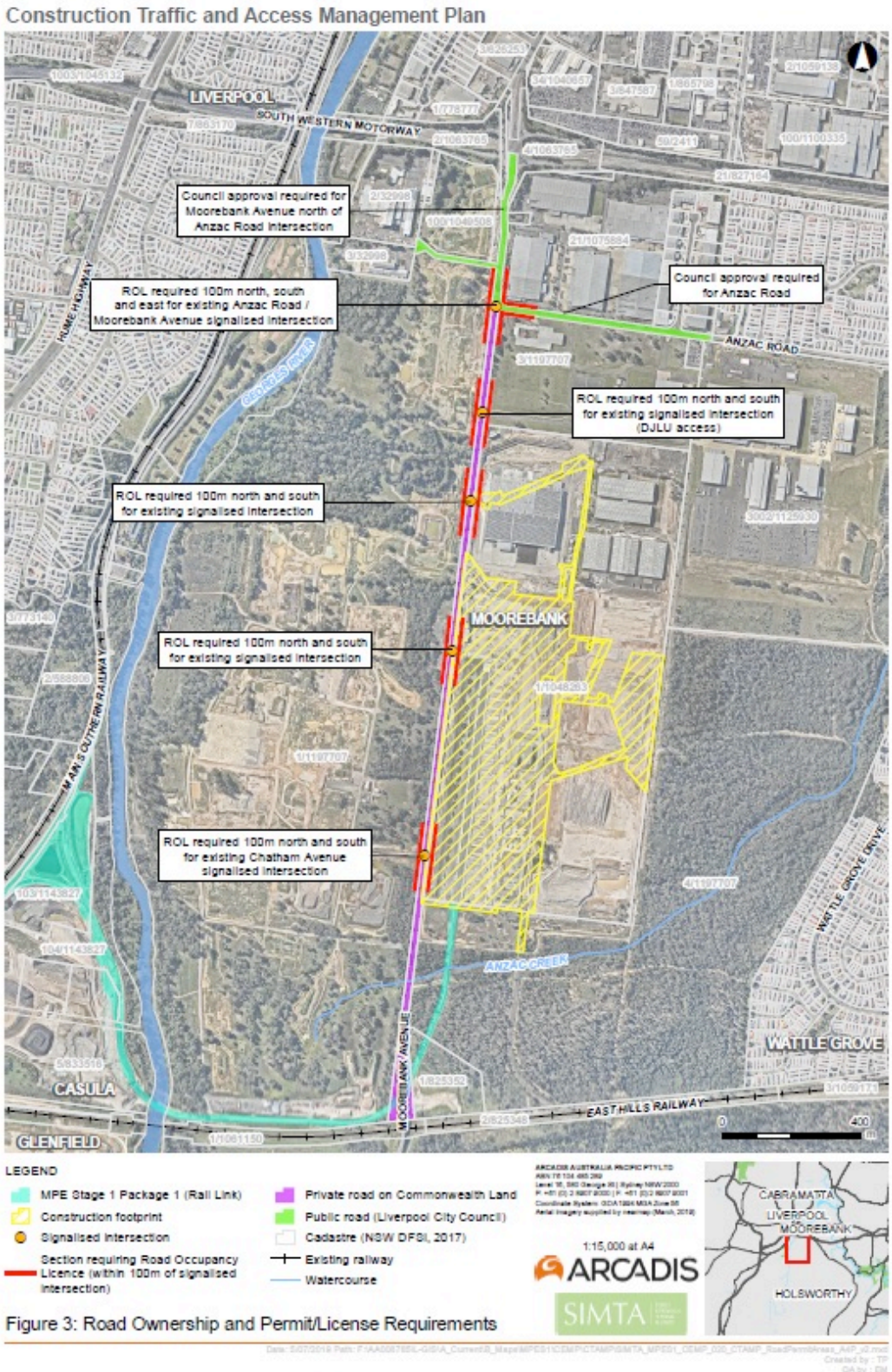

Figure 3: Road Ownership and Permit/License Requirements

2.3.2 **Speed Zone Authorisation**

Changes to traffic speeds as they approach and pass through the worksite will be required. A speed zone authorisation (SZA) will be requested from the appropriate road authority.

3 EXISTING ENVIRONMENT

3.1 Road Network

The Project is located on Moorebank Avenue, south of Anzac Road. It is expected that most traffic associated with the Project would travel via Moorebank Avenue and the M5 South West Motorway. Table *5* outlines key roads on the road network adjacent to the MPE site.

Table 5 Existing Key Roads Network

Road Names	Road Hierarchy	Characteristics
M5 South West Motorway	Motorway	The M5 South West Motorway (M5) is a 22km tolled road with generally three lanes in each direction between Camden Valley Way, Prestons and King Georges Road, Beverly Hills. It is operated by Interlink Roads. It forms part of the M5 transport corridor, the main passenger, commercial and freight route between Sydney Airport, Port Botany and south west Sydney. It is also a key part of the Sydney Orbital Network, a series of interconnected roads that link key areas of the Greater Sydney Metropolitan Region.
Moorebank Avenue	Local Road / Private Road	Moorebank Avenue is currently a two lane undivided road (one lane in each direction) between Cambridge Avenue and M5 South West Motorway (adjacent to the site) and four lane undivided road (two lanes in each direction) north of the M5 South West Motorway. This road provides a north-south link between Liverpool and Glenfield. It also forms a grade separated interchange with the M5 South West Motorway. Moorebank Avenue between M5 and Anzac Road is owned and maintained by Liverpool City Council. Moorebank Avenue between Anzac Road and Cambridge Avenue is a private road on Commonwealth land.
Anzac Road	Local Road	Anzac Road is an east-west local road that connects Moorebank Avenue and Heathcote Road. It provides access to Moorebank Business Park and the residential area of Wattle Grove. This is generally a two-lane undivided road. The study area includes the section between Yulong Close and Moorebank Avenue.
Cambridge Avenue	Local Road	Cambridge Avenue is a local road which connects Moorebank Avenue from the south to Macquarie Fields through to Campbelltown. It is generally a two lane road (one lane each direction). Cambridge Avenue is owned and maintained by Campbelltown City Council. Cambridge Avenue crosses the Georges River via a low level narrow bridge (subject to flooding). Cambridge Avenue will not be utilised for heavy vehicle movements.

3.2 Existing Traffic Volumes

The existing traffic volumes on key roads that provide access to the Project site are provided below.

