

### **Biannual Trip Origin Destination Report**

01 November 2022 – 30 April 2023

Moorebank Precinct East 9/08/2023 P1065r07



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### **Document Control**

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-				

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### Contents

#### Glossary

1	Introduction	1
	1.1 Introduction	1
	1.2 Purpose	1
	1.3 Scope	2
	1.4 Period of Reporting	2
2	Shipping Container Transport	3
3	Truck Gate Opening Periods	4
	3.1 Period of Opening	4
	3.2 Exceptions to Full Time Opening	4
	3.3 Actual Hours of Opening	4
4	Traffic Volumes	5
	4.1 MPE Main Access	5
5	Origin-Destination Results	6
	5.1 Survey Locations	6
	5.2 Amendments to Survey Locations	6
6	Employee Numbers	12
7	Summary	13



### **Contents Continued**

### Figures

Figure 1: Origin-Destination Gates	7
Figure 2: Visual of Average OD Movements - All Vehicles	8
Figure 3: Visual of Average OD Movements - Light Vehicles	9
Figure 4: Visual of Average OD Movements - Heavy Vehicles	10
Figure 5: Visual of Average OD Movements – Articulated Heavy Vehicles	11

#### Tables

Table 1:	Breakdown of Operational Status Within MPE	2
Table 2:	Shipping Container Transport	3
Table 3:	Breakdown of Operational Status Within MPE	4
Table 4:	Truck Gate Opening Period Exceptions	4
Table 5:	Average Daily Traffic Volumes	5
Table 6:	OD Survey Gates	6
Table 7:	Average OD Movements – All Vehicles	8
Table 8:	Average OD Movements – Light Vehicles	9
Table 9:	Average OD Movements –Heavy Vehicles	10
Table 10	: Average OD Movements – Articulated Heavy Vehicles	11
Table 11	: OD Survey Gates	12

#### **APPENDICES**

Appendix A. BTODR Framework Report





### Glossary

Acronym	Description	
BTODR	Biannual Trip Origin Destination Report	
GFA	Gross Floor Area	
IMEX	IMEX (Import-Export) Intermodal Terminal	
MLP	Moorebank Logistics Park	
MPE	Moorebank Precinct East	
OD	Origin - Destination	
QUBE	Qube Property Management Services Pty Limited	
RMS	Roads & Maritime Services	
SSD	State Significant Development	
ТА	Transport Assessment	
TEU	Twenty Foot Equivalent Units	
TfNSW	Transport for New South Wales	
SIMTA	Sydney Intermodal Terminal Alliance	

### **Reference Documents**

Abbreviation	Document
BTODR Framework Report	Moorebank Precinct East -Biannual Trip Origin Destination Report Framework for Data Collection and Reporting, (Arcadis, August 2019)
BTODR Report Nov 2022	Biannual Trip Origin Destination Report, Moorebank Precinct East, Ref:1065r06v1 (Ason Group, October 2022)
MPE Stage 1 - TAIA	SIMTA Intermodal Terminal Facility Stage 1 Traffic & Accessibility Impact Assessment (Hyder Consulting, March 2015)
MPE Stage 2 - OTTIA	Moorebank Precinct East Stage 2 Proposal - Operational Traffic and Transport Impact Assessment (Arcadis, December 2016)
MPE Stage 2 – RtS	Moorebank Precinct East Stage 2 Proposal – Response to Submission - Appendix C3: Consolidated Traffic Table (Arcadis, July 2017)



## **1** Introduction

### 1.1 Introduction

Ason Group has been commissioned by Qube Property Management Services Pty Limited to prepare an initial BTODR for MPE (including IMEX), as outlined within the development consents SSD 7628 and SSD 6766. This report has been prepared following Condition B28 of SSD 7628, which has been provided below;

Condition B28. The Applicant is to prepare a Biannual Trip Origin and Destination Report each six months following commencement of any operation (in a format agreed with TfNSW and RMS) that advises:

- a) the number of actual and standard twenty-foot equivalent shipping containers despatched and received during the period;
- b) the number of days in the period that the truck gate was open for despatching trucks 24 hours a day,
   7 days a week and detail any exceptions to this and advise actual hours of operation;
- c) records of vehicle numbers accessing the site; and
- d) representative vehicle origins and destinations, based on a cordon in the surrounding network.

A framework for recording and reporting on the data required for the report, prepared to the satisfaction of TfNSW and RMS, is to be submitted to the Secretary three months prior to the commencement of operation.

The report is to be submitted within one month of its preparation throughout operation of the project, starting six months from the commencement of operation, unless otherwise agreed by the Secretary, TfNSW and RMS.