Traffic count surveys were undertaken in November and December 2014 for the traffic assessment of MPE Stage 1. The traffic surveys were undertaken after the M5 West Widening was opened to traffic. Table *6* below shows existing peak hour traffic volumes on Moorebank Avenue, Anzac Road and

Cambridge Avenue. These roads are likely to be impacted by construction traffic from the Project. Detailed traffic surveys conducted for other locations are included in the EIS.

Table 6 EIS Assessed Peak Traffic Volumes

Site ID	Locations	AM Peak		PM Peak	
		NB/EB[(1)]	SB/WB[(1)]	NB/EB[(1)]	SB/WB[(1)]
M-1	Moorebank Ave, South of Anzac Rd	1,150	650	490	1,290
M-2	Anzac Rd, East of Moorebank Avenue	560	390	480	680
M-3	Moorebank Ave, South of Jacquinot Road	1,190	340	340	1,340
M-9	Cambridge Avenue, East of Canterbury Road	1,140	320	340	1,340

Source: November 2014 traffic survey, Hyder's analysis Note: (1) Northbound (NB), Eastbound (EB), Southbound (SB), Westbound (WB)

3.3 Intersection Performance

The intersections assessed were noted to be performing at a satisfactory LoS; however, the intersection of Moorebank Avenue / Heathcote Road was found to be currently operating at capacity in the AM peak and near capacity in the PM peak. The intersection of Moorebank Avenue / Newbridge Road was found to be nearing its operational capacity during the PM peak.

3.4 Road Condition

A pre-construction road dilapidation survey will be undertaken to determine the current condition of the road.

3.5 Cyclists and Pedestrians

Moorebank Avenue does not include formal cycle lanes, however, does connect to several existing cycling routes in the area. Both Moorebank Avenue and Cambridge Avenue are not identified as cycling routes on the Liverpool Bike Plan (2010) and is not considered to be highly utilised by cyclists.

A sealed footpath is provided on the western side of Moorebank Avenue and pedestrian crossing facilities are provided at the existing signalised intersections along Moorebank Avenue.

3.6 Public Transport

The low public transport usage identified in the Moorebank catchment area may be due to the limited supply of public transport services to some areas. The Project is also currently poorly serviced by public transport. Several bus stops are located along Moorebank Avenue; however, these are serviced on a limited basis, with a single bus service provided in the peak AM and PM periods. During non-peak services the closest bus stop operating near the site is at the intersection of Moorebank Avenue and Anzac Road, approximately 750 m from the Project site entry.

Liverpool Station is located approximately 4 km from the Project, with Holsworthy and Casula stations both within 7 km of the site, all of which are considered further than the acceptable walking distance.

3.7 Crash Data

A total of 524 accidents were recorded in the five-year period between 2009 and 2013. Of these, 240 (46%) of crashes resulted in injuries and 284 (54%) of crashes were recorded as non-casualty. No fatal crashes occurred across the wider road network, including Moorebank Avenue and Cambridge Avenue. Most crashes occurred on State roads, particularly the M5 Motorway between the Hume Highway and Heathcote Road.

4 ASPECTS, IMPACTS & RISKS

The Project has the potential to result in additional traffic volumes and disruption to the existing road network and local community.

Activities associated with proposed traffic and access management for the Project are as follows:

- Site establishment
- Geotechnical investigations
- Survey
- Vegetation clearance
- Earthworks
- Construction works
- Material delivery
- Site staff movements
- Landscaping
- Demolition works
- Building construction works.

These activities will require the mobilisation and demobilisation of plant and materials at various times throughout the works. The following sections describe the traffic impacts of the Project with mitigation measures to manage these impacts identified in Section 5.

4.1 Construction Impacts

4.1.1 Potential Impacts

Potential traffic and access impacts associated with Project works may include:

- Temporary, short term traffic delays due to increased traffic volumes
- Full/partial closure of roadways
- Safety of the workforce and local community
- Disruption to normal traffic movements for residents adjacent to project works
- Temporary cyclist and/or pedestrian diversions
- Damage to local roads from heavy vehicle movements
- Heavy plant (haul trucks) mixing with light construction traffic and other road users
- Increased dust and noise emissions (these are addressed in the Construction Air Quality Management Plan and Construction Noise and Vibration Management Plan)
- Reduced roadwork speed limits which will potentially increase travel times
- Haulage operations and over-dimension vehicle movements which may create temporary traffic hazards for other vehicles.
- Increased potential for native fauna road kills.

Specific strategies for mitigating traffic and access impacts will be further addressed in Contractor developed Traffic Control Plans (TCP) for those specific work sites and/ or activities

4.1.2 Construction Traffic Generation

The construction works will result in an increase in traffic volumes (as discussed in Section 3). Approximately 430 parking spaces have been designated on site which is adequate to accommodate anticipated parking demand and staff movement assuming that all staff would use cars.

The number of daily heavy vehicle movements would vary between 10 and 400, whilst daily light vehicle movements would vary between 100 and 750, depending on the works period, as shown in Table *7* .

Table 7 Daily Construction Traffic Estimates per works period

Construction Period	Daily Vehicle Trips	
	Heavy vehicle movements	Light vehicle movements
Works period 1	52	200
Works period 2	80	200
Works period 3	400	400
Works period 4	72	750
Works period 5	10	750

It is noted that construction activities will largely be confined to Moorebank Avenue (south of M5 Motorway) during normal working hours and the existing number of trafficable lanes will be maintained. The Construction Traffic Impact assessment in Appendix L of the EIS, also notes that Moorebank Avenue is anticipated to experience up to 10% increase in average daily vehicle movements due to construction traffic accessing the work areas.

4.1.3 Intersection Performance

Due to the concurrent construction activities on Moorebank Avenue, a revised traffic intersection analysis using SIDRA Intersection 7.0 modelling software has been conducted as part of the MPE Stage 2 EIS. This modelling assesses the cumulative impacts during the peak construction period, when activities for MPE Stage 2 and MPW Early Works will be occurring concurrently with the construction on the MPE Stage 1 works in 2018.

It should be noted that two lanes of traffic on Moorebank Avenue will be made available at all times where possible during the construction works period via the temporary diversion road. This temporary diversion road will be constructed prior to the commencement of any Moorebank Avenue upgrade works (undertaken as part of MPE Stage 2).

Roads and Maritime uses Level of Service (LoS) as a measure of performance for all intersection types operating under prevailing traffic conditions. The level of service ranges from LoS A to LoS F which is directly related to the average intersection delays experienced by traffic travelling through the intersection. LoS A to LoS D are considered to provide acceptable performance, with LoS A providing better performance than LoS D. LoS D is the long-term desirable level of service. LoS E and LoS F are considered to provide unsatisfactory intersection performance.