The cordon count at (d) above will:

- apply to all classes of vehicles; and
- cover the intermodal terminal, the warehousing facility, and any other uses such as the freight village.

As such, this report has been prepared on the basis of a review of the documentation provided and relevant publicly available documentation associated with the staged redevelopment of the MPE. Additionally, the reference BTODR Framework report (at **Appendix A**) forms the basis and format of this report and has been prepared to the satisfaction of Transport for NSW.

The BTODR is a document ultimately intended for when MPE is fully operational. Currently MPE has a mixture of lots where warehouses are operational or under construction; therefore, there are challenges to collect the full extent of data envisaged at this stage. Accordingly, this BTODR has been compiled on the basis of the data available at this time, with a view to achieving as best as possible the objectives of the BTODR.

### 1.2 Purpose

This BTODR addresses the relevant requirements of the Project Approvals and other guidelines and standards applicable during operations of MPE. The BTODR is proposed to keep an accurate record of the shipping containers and vehicle arrivals / departures against approved volumes.



### 1.3 Scope

For the purpose of the BTODR, the scope of this report shall include:

- Review of the number of twenty-foot equivalent shipping containers dispatched and received. •
- Review the number of days in the period that the truck gate was open for despatching trucks and detail • any exceptions to the actual hours of operation.
- Record the number of vehicles accessing MPE. .
- Outline the vehicle origin and destinations based on a cordon in the surrounding round network.
- Comment on the employee numbers at MPE.

This report has assumed selected OD cordons (as outlined within Figure 1) which will apply to all classes of vehicles (while also covering the IMEX, warehousing facilities and any other uses such as the freight village).

#### Period of Reporting 1.4

As mentioned above, the main objective of the BTODR is to report on traffic once MPE is completed and fully operational. At this stage, MPE is only partially operational and has a number of areas within the Site that are under construction.

Tenanted Area	Operational		
	1 May 2022 – 31 Oct 2022	1 Nov 2022 – 30 Apr 2023	
IMEX	Yes	Yes	
WH 1	Yes	Yes	
WH 3A	Yes	Yes	
WH 3B	Yes	Yes	
WH 4A	Yes	Yes	
WH 4B	Yes	Yes	
WH 5	Yes	Yes	
WH 6	No	No	
WH 7	No	No	
WH 8	No	No	

Note: Those in **bold** are the changes from the precious reporting period.

The reporting periods assessed by this BTODR - based on available data - are outlined below:

- Shipping Container Transport: 1 November 2022 – 30 April 2023 Truck Gate opening period: 1 November 2022 - 30 April 2023 Traffic Volumes: 22 May 2023 - 26 May 2023
- Origin / Destination Numbers: 22 May 2023 - 26 May 2023
- Employee Numbers: 1 November 2022 - 30 April 2023



## **2 Shipping Container Transport**

This section provides the total number of actual TEUs dispatched and received during the reporting period. The analysis is based on the operational data from logistical schedules.

The information outlined below has been sourced by Tactical, BMD, Qube Logistics, Knight Frank who are currently operating in some form within MPE. **Table 2** presents the total TEUs received and dispatched from the IMEX terminal.

TABLE 2:	SHIPPING CO	NTAINER TRANSPORT		
Reporting Month Period		Total Containers Received / Dispatched	Cumulative Total for Period	
Period 5	May-2022	8,493	8,493	
	Jun-2022	11,282	19,775	
	Jul-2022	5,316	25,091	
	Aug-2022	6,156	31,247	
	Sep-2022	10,622	41,869	
	Oct-2022	7,742	49,611	
Period 6	Nov-2022	5,923	5,923	
	Dec-2022	4,246	10,169	
	Jan-2023	2,204	12,373	
	Feb-2023	1,046	13,419	
	Mar-2023	1,334	14,753	
	Apr-2023	619	15,372	



### **3 Truck Gate Opening Periods**

### 3.1 Period of Opening

The BTODR Framework requires reporting on the number of days in a specific period that the truck gate was operational. In response, the period of time where the gate was operational has been in **Table 3**.

TABLE 3: BREAKDOWN OF OPERATIONAL STATUS WITHIN MPE		
Reporting Period	Period of Opening	
Period 5	1 May 2022 – 31 October 2022	
Period 6	1 November 2022 – 30 April 2023	

### 3.2 Exceptions to Full Time Opening

Further to the above, the BTODR Framework requires reporting on any periods when the gates were not open. In response, **Table 4** outlines the timeframes and reasons for when no containers left IMEX by truck.

TABLE 4: TRUCK GATE OPENING PERIOD EXCEPTIONS				
Reporting Period         Period of Closure         Reason for Closure				
Period 5	No Closures during this period	-		
Period 6	No Closures during this period	Ξ.		