A summary of the traffic modelling findings under the ‘worst-case’ cumulative construction traffic scenario is as follows:

- The M5 Motorway-Moorebank Avenue interchange will continue to operate at an overall acceptable Level of Service (LoS) at B and C in the AM and PM, respectively. The expected changes for specific movements at this intersection are shown in Table *8* and Table *9*.
- The Moorebank Avenue/ MPE Site Access will continue to operate at LoS A in both the AM and PM
- The Moorebank Avenue- DNSDC (DJLU) Access will operate at LoS A in the AM and PM
- The Moorebank Avenue-Anzac Road intersection will operate at LoS C or better in the AM and PM.

The results of the AM and PM Peak SIDRA analysis are presented in Table 8 and Table 9, respectively. It is noted that the existing modelling results (i.e. without construction) have been derived from the revised cumulative traffic modelling as part of the MPE Stage 2 RtS.

Table 8 AM Peak Intersection Performance Results

Intersections	Intersection Control	AM Peak			
		Existing Baseline Scenario (without construction)		Proposed Scenario (With construction) *	
		Ave. Delay (s)	LoS	Ave. Delay (s)	LoS
Moorebank Avenue - MPE Site Access	Signal	7	LOS A	12	LOS A
Moorebank Avenue - DNSDC (DJLU) Access	Signal	N/A^	N/A^	4	LOS A
Moorebank Avenue- Anzac Road	Signal	18	LOS B	39	LOS C
M5 Motorway- Moorebank Avenue	Signal	24	LOS B	34	LOS C

Table 9 PM Peak Intersection Performance Results

Intersections	Intersection Control	PM Peak			
		Existing Baseline Scenario (without construction)		Proposed Scenario (With construction) *	
		Ave. Delay (s)	LoS	Ave. Delay (s)	LoS
Moorebank Avenue- MPE Site Access	Signal	6	LOS A	10	LOS A
Moorebank Avenue- DNSDC (DJLU) Access	Signal	N/A^	N/A^	5	LOS A
Moorebank Avenue- Anzac Road	Signal	17	LOS B	44	LOS D
M5 Motorway- Moorebank Avenue	Signal	30	LOS C	39	LOS C

Note:

* Assessed against the peak construction period, including MPE Stage 1 (subject of this CTAMP), MPE Stage 2 and MPW Early Works.

^The existing conditions of the Moorebank Avenue- DNDSC (DJLU) Access intersection have not been modelled as the intersection is not currently operational.

The above traffic modelling results indicate that the surrounding key intersections along Moorebank Avenue shall continue to operate at an acceptable LoS.

4.1.4 Oversize Vehicles

If larger vehicles are required to deliver materials, such as low loaders delivering beams or other prefabricated materials or machinery, there may be a need for approval process for oversized vehicles subject to a separate traffic management plan. Furthermore, permits may be required from RMS and/or Liverpool City Council.

Low loader movements will require mobile works convoys including escort vehicles and potentially police escorts.

4.1.5 Potential Road Closure

There may be a possibility that part of the Moorebank Avenue would need to be closed from time to time, for short periods, to undertake works near the Stage 1 site boundary. These works would be subject to a separate traffic management plan and would include signage and diversion plans to ensure the safe operation of the Moorebank Avenue through traffic. Furthermore, a road occupancy licence may be required from RMS for any road closure.

4.1.6 Pedestrians and Cyclists

Construction of the Project would have minor impacts to pedestrian and cyclist movements such as:

- Potential conflict between cyclists crossing compound access and egress points
- Shared access to Moorebank Avenue with heavy vehicles
- Potential conflict with general road traffic particularly associated with road diversions and other changes in road conditions.

4.1.7 Residents and Business

Residents and business may be affected by the Project. However, existing local accesses along Moorebank Avenue would be maintained during construction. This CTAMP includes procedures for traffic control and access to ensure turning manoeuvres at site access points will not conflict with other traffic. Of concern to Campbelltown City Council are potential issues with the line of sight on the Cambridge Avenue causeway; this will be addressed as part of the Road Safety Audit.

Further impacts may be due to increased traffic volumes, speed restrictions and temporary road closures.

4.1.7.1 Local Property Access

The existing local accesses to public, private and Commonwealth lands would be maintained during construction. Should any changes to the existing access arrangements be required, consultation will be undertaken with the relevant authorities and stakeholders to seek agreement on proposed mitigation and any adverse impacts are minimised.

4.1.8 Public Transport

Commuters may be affected by increased traffic volumes, speed restrictions and temporary road closures. However, delays are expected to be minimum. There is not expected to be any impacts on bus routes or bus stop facilities because of the construction works.

4.2 Site Compounds

During the construction of the Project, one main construction compounds and stockpile site has been identified to support the construction works as depicted in Figure 3. The main compound will include space for site offices and amenities, car parking storage and laydown and materials testing facilities. There is also potential for the inclusion of a batching plant.

4.2.1 Access/Egress Points

Site access and egress for all construction related traffic will be via Moorebank Avenue. The majority this traffic would access the site from the north, from the direction of the M5 motorway, with some staff expected to arrive from the south.

As shown in Figure 3, construction vehicles will access the site at the following access points:

- Main IMT compound access – via the existing traffic signal at DNSDC northern access on Moorebank Avenue
- Secondary IMT compound access – via the existing traffic signal at the DNSDC Main Gate on Moorebank Avenue
- A materials and emergency access point on the southern edge of the Project.

Figure 3 Construction Footprint and Site Access Route (Stage 1, Package

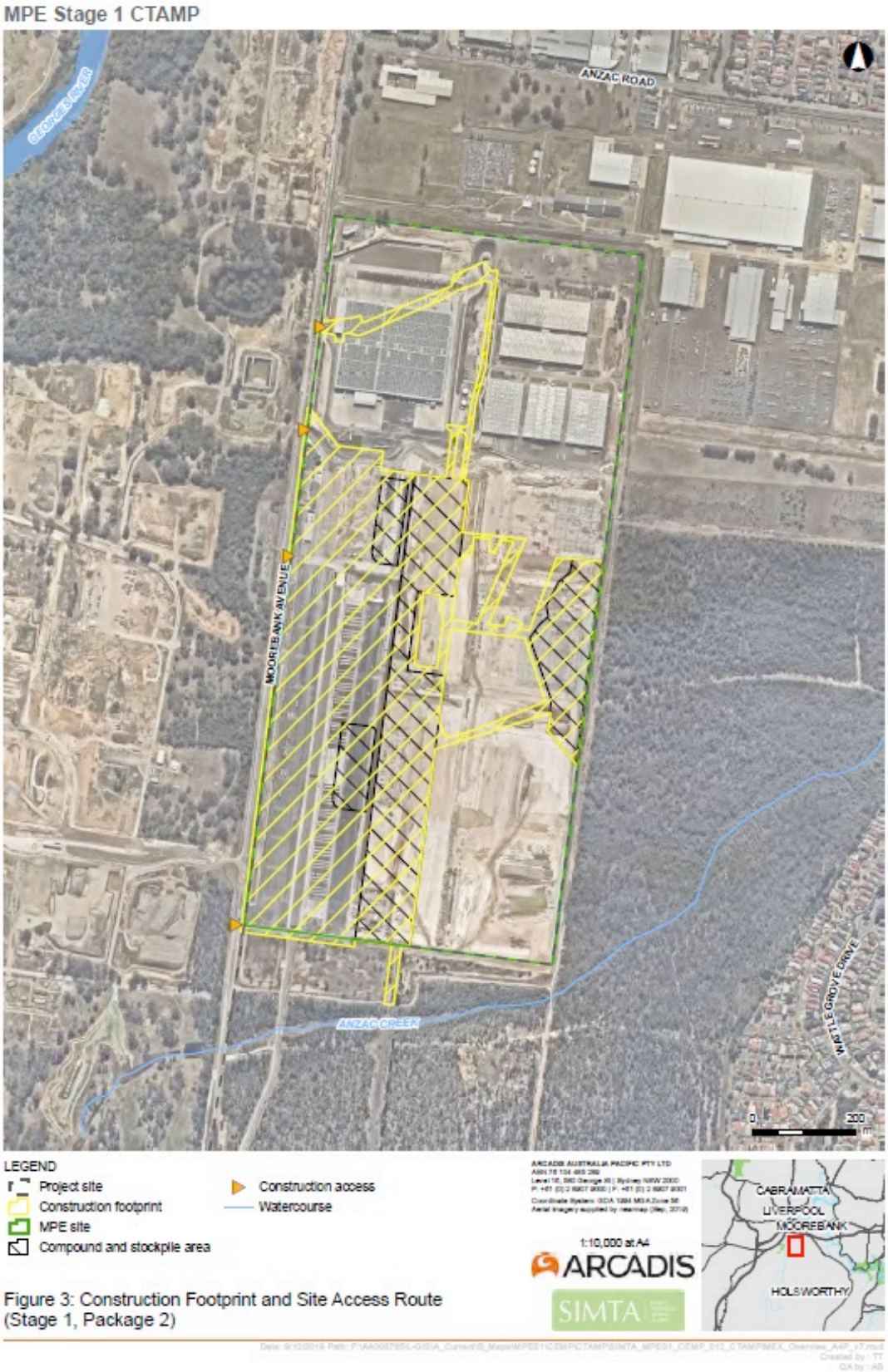

Figure 3: Construction Footprint and Site Access Route (Stage 1, Package 2)

4.3 Construction Traffic Distirbution and Haulage Route

4.3.1 Light Vehicle Movements

Approximately 90% of light vehicle movements would access and egress the IMEX construction site and travel along Moorebank Avenue to the north of the construction site to the M5 Motorway and surrounding road network. The remaining 10% of light vehicles are expected to use Anzac Road.

4.3.2 Heavy Vehicle Movements

In accordance with the Commonwealth Mitigation Measures (Traffic), outlined in Table *2*, construction material will be sourced from within metropolitan Sydney and delivered to the MPE Stage 1 site primarily via the M5 Motorway, Hume Highway, M7 Motorway and Moorebank Avenue.

All heavy vehicles (including for the haulage of spoil) are expected to access and egress the construction site at access points identified in Section 4.2.1 above. Heavy vehicles would then travel north along Moorebank Avenue towards the M5 Motorway and surrounding road network. It is anticipated that heavy vehicles would use the gazetted heavy vehicle routes to access the construction site.

No heavy vehicles would use Anzac Road or other residential streets including Cambridge Avenue. In the event that disposal of unsuitable material to Glenfield Waste Facility is required, a small number of truck movements (expected to be less than six per day) will access the facility / Project site via Cambridge Avenue. Any additional heavy vehicle access to Cambridge Avenue would be conditional upon both ingress and egress only via the western end of Glenfield Road (intersection of Campbelltown Road), and would prevent heavy vehicle movements impacting Cambridge Avenue lane-narrowing at the Georges River crossing point.

It is proposed that all suitable demolition materials will be retained on site for beneficial re-use following processing, however, some spoil material will be removed from the site and it is proposed to transport these materials for disposal using trucks, including using the empty fill-haulage trucks.

5 -MANAGEMENT AND CONTROL MEASURES

This Section describes the overall approach and principles associated with managing and mitigating environmental impacts and risks as associated with traffic and access management for the Project.

The management measures are based on the mitigation measures compiled from the EIS, Final Compilation of Mitigation Measures (FCMMs) and the Minister's Conditions of Consent (CoC), as well as best practice.

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Table 10 Mitigation Measures

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
Hours of Work				
TR1	CoC E34a, E34b FCMM 1A FCMM 1B	Construction works would generally be undertaken during standard daytime construction working hours: • 7 am to 6 pm Monday to Friday. • 8 am to 1 pm Saturday. • No works on Sunday or Public Holidays. It is acknowledged that some construction works with traffic impacts may be required to be undertaken outside of the above hours. These works would be limited to any of the following situations as stipulated in the CoC: • construction works that cause LAeq (15 minute) noise levels that are: (i) No more than 5 dB above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and (ii) No more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC, 2009) at other sensitive land uses; or • for the delivery of materials required by the police or other authorities for safety reasons; or • where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or • construction works approved through an Out-Of-Hours Work Protocol prepared as part of the Construction Noise and Vibration Management Plan required by condition E34 (b), provided the relevant Council, local residents and other affected stakeholders and sensitive receivers are informed of the timing and duration at least 48 hours prior to the commencement of the works; or identified works approved by the Secretary. OOHW will be managed in order to minimise noise impacts on residential receivers by undertaking the following minimum requirements: • Access/egress to site will be via main roads only; • No vehicles are permitted to park in residential streets and vehicles must not be left to idle;	Construction	Construction Manager Environmental Manager