### 3.3 Actual Hours of Opening

At present, the general truck gate daily opening times are outlined below.

- Monday Friday: 4:00am 3:00am
- Saturday: 4:00am 4:00pm
- Sunday: Closed

These times changed from the previous period of reporting.



### **4 Traffic Volumes**

### 4.1 MPE Main Access

Traffic data has been collected to identify the volumes of light and heavy vehicles accessing MPE from the current main access on Moorebank Avenue. Table 5 summarises the average daily volumes from the data collected.

Reporting Period	Reporting	Vehicles In		Vehicles Out	
	Dates	Light Vehicles	Heavy Vehicles	Light Vehicles	Heavy Vehicles
Period 5	15 Nov 2022 - 18 Nov 2022 & 21 Nov 2022	882	275	884	236
Period 6	22 May 2023  26 May 2023	1,050	443	1,042	444



## **5 Origin-Destination Results**

### 5.1 Survey Locations

OD surveys have been undertaken to understand the distribution of MPE traffic on the surrounding road network. To meet the requirements of the BTODR, the OD surveys have recorded traffic volumes across a 24-hour period, with the locations of the survey and corresponding gate numbers presented on **Figure 1** and outlined below.

#### **TABLE 6: OD SURVEY GATES**

Gate Location
Moorebank Avenue, about 350 metres north of the M5 South Western Motorway
Eastbound off-ramp of M5 Interchange
Eastbound on-ramp of M5 Interchange
Westbound on-ramp of M5 Interchange
Westbound off-ramp of M5 Interchange
Moorebank Avenue, about 300 metres south of the M5 South Western Motorway
Anzac Road
Defence Joint Logistics Access
IMEX/MPE Main Access
Cambridge Avenue
Moorebank Avenue, south of Cambridge Avenue

### 5.2 Amendments to Survey Locations

During a previous reporting period of the BTODR (Period 4: 1 May 2022 – 31 October 2022), concerns were raised by the Department of Defence (DoD). DoD owns and manages sensitive properties within proximity of the Moorebank Intermodal (IMT) and were concerned about the potential for security issues for their property and/or personnel arising from traffic survey data that is routinely collected for the IMT using video camera technology. The main concern of DoD relates to the security of personnel arriving/departing from their lands and the potential for the driver and/or their vehicles being identified from the video footage.

The DoD outlined the 2 intersections that are of significance, being:

- OD8: Access intersection of the Defence Joint Logistics Unit (DJLU) with Moorebank Avenue
- OD11: Moorebank Avenue intersection with Cambridge Avenue The southern approach of Moorebank
   Avenue effectively provides the rear access to the Holsworthy Military Barracks

Ason Group were instructed to remove OD and CIC survey from both intersections, therefore for this reporting period of the BTODR, OD8 and OD 11 have been removed, as noted in **Table 6** and **Figure 1**.



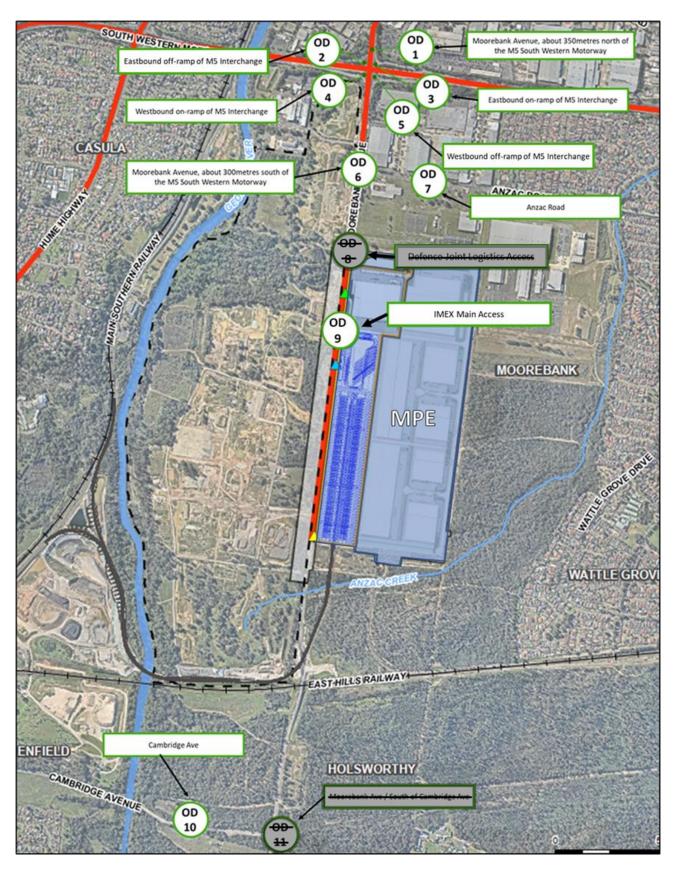


Figure 1: Origin-Destination Gates

The data of the OD surveys have been collated and is presented on the following tables for the relevant vehicle classes, as well as graphically on the following figures.