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		• Loading and unloading of materials will be only be undertaken within the site boundary. Wherever possible, metal on metal contact will be avoided; • Materials are to be placed down not dropped and drop heights into skips and bins will be minimised to reduce noise; • Reversing alarms must be replaced with white noise. Further OOHW management measures, as well as the OOHW Noise Protocol are detailed within the CNVMP.		
General Mitigation Measures				
TR2	CoC C18, C19, E34a FCMM 1B	• In consultation with the Liverpool and Campbelltown City Councils and RMS, general signposting of the access roads with appropriate heavy vehicle and construction warning signs will be implemented • Speed restrictions to be reviewed along the Moorebank Avenue and additional signposting of speed limitations installed • Installation of specific warning signs at entrances to the construction site to warn existing road users of entering and exiting construction traffic • Establishing pedestrian walking routes and crossing points • Distribution of day warning notices to advice local road users of scheduled construction activities • Installation of appropriate traffic control and warning signs for areas identified where potential safety risk issues exist • The promotion of car-pooling for construction staff and other shared transport initiatives during the construction phase • Arrangements will be made with the materials providers to effectively manage the transportation of construction materials. This will be achieved by careful planning of vehicle movements and operations to and from site. Construction program will consider minimisation of vehicle movements during AM and PM peak hours. • Traffic Control Plans (when and where required) will be prepared for the road network surrounding the project, including all primary and secondary access points. Traffic Control Plans (TCP) will be produced for specific construction staging scenarios, depicting vehicle, pedestrian, bus and cyclist restrictions and protection measures. TCPs will be prepared for off-site works, particularly associated with stringing transmission lines across roads, utility crossings and inspections for dilapidation reports.	Construction	Construction Manager Stakeholder and Community Relations Manager Environmental Manager Safety Manager

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
Traffic Management Controls				
TR3	CoC C17, C18, C24	**Pre and Post Construction Requirements** The contractor will work to ensure all pre-construction Traffic and Access requirements are addressed to the satisfaction of the Certifying Authority prior to construction commencing. This will include: • Pre-Construction Dilapidation Report in accordance with CoC C17. • Road pavement deflection testing in accordance with CoC C18. • Road Safety Audit in accordance with CoC C23. • Post-Construction Dilapidation Report in accordance with CoC F1.	Pre-Construction Construction Post-Construction	Construction Manager Environmental Manager Safety Manager Auditor
TR4	CoC C19, C24	**Construction under Traffic** In areas where construction is occurring immediately adjacent to through traffic, the following traffic control techniques would be used to delineate and/or separate construction works from through traffic: • Temporary road deviations or detours • Raised pavement markers and clear line markings • Channelisation using line delineators • Directional and regulatory signage.	Construction	Traffic Controller Construction Manager
TR5	RSoC, CoC E34a FCMM 1B	**Traffic Controllers and Traffic Control Plans** The contractor will advise applicable authorities of the names of proposed traffic controllers, their Workzone Traffic Management competency numbers and emergency contact information. Prior to implementation the contractors Construction Manager will ensure: • Traffic controllers have been issued a Workzone Traffic Management card; • All required signs, traffic control procedures and plans have been issued; • Personnel have been issued with the required clothing and safety equipment. • During and after implementation of control measures the Construction Manager shall ensure: – Where the Traffic Control Plan involves temporary speed zoning, a diary recording the operation times of the speed zone is kept;	Construction	Safety Manager Construction Manager Traffic Controller

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		– Where the Traffic Control Plan involves the construction of temporary roadways and detours, all work is carried out in accordance with the specification; – Plant and equipment has appropriate measures implemented in day and night situations where they obstruct or impede traffic; – All traffic control devices used meet all specified requirements and are maintained in good working order; – Temporary roads and detours have been inspected for safe conditions and maintained as required; – Signs are periodically cleaned to ensure maximum visibility is maintained; and – Temporary roadways or detours are removed and restored to their original condition after completion of works. Appropriate Traffic Control Plans based on the RMS' Traffic Control at Work Sites Guidelines (2010) and Australian Standard 1742.3 Manual of Uniform Traffic Control Devices, Part 3. Traffic Control Devices for Works on Roads and Traffic Control Plans will be produced in consultation with RMS and the relevant Certifying Authority. Specific Traffic Control Plans (TCP's) will be prepared for all work which involves any form of traffic control or restriction. TCP's will be prepared in accordance with the requirements of the RTA (2003) Traffic Control at Work Sites. All necessary approvals will be obtained from, and consultation undertaken with, Council, RMS, emergency services and other relevant authorities prior to implementing TCP's where necessary.		
TR6	CoC E34a (viii)	**Liaison with Stakeholders** Written notification would be provided to likely and potentially affected receivers prior to commencement of any works on site. This would include local residents, local businesses and relevant Authorities. The following key Stakeholders have been identified: • Roads and Maritime Services (RMS) • Land owners • Local Residents	Construction	Stakeholder and Community Relations Manager Environmental Manager CEC

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		• Liverpool City Council • Campbelltown City Council. • Emergency services • Road user groups • Relevant pedestrian and bicycle user groups The CTAMP will be developed in consultation with the relevant stakeholders noted above. The manner of notification would be confirmed in the final Community Communication Plan and may include such measures as letter box drops, phone calls, emails, door knocking. Notifications are required where works may impact on the community in the following ways: • Construction commencement • Road closures/lane closures • Night works • Changes to traffic conditions • Modifications to pedestrian routes, cycle ways and bus stops • Out of hours works (OOHW) • Disruption to residential or business access; and • Changing or disruption of utility services. Notifications will be issued to the Community Engagement Consultant (CEC) agreed distribution area at least 7 days prior to works which may have an additional impact on the community or stakeholders in addition to the information provided in any Project-wide Newsletters or Updates		
Traffic Management Procedures				
TR7	CoC E28	**Safety and Amenity of Road Users and Public** To maintain the amenity of road users and the public, the following procedures are adopted within the CTAMP: • Consideration will be given to all other site users not involved in construction activity.	Construction	Construction Manager Traffic Controller Stakeholder and Community Liaison Manager

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		• All complaints involving vehicle movements relating to construction activity will be responded to within 48 hours. • To separate the public from the construction areas and safeguard pedestrian traffic, physical barriers will be provided in the form of appropriate fencing.		
TR8	CoC C19, E28 FCMM 1B, FCMM 16Aj	**Minimisation of Impacts on Traffic Flows and Congestion on Local Roads** If road closures are required for construction works, stakeholders will provided with 48 hours' notice of closure times. Temporary road closures, single-lane access and relocations during the construction period will be subject to coordination with the appropriate Authorities. All traffic-related issues and changes will be presented to stakeholders as part of the consultation process, and will be carried out, wherever possible, in non-peak periods. The following requirements are adopted to minimise impacts on local amenity during these works: • Parking and queuing on public roads will be minimised. • Where practical, idling and queuing in local residential streets will be minimised. • Nominated haulage routes within Traffic Control Plans will be adhered to for minimisation of fuel usage and reduce impacts on local roads. • Access and egress from construction compound will be undertaken in a safe and lawful manner. • Construction machinery and vehicles will be well maintained and in good working order. • Where practical, trucks removing waste from the Proposal site or bringing materials to the Proposal site will be filled to the maximum amount allowable, depending on the truck size and load weight, to reduce the number of traffic movements required. • Speed limits will be set and observed at the site to minimise dust generation. • Road Occupancy Licences will be obtained from relevant authorities where required. • Appropriate directional signage and traffic control will ensure construction related vehicles enter and exit the Project Site with minimal disturbance to other road users and advice of any changes in road conditions	Construction	Construction Manager Traffic Controller Stakeholder and Community