TABLE 7	7: AVER/	AGE OD		IENTS – A	ALL VE	HICLES				
	To Station									
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	494	9,950	0	3,082	1,024	247	1,433	16,231
2	14,533		0	297	0	4,829	1,623	555	2,017	23,854
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	2,036	0	2,036	0		3,042	895	273	1,349	9,631
6	3,352	0	3,098	4,384	0		3,825	1,272	4,979	20,910
7	948	0	827	1,239	0	2,977		91	2,062	8,143
9	218	0	548	643	0	1,371	0		116	2,896
10	846	0	2,491	1,503	0	4,825	2,017	119		11,800
Total	21,933	0	9,493	18,016	0	20,125	9,383	2,557	11,956	93,464

Below is a visual representation of the OD Movements within Figure 2.

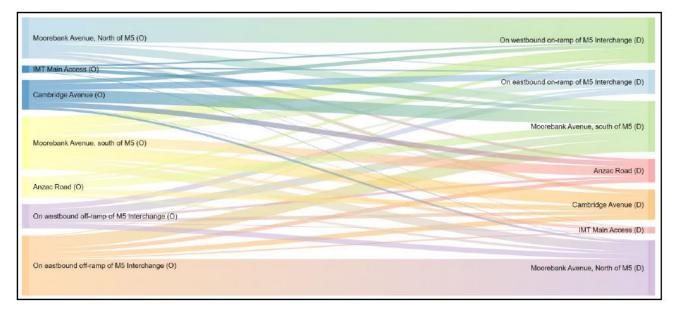


Figure 2: Visual of Average OD Movements - All Vehicles



TABLE 8	B: AVER	AGE OD	MOVEN	IENTS –	LIGHT	VEHICLE	S			
	To Station									
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	376	8,559	0	2,815	971	200	1,385	14,306
2	13,118		0	269	0	4,197	1,494	405	1,905	21,389
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	1,875	0	1,875	0		2,651	836	190	1,295	8,722
6	3,121	0	2,712	3,735	0		3,481	874	4,696	18,618
7	853	0	752	1,071	0	2,675		91	2,004	7,445
9	146	0	403	403	0	944	0		97	1,994
10	803	0	2,436	1,433	0	4,672	1,968	97		11,409
Total	19,916	0	8,553	15,470	0	17,954	8,749	1,857	11,383	83,881

Below is a visual representation of the OD Movements within Table 8

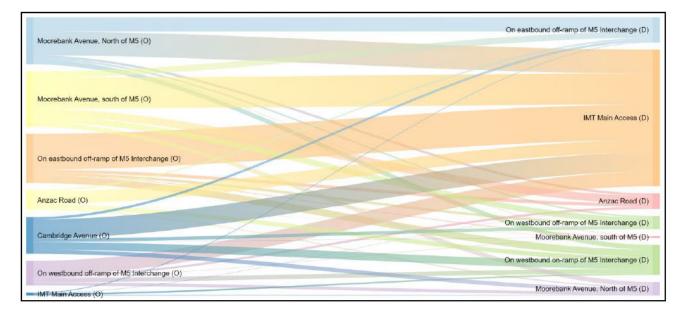


Figure 3: Visual of Average OD Movements - Light Vehicles



TABLE 9: AVERAGE OD MOVEMENTS -HEAVY VEHICLES										
	To Station									
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	79	848	0	239	52	42	47	1,306
2	889		0	21	0	429	107	97	103	1,645
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	111	0	111	0		223	45	40	48	579
6	188	0	219	337	0		275	246	260	1,526
7	79	0	56	122	0	244		0	55	555
9	50	0	94	125	0	261	0		15	545
10	37	0	49	60	0	138	46	19		349
Total	1,354	0	609	1,513	0	1,533	525	445	527	6,506

Below is a visual representation of the OD Movements within Table 9.

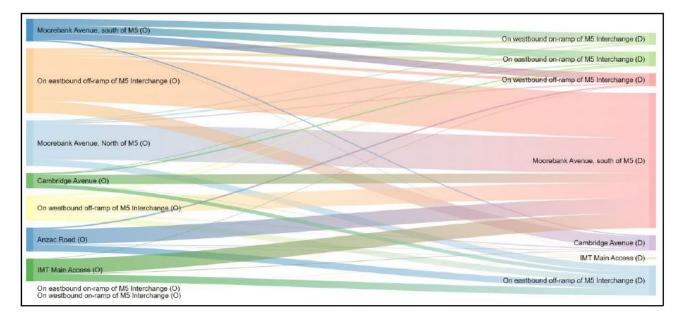


Figure 4: Visual of Average OD Movements - Heavy Vehicles



		To Station								
From Station	1	2	3	4	5	6	7	9	10	Total
1		0	39	543	0	28	2	5	1	618
2	526		0	7	0	203	22	53	9	820
3	0	0		0	0	0	0	0	0	0
4	0	0	0		0	0	0	0	0	0
5	50	0	50	0		167	14	43	7	330
6	43	0	167	312	0		69	152	23	766
7	16	0	19	46	0	58		0	3	142
9	22	0	51	115	0	166	0		3	357
10	6	0	5	10	0	16	3	3		42
Total	663	0	331	1,033	0	638	109	255	47	3,076

Below is a visual representation of the OD Movements within Table 10.

On eastbound off-ramp of M5 Interchange (O)	
Moorebank Avenue, North of M5 (O)	
IMT Main Access (O)	On westbound on-ramp of M5 Interchange (D)
Moorebank Avenue, south of M5 (O)	
Anzac Road (O)	
On westbound off-ramp of M5 Interchange (O)	On eastbound on-ramp of M5 Interchange (D) Mocrebank Avenue, North of M5 (D)
Cambridge Avenue (O)	On eastbound off-ramp of M5 Interchange (D)

Figure 5: Visual of Average OD Movements – Articulated Heavy Vehicles



### 6 Employee Numbers

To corroborate data provided within the Workplace Travel Plan and minimise the need for additional reporting, **Table 11** presents relevant information on employee numbers for each of the sub-area's within MPE.

Reporting Periods	Month	IMEX	Rail Link	Tenanted Area	
Period 5	01-May-2022	61	9	WH 1	225
				WH 3A	25
				WH 3B	38
				WH 4A	15
				WH 4B	35
				WH 5	110
Period 6	01 Nov 2022	61	9	WH 1	150
	- 30 Apr 2023	30 Apr 2023		WH 3A	15
				WH 3B	38
					WH 4A
				WH 4B	32
				WH 5	110

Note: Any information not received from individual tenants have been marked with an \*. This report will be updated if/when the information is provided.



## 7 Summary

The data provided within this report has been collected in accordance with the BTODR Framework report and enables a comparative assessment of traffic accessing the Site and future growth in operational activities.

All data is a fair and accurate representation of the operational traffic for MPE and its surrounding road network. This data has been collected for the reporting period between 1 November 2022 and 30 April 2023.



### **Appendix A. BTODR Framework Report**

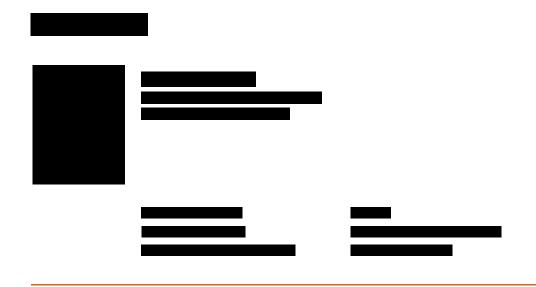




## MOOREBANK PRECINCT EAST -BIANNUAL TRIP ORIGIN DESTINATION REPORT

Framework for Data Collection and Reporting

27 AUGUST 2019



### QUBE

# MOOREBANK PRECINCT EAST - BIANNUAL TRIP ORIGIN DESTINATION REPORT

Framework for Data Collection and Reporting

Author	
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Approver	
Report No	PREC-ARC-TR-RPT-0001
Date	27/08/2019
<b>Revision Text</b>	008

This report has been prepared for Qube in accordance with the terms and conditions of appointment for Moorebank Precinct East dated 7 October 2016. Arcadis Australia Pacific Pty Limited (ABN 76 104 485 289) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.

### REVISIONS

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002	13/03/19	Revised and issued for client review		
003	5/06/19	Revised to address agency comment		
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Revision	Date	Description	Prepared by	Approved by
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## **CONTENTS**

1 INTRODUCTION	1
1.1 Background	1
1.1 Scope and Purpose	1
1.2 Consultation	3
2 PROJECT DESCRIPTION	6
2.1 Site Location	6
2.2 Site Operations	6
2.3 Heavy Vehicle Access Routes	6
3 REPORTING FRAMEWORK	9
3.1 Frequency of Reporting	9
3.2 Report Structure	
3.3 Process	1
4 ROLES AND RESPONSIBILITIES	2
5 DATA COLLECTION FRAMEWORK	
5.1 Data Collection Scope and Methodology1	
5.2 Using the Data in the Report	8
APPENDIX A REPORTING TABLE TEMPLATES	1
APPENDIX B EVIDENCE OF CONSULTATION	1