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
TR9	CoC B5, E28 FCMM 1B	**Heavy Vehicle Movements** The following provisions will be applied to the movement of heavy vehicles across the site: • Heavy vehicle movements will occur outside of peak traffic conditions where possible; • Heavy vehicle drivers are to abide by the construction vehicle code of conduct (see Appendix B); and • Roads and Maritime Services, local council and local police should be notified before the commencement of heavy vehicle movements • A left turn ban out of site and a right turn ban into site will apply for all heavy vehicles to minimise the use of Cambridge Avenue causeway.	Construction	Construction Manager Traffic Controller Stakeholder and Community
TR10	CoC B5, E28	**Site Security and Access** The issues considered in determining the location of site accesses were: • Safety of travelling public, including pedestrians and cyclists. • Safety of construction workers and equipment. • Impact on local communities in terms of safety, noise and road damage. • Ease of access for emergency vehicles. • Site security	Construction	Construction Manager Traffic Controller Stakeholder and Community
TR11	CoC B5	**Road User Delay Management** Delays to road users during construction will be minimised by providing experienced and qualified traffic control personnel. Traffic control measures will also be employed should an incident occur which may impact on road users. Such incidents may include inclement weather or spill response. See TR14. Where traffic has to be stopped or diverted at particular times this will be planned properly and in advance so that the durations of inconvenience are kept to a minimum and large traffic queues are prevented as far as practical. An increased risk of rear end collisions arises in any location where road traffic is stopped for a period of time. Ensuring that there is sufficient warning to road users before encountering the queue is essential. Depending on the situation this may require extending the length of a sign posted roadwork speed zone in the development of the TCP, using oversized signs, flashing light signs and variable message signs.	Construction	Construction Manager Traffic Controller Stakeholder and Community

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
TR12	CoC E2 FCMM 1B	**Information Signage, Distance Information and Advance Warning** All signage shall be established prior to the project commencing, retained during the project as required and reinstated or replaced upon completion. The signage would include: • project identification signs • traffic management signs • information signs • regulatory signs. Signposting covers information, regulatory, warning and guide signs as defined in national and RMS standards all of which contribute to safety to road users. The types and classes of signs are: • Information Signs – used for project identification to provide advice and notification to the public • Regulatory Signs – used to prohibit dangerous traffic movements. • Warning Signs – used to provide advance notice of road hazards ahead. • Guide Signs – used to guide drivers to make driving safer and easier. Safety principles for these signs are: • Before approval is given for a new sign a demonstrated need should be established. • All signs should convey a clear message to all users under all conditions. • The sign support structure should not create a safety hazard in itself. All signs will be manufactured and erected in accordance with Australian Standards AS1742, AS1742.1 to 1742.13, AS1743 and AS1744 in consultation with LCC, CCC and RMS at the time of Traffic Control Plan (TCP) finalisation.	Construction	Construction Manager Traffic Controller Stakeholder and Community
TR13		**Other Traffic Control Devices** Other devices of use include barrier boards, plastic mesh fencing, temporary post mounted delineators, cones, flaps, traffic warning lamps, temporary pavement markings, boom gates and portable traffic signals. These items will be provided as required.	Construction	Construction Manager Traffic Controller
TR14	CoC E34a) ix)	**Incident Management** In the event of a site safety incident relating to traffic, the following procedures will be implemented:	Construction	Construction Manager Traffic Controller

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		• Stop vehicle/personnel involved in the incident immediately (or as appropriate). Operate warning lights and warn other drivers to slow down. • Immediately begin warning other road users in the safest means possible; • Use an appropriate TCP and use traffic controllers and signage where necessary; and • If a queue will be generated by the emergency incident, provide warning signs to inform road users and minimise the potential for end of queue collisions. • In the event of spillage, clear the spill whilst engaging appropriate safety standards as relevant to the event. Traffic will be directed around the incident. • In the event of a complaint or failure to comply with a permit or licence condition, a suitable member of the construction team will investigate the complaint promptly and initiate appropriate action to reduce impact. The following process will be followed: – Undertake an investigation to determine the cause of the problem. – Undertake traffic monitoring, if possible. – Modify transportation practices as necessary to reduce the duration or level of impact. – Report the results of the investigation to relevant authorities. • In the event of inclement weather such as flooding, traffic control personnel may be utilised to manage traffic flows around the flooding and emergency road diversions will be out in place if necessary in consultation with Liverpool City Council and RMS.		Stakeholder and Community
TR15	CoC E23, E24	**Construction Traffic Noise** The project will be constructed within the approved hours described in the CoC. All construction traffic will access the sites via major arterial roads and would constitute an insignificant increase in traffic volume. Hence no noise impact from construction traffic is predicted. Use of compression brakes will not be permitted for the construction vehicles in the vicinity of residential areas near the construction site. Construction traffic movements, parking, loading, unloading during out-of-hours work will be managed in accordance with the following measures:	Construction	Construction Manager Environmental Manager Stakeholder and Community

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		• Access to and from site will be via approved access haulage routes and access points • Parking will be in designated areas only • During unloading and unloading, metal on metal contact will be avoided wherever possible • Use of local and residential roads will not be permitted • Use of tonal reversing alarms will be avoided and replaced with reversing squawkers wherever possible • The OOHW process as defined in the construction noise and vibration management plan will be implemented.		
TR16	CoC E23	**Drivers Code of Conduct** A Driver Code of Conduct will be issued to all haulage subcontractors and suppliers. This conduct is included in Appendix B of this report.	Construction	Construction Manager Plant Operators/Drivers
TR17	Best Practice	**Sediment and Stormwater Management and Load Protection** The location of any access tracks within the sites will be planned to ensure that the passage of stormwater through the site is not impeded and thus limit any potential damage which could occur from flooding or misdirection of overland water flow. Where activities have the potential to track mud/soil onto the surrounding roads, a rumble grid shall be installed prior to vehicles exiting the road. All loads accessing and leaving the site will be appropriately covered to ensure material is not lost or deposited on public roads or adjacent properties, including spoil material and associated dust and all waste collection. Water carts are only to use water sprays on the construction sites and not on the public road network. Street sweepers will be on call during earth work activities. Any spilt material to public areas, including roads, will be cleaned and removed immediately.	Construction	Construction Manager Environmental Manager
TR18	CoC E30, E34a(v)	**Adjacent Property Interface** Access to adjacent property or businesses adjacent to or affected by the construction activities will be controlled throughout the construction period. Should access to any property need to be restricted, the owners and users will be notified a week in advance and consulted with regarding the alternative access arrangements to those properties. Such access is not expected to be	Construction	Construction Manager Traffic Controller Stakeholder and Community