### LIST OF TABLES

Table 1-1: CoCs of SSD 7628 (MPE Stage 2)	1
Table 1-2: CoCs of SSD 6766 (MPE Stage 1)	2
Table 1-3: Consultation Summary	3
Table 3-1: Report Outline and Structure	9
Table 4-1: Key roles and responsibilities 1	2

### **LIST OF FIGURES**

Figure 2-1: Site location and local context	7
Figure 2-2: Heavy vehicle access routes to MPE site	8
Figure 3-1: Biannual trip origin destination reporting process	. 11
Figure 4-1: Key roles for MLP East Precinct	. 12
Figure 5-1 Survey locations	. 17

### ACRONYMS AND DEFINITIONS

Acronym	Meaning
CoC	Conditions of Consent
DJLU	Defence Joint Logistics Unit
DP&E	Department of Planning and Environment
EP&A Act	Environmental Planning and Assessment Act 1979
IMEX	Import-Export
MLP	Moorebank Logistics Park
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
RFID	Radio-Frequency Identification
RMS	Roads and Maritime Services
Secretary	Secretary under the EP&A Act, or nominee
SIMTA	Sydney Intermodal Terminal Alliance
SSD	State Significant Development
TfNSW	Transport for New South Wales
the Moorebank Precinct	Moorebank Intermodal Precinct

### **1 INTRODUCTION**

### 1.1 Background.

The Sydney Intermodal Terminal Alliance (SIMTA) received approval for the construction and operation of Stage 2 of the MPE Project (SSD 7628), which together comprises the second stage of development under the MPE Concept Consent (MP10\_0193). Operations are due to commence in April 2018.

This Biannual Trip Origin and Destination Report addresses the relevant requirements of the Project Approvals, including the Environmental Impact Statement (EIS), Revised Statement of Commitments (RSoC), Response to Submissions (RtS) and Minister's Conditions of Consent (CoC), and guidelines and standards applicable during operations of the MLP East Precinct.

### 1.1 Scope and Purpose

Condition of Consent (CoC) B28 of SSD 7628 requires that a *Biannual Trip Origin and Destination Report* is prepared. Table 1-1 and Table 1-2 details the applicable CoC.

Table 1-1: CoCs of SSD 7628 (MPE Stage 2)

CoC	Requirement	Document Reference			
Primary	Primary Conditions				
and Destina commences with TfNSW a. the num equivale received b. the num	The Applicant is to prepare a Biannual Trip Origin and Destination Report each six months following the commencement of any operation (in a format agreed with TfNSW and RMS) that advises:				
	<ul> <li>a. the number of actual and standard twenty-foot equivalent shipping containers despatched and received during the period;</li> </ul>	Section 3 Section 5			
	b. the number of days in the period that the truck	Section 3			
	gate was open for despatching trucks 24 hours a	Section 5			
B28	day, 7 days a week and detail and exceptions to this and advise actual hours of operation;	Note that there is no truck gate at the warehouse entrance however a truck gate is in operation at the IMEX entrance where truck numbers will be monitored.			
	c. records of vehicle numbers accessing the site; and	Section 5			
	<ul> <li>representative vehicle origin and destinations, based on a cordon in the surrounding network.</li> </ul>	Section 5			
	A framework for recording and reporting on the data required for the report, prepared to the satisfaction of TfNSW and RMS, is to be submitted to the Secretary three months prior to the commencement of operation.	This document provides a framework for recording and reporting on the data required for the <i>Biannual Trip Origin and Destination Report</i>			

CoC	Requirement	Document Reference
	The report is to be submitted within one month of its preparation throughout operation of the project, starting six months from the commencement of operation, unless otherwise agreed by the Secretary, TfNSW and RMS. The cordon count at (d) above will: • apply to all classes of vehicles; and • cover the intermodal terminal, the warehousing facility and any other uses such as the freight village.	
Secondary Conditions		
B89	Heavy road freight vehicles are not permitted to use Moorebank Avenue south of the East Hills Railway corridor. A main gate monitoring system (eg CCTV) shall be installed to identify heavy vehicles turning left from the terminal site onto Moorebank Avenue, or turning right from Moorebank Avenue to the terminal site. The Secretary may at any time request the Applicant to provide a heavy vehicle monitoring report for the prior 12 month period.	Section 2.3