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		required, however, should this be required, and a local access plan will be developed. Any access that is affected by construction works will be reinstated to its prior or an equivalent state. Any physical disruption to driveways or access roads will be repaired during the construction process. Condition reports shall be prepared prior to commencement of construction to include all local roads, footpaths, parks and other open space areas, heritage items and existing boundary infrastructure likely to be used or affected by construction. No temporary road closures or diversions are forecast for Works. If any such measures are required, discussions will be held with the relevant authorities to agree the appropriate measures required.		CEC
TR19	CoC E29 FCMM 1B	**Public, Pedestrian and Cyclist Safety** Access by foot and cycle will always be maintained around the construction zone. Temporary signage will be installed at site access points to notify the public of the likelihood of vehicles entering or leaving the construction site. Vehicles leaving the site will be required to STOP prior to entering traffic. Where required, the designing of temporary footpaths needs to consider the following points: • Footpaths to be constructed to an all-weather standard; • Adequately signposted to direct pedestrians accordingly; • Footpaths are to be of equivalent performance to adjacent footpaths; and Pedestrians are to be excluded from the works site using containment fencing.	Construction	Construction Manager Traffic Controller Stakeholder and Community CEC
TR20	CoC B6	**Emergency Access Management** Onsite emergencies will be managed in accordance with the emergency procedures developed as part of the Project Safety Management Plan for the Managing Contractor works, and in accordance with the CEMP for environmental related emergencies (i.e. spills/leaks, etc.). As part of the emergency response, temporary traffic control measures may need to be implemented in order to facilitate the access of emergency services and the egress of personnel from the site. In such circumstances, the traffic control measures to be implemented will be at the discretion of the site management	Construction	Construction Manager Traffic Controller Environmental Manager Stakeholder and Community

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
		team until control can be handed over to appropriate emergency personnel (e.g. Police). In the event of traffic accidents occurring at or near locations where the contractor have implemented approved traffic control measures, further measures will be managed by Traffic Control personnel. Should the accident constitute an emergency event by causing injury to or endangering the life of any person, or by causing significant property or environmental damage, the Project Emergency Procedure will be implemented. All other traffic accidents will be managed by the Traffic Control sub-contractor's personnel until the police or other responsible authority arrive at the scene. In such cases, the prime management objective will be to obtain assistance for any injured person and to prevent or minimise the risk of further accidents or injury to road users or any other person. Approved traffic control measures implemented by the contractor will be removed where directed by Police or other responsible authority to facilitate the movement of emergency vehicles or the removal of any obstructions to traffic to enable road traffic to return to normal. Such removal will be dependent upon the action required not endangering the safety of contractor personnel or members of the public. Access for emergency vehicles would be maintained at all construction sites and emergency services would be advised of all planned changes to traffic arrangements prior to applying the changes. An emergency truck exit is proposed near the southern boundary of the Stage 1 site at Moorebank Avenue. The emergency truck exit will be controlled via a gate. Dependant on the stage of the construction process this will provide an additional access and egress point in the event of an emergency.		

ID	Reference	Proposed Mitigation Measure/Controls	Timeframe	Responsibility
TR21	CoC B4 CoC E23	**Staff Awareness** All site staff, including subcontractors must attend an induction which details traffic management measures to be implemented to reduce impact on stakeholders and ensure project requirements are met. This will also include the requirement to restrict heavy vehicles turning left on to Moorebank Avenue, or right into Site from Moorebank Avenue as well as measures to reduce traffic noise. Requirements will be reiterated in toolbox talks and prestart meetings as required. Records of all training are to be filed in accordance with the project filing system.	Pre-construction	All staff

6 COMPLIANCE MANAGEMENT

6.1 Training

All site personnel shall undergo site specific induction training, which will include details of approved transport and haulage routes, approved hours of operation, local access plans, emergency response plan for construction traffic incidents etc. Toolbox meetings will also be undertaken as and when required; covering specific traffic, transport and access issues and control measures. In particular, details concerning the left turn ban out of site/right turn ban into site applicable for all heavy vehicles will be briefed during the induction, tool box and noted in the contractor developed traffic control plans.

The Environmental Control Maps (ECMs) will identify site-specific environmental features including proposed traffic, transport and access management measures and associated control measures to be implemented where applicable, (e.g. approved site entry and egress). The ECMs will form part of the induction training.

Personnel directly involved in implementing control measures will be given specific training in the various measures to be implemented. Only trained and accredited traffic control personnel will be used for traffic control works on public roads. Traffic controllers will undergo appropriate training and be certified as competent prior to their assignment to undertake traffic management at construction work sites. The minimum requirement is to have satisfactorily completed the RMS's training package – Traffic Control Using a STOP/SLOW bat.

Records of all training are to be filed in accordance with the contractor project filing system.

6.2 Auditing and Reporting

Auditing and reporting will be undertaken as per the Project CEMP.

6.3 Inspections

Inspections will be undertaken weekly at the commencement of construction and fortnightly thereafter to ensure the safe movement of traffic and the protection of persons and property in and around the worksite. The inspector will monitor work practices and identify non-conforming areas and activities or work practices which could lead to potential impact to road users.

6.4 Monitoring

Table *11* identifies the traffic and access monitoring requirements that will be undertaken to confirm compliance with this CTAMP and other regulatory requirements. Daily site diaries, and weekly site health, safety and environmental inspections will monitor traffic movements and will note any non-conformances. Monitoring will be recorded in the daily site diary by the Site Supervisor (or delegate) and weekly environmental inspection by the Construction Manager (or delegate).

Table 11 Monitoring Requirements

Monitoring Activity	Trigger/Criteria	Contingency Measure	Timeframe	Responsibility
Visual monitoring of all traffic movement within the MPE to detect unsafe movement of traffic and risk to persons and property	Unsafe movements of construction vehicles.	Direct cessation of unsafe movements. Review need to address persistent unsafe movements. Modification of traffic controls to self-enforce appropriate vehicle manoeuvres within the site.	Daily, and continuous	Construction Manager Traffic Controller
Access roads to/from Moorebank Avenue will be inspected to ensure roads remain clear and road conditions support a safe environment for all road users	Road and intersection congestion.	Clear any impediments to access roads. Report unsafe road conditions to RMS for attention.	Daily	Construction Manager Traffic Controller
Following periods of adverse weather conditions (e.g. a significant heavy rain event), access and onsite roads will be inspected prior to heavy vehicle traffic use to ensure driver and vehicle safety and to prevent spoil tracking onto public roads.	Unsafe road conditions e.g. standing water, road integrity.	Any impediments to access roads will be cleared.	Continuous	Construction Manager Traffic Controller Safety Manager
Inspection of implementation and efficiency of traffic control measures.	Ineffective traffic control measures for managing movement of road users. Incorrect placement of traffic controls. Damaged or faulty traffic controls.	Rectify/ adjust traffic control measures to improve visibility or effectiveness. Review need for additional or modified traffic control measures.	The traffic control inspection shall be completed every week	Construction Manager Traffic Controller

6.5 Non-compliances, Non-conformances and Actions

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

Non-conformances, non-compliances and corrective and preventative actions will be managed as per section 9.2.1 of the CEMP.

Non-conformances and non-compliances are to be recorded by way of the contractors System Notification process. The Construction Manager, and if applicable LOGOS's Principal Representative, will review and analyse the cause of detected non-conformance and non-compliances in or to develop a corrective action to prevent recurrence. Details of the occurring non-conformance or non-compliance, including any immediate corrective actions undertaken are to be recorded, reviewed and accepted by the contractor and LOGOS.

It is the responsibility of the Construction Manager to immediately initiate corrective actions if required. The non-conformance or non-compliance and corrective action must include details of the action proposed and an appropriate close out date. The system notification report should be signed, dated and filed.

If such corrective and preventative action leads to further non-conformance, any further action will be subject to approval by the Construction Manager in consultation with the Environmental Manager and the Health and Safety Manager.

6.6 Enquiries, Complaints and Incident Management

Enquiries, complaints and incident management will be undertaken as per the Community Communication Plan including those related to traffic, transport and access associated with the works. Further detail is also included in Table 10 TR6.

6.7 Review and Improvement

Continuous improvement of this plan will be achieved by the ongoing evaluation of environmental management performance against regulatory environmental policies, legislative requirements, LOGOS's Environmental Policy, Project objectives and targets to identifying opportunities for improvement.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance.
- Determine the cause or causes of non-conformances and deficiencies.
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies.
- Verify the effectiveness of the corrective and preventative actions.
- Document any changes in procedures resulting from process improvement.
- Make comparisons with objectives and targets.

Any revisions to the CTAMP may result from:

- Management Review
- Audit (either internal or by external parties)
- Client complaints or non-conformance reports
- Changes to the Company's standard system
- Changes to procedures, scope of works and/or systems after a potential Class 1 incident
- Traffic related amendments to the CEMP

Revisions shall be reviewed and approved by the Project Manager prior to issue. Updates to this plan are numbered consecutively and issued to holders of controlled copies.

The Environmental Representative will endorse/reject “minor” amendments to the CTAMP whereas major amendments will be provided to the Secretary for approval.

APPENDIX A EVIDENCE OF STAKEHOLDER CONSULTATION

APPENDIX B DRIVER CODE OF CONDUCT

General

All drivers will maintain a high level of professional conduct and respect for other road users and the public in general. The following behaviours should be exercised at all times:

- Adhere to the approved hours of work
- All subcontractor and delivery drivers arriving to site must have undergone the contractor's driver induction
- Be mindful of the public including pedestrians, cyclists and other road users
- Loads to be are fully covered
- Arrive to site at the pre-determined times to avoid queuing and negative impacts to surrounding traffic
- No parking or layover in residential areas,
- No use of compression brakes in residential areas surrounding the site
- Use the horn as a warning device only
- Drive defensively and with care to avoid accidents and sudden stops, i.e. allow sufficient room between vehicles and consider weight of load
- Adhere to posted speed limits, road signs and legislative road rules
- Obey directions of Police, Roads and Maritime Services (RMS) and other authorities
- All vehicles must have registration with an applicable Road Authority
- Consumption of alcohol or drugs is not permitted whilst on duty
- Do not crowd other operators or traffic, and allow irate drivers the right of way
- Acknowledge courteous acts by others
- No use of Cambridge Avenue

Workplace Safety

Drivers have a duty to apply safe work practices for both personal safety and the safety of others. Under no circumstances is the driver to endanger or jeopardise the safety of another for the sake of being time efficient or for any other reason. Drivers must inform the contractor of any unsafe work practices, near misses or incidents/injuries and cooperate in any investigation carried out by the contractor or authorities.

Licences

Drivers must have the appropriate Driving and Dangerous Goods Transport Licences for the works they are executing. Licences must be renewed prior to the expiry date and shall be available to the contractor and Authorities at all times.

Where a licence has been cancelled the subcontractor or supplier is to inform the contractor of the situation immediately, failure to do so may result in termination of employment or contract agreement.

Traffic Routes and Access

All drivers must adhere to the approved site access and traffic routes issued as part of the subcontract or supply agreement. Failure to do so may result in termination of the work contract or supply agreement.

Off-street parking is not permitted; all vehicles must park in the allocated parking areas on site to avoid traffic congestion and negative impacts on the surrounding road network.

Vehicle Maintenance

All vehicles must comply with legislative safety and reliability inspections as required for the relevant vehicle.

Depending on the vehicle and load required for delivery/pick up, the operator must ensure the equipment necessary to stow and secure the load is in accordance with the relevant codes, legislation and best practice.

Vehicle Noise Emission

Vehicle noise includes noise from exhaust systems, horns, brakes, engine and sound systems. To combat the emissions of noise the following must be observed:

- No use of compression brakes shall be permitted for construction vehicles associated with construction near the subject site.
- The horn will only be used as a warning device,
- Australian Road Rule 291 requires that vehicles do not emit 'unnecessary noise or smoke' such as that from intentional wheel spins and doughnuts
- Operators must comply with notices issued following noise checks on heavy vehicles at heavy vehicle inspection stations
- Complaints registered with the contractor regarding noise emission will be logged and investigated

Non-conformance

In the event a driver refuses or is seen wilfully breaching this Code then a non-conformance will be issued to the relevant subcontractor or supplier; if the driver will not change their behaviour then termination of those services may take effect.

Misconduct

Repeated offences relating to infringements of this code, general driving safety requirements, tampering with vehicle equipment and/or complaint regarding the services provided may result in termination of employment or services.