#### Table 1-2: CoCs of SSD 6766 (MPE Stage 1)

CoC	Requirement	Document Reference	
Second	Secondary Conditions		
	The Applicant shall prepare a six-monthly report to the Secretary with the results of container and vehicle monitoring for a period of 3 years, or as otherwise agreed with the Secretary, from the commencement of operation of the IMEX terminal. The Secretary shall consider the need for further reporting following a review of the results for year 3. The report shall include:	Section 3.1	
G11	a) The number of twenty foot equivalent units	Section 3	
	dispatched and received during the period	Section 5	
	<li>b) A record of heavy vehicle entry by date and approximate time; and</li>	Section 5	
	c) The number of light vehicles turning right into the terminal site from Moorebank Avenue and turning left from the terminal site onto Moorebank Avenue for a representative day	Section 5	
G14	<ul> <li>Heavy road freight vehicles are not permitted to use Moorebank Avenue south of the East Hills Railway corridor. A main gate monitoring system (eg CCTV) shall be installed to identify heavy vehicles turning left from the terminal site onto Moorebank Avenue, or turning right Section 2.3 from Moorebank Avenue to the terminal site. The Secretary may at any time request the Applicant to provide a heavy vehicle monitoring report for the prior 12 month period.</li> </ul>		

This report has been prepared to provide a framework for recording and reporting on the data required for the *Biannual Trip Origin and Destination Report*, which will be used to agree a format for the six-month reports with TfNSW and RMS. This report assumes that the condition is related to the impact of 20-foot equivalent shipping containers and does not address other heavy vehicles associated with operations, such as garbage trucks and maintenance vehicles.

### **1.2 Consultation**

The Framework for Biannual Trip Origin Destination Report has been prepared to the satisfaction of Transport for NSW (TfNSW) and Roads and Maritime Services (RMS). Following the development of this draft framework, the document will be issued to the Secretary for review and comment.

Table 1-3: Consultation Summary

Agency	Date	Person Contacted	Comment	Status
	26/3/19	TfNSW Representative	Draft report emailed for review and comment	Open
	11/4/19	TfNSW Representative	Email to follow up on progress of review	Open
	18/4/19	TfNSW Representative	Email to follow up on progress of review	Open
	29/4/19	TfNSW Representative	Email to follow up on progress of review	Open
	3/5/19	TfNSW Representative	Email to follow up on progress of review	Open
	4/5/19	TfNSW Representative	Email to follow up on progress of review	Open
	9/5/19	TfNSW Representative	Email to follow up on progress of review	Open
Transport for NSW (TfNSW)	10/5/19	MLP Representative	Email noting that TfNSW is to provide comments early next week	Open
	15/5/19	MLP Representative	Email noting that TfNSW is drafting a letter including comments on the report	Open
	16/5/19	MLP Representative	Letter from TfNSW including comments on the report	Open
	26/5/19	TfNSW Representative	Email with attachment provided in response to TfNSW's comments	Open
	30/5/19	TfNSW Representative	Email to follow up on progress of review	Open
	6/6/19	TfNSW Representative	Email to follow up on progress of review	Open
	6/6/19	MLP Representative	Email noting that TfNSW is to provide further comments early next week	Open

	7/6/19	TfNSW Representative	Email to confirm satisfaction of timeframe for comment review	Open
	7/6/19	MLP Representative	Email with attachment provided in response to TfNSW's comments	Open
	13/06/19	TfNSW Representative	Meeting to discuss final comments	Open
	17/06/19	TfNSW Representative	Minutes of meeting submitted for review	Open
	28/06/19	TfNSW Representative	Updated document submitted demonstrating comments incorporated	Open
	12/07/19	MLP Representative	Email with further comments	Open
	7/08/19	TfNSW Representative	Updated document submitted demonstrating comments incorporated	Open
	13/08/19	MLP Representative	Email with further comments	Open
	15/08/19	TfNSW Representative	Updated document submitted demonstrating comments incorporated	Open
	16/08/19	TfNSW Representative	Email with final RMS comments	Closed
	26/3/19	RMS representative	Draft plan emailed for review and comment	Open
	4/4/19	RMS representative	Email to follow up on progress of review	Open
	11/4/19	RMS representative	Email to follow up on progress of review	Open
	18/4/19	RMS representative	Email to follow up on progress of review	Open
Roads and	26/4/19	RMS representative	Email to follow up on progress of review	Open
Maritime Service (RMS)	2/5/19	RMS representative	Email to follow up on progress of review	Open
	3/5/19	MLP representative	Email advising that a new contact point for RMS	Open
	9/5/19	RMS representative	Email to follow up on progress of review	Open
	14/5/19	RMS representative	Email to follow up on progress of review	Open
	15/5/19	MLP representative	Email from RMS providing comments on the report	Open
	26/5/19	RMS representative	Email noting that response to RMS review would be provided in the coming days	Open

3/6/19	RMS representative	Email noting that response to RMS review would be provided in the coming days	Open
3/6/19	MLP representative	Email to confirm satisfaction of timeframe for response	Open
4/6/19	RMS representative	Email with attachment provided in response to RMS's comments	Open
12/6/19	MLP representative	Email providing comments to previous responses	Open
13/06/19	MLP representative	Email providing additional comments to previous responses	Open
29/06/19	RMS representative	Response to comments and updated document submitted demonstrating comments incorporated	Open
22/07/19	MLP representative	Email providing comments on updated document	Open
07/08/19	RMS representative	Email providing updated document to confirm close out of comments	Open
09/08/19	RMS representative	Email and phone call to follow up on progress of close out.	Open
16/08/19	TfNSW Representative	Email with final RMS comments	Closed

### **2 PROJECT DESCRIPTION**

### 2.1 Site Location

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

Figure 2-1 illustrates the MPE site location and local context.

### 2.2 Site Operations

The operational activities associated with the MLP East Precinct site, which are likely to result in vehicle movements into and out of the site are detailed as follows:

- Import Expert (IMEX) Terminal, operating 24 hours, seven days per week:
  - Rail loading/ unloading and container processing
  - Truck processing and holding
  - Maintenance activities, such as vegetation management, electrical infrastructure, civil and drainage work, signalling and track maintenance
- Rail link, operating 24 hours, seven days per week to support the IMEX terminal activities:
  - Maintenance activities, such as vegetation management, electrical infrastructure, civil and drainage work, signalling and track maintenance
- Common or non-tenanted areas:
  - An internal road network to enable efficient movement of vehicles, dispatch of freight from the warehouses and transport of containers between the IMEX Terminal and warehouse and distribution facilities
  - Maintenance activities, such as internal roads, utilities services, fire protection systems, drainage, fencing and signage, bush fire hazard reduction and pest and vegetation control
  - Waste management
- Warehousing operational activities (24 hours, seven days per week), which will be dependent on the individual tenant and will be detailed in the respective Warehouse Operational Environmental Management Plans.

### 2.3 Heavy Vehicle Access Routes

Figure 2-2 illustrates the heavy vehicle access routes to/ from the MPE site during the operation of the proposed facilities.

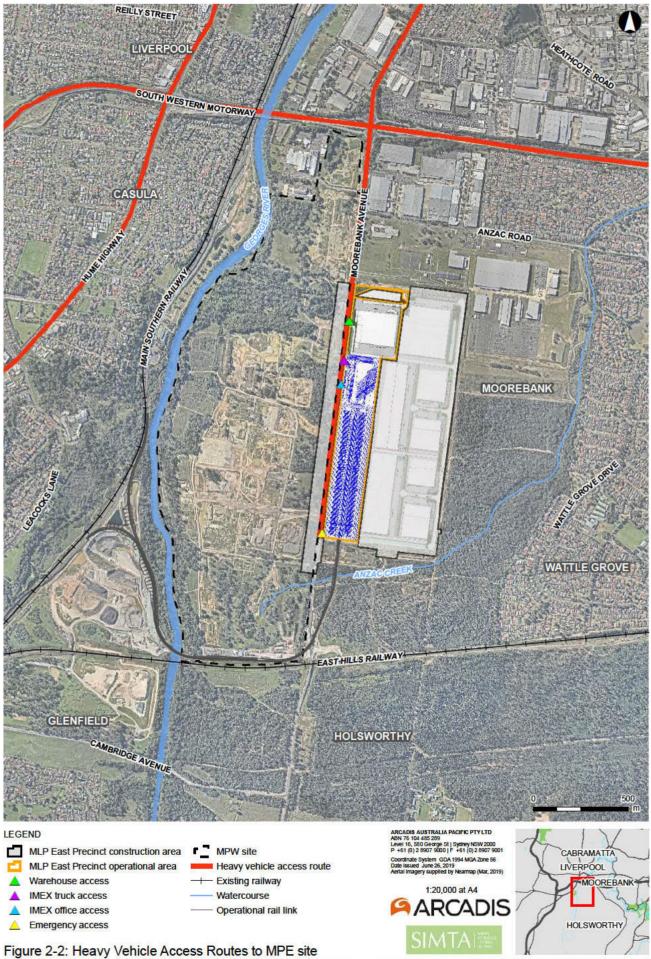
#### **Biannual Trip Origin Destination Report Framework**



Figure 2-1: Site Location and Local Context

Created by EM

#### **Biannual Trip Origin Destination Report Framework**



### **3 REPORTING FRAMEWORK**

### 3.1 Frequency of Reporting

The Biannual Trip Origin and Destination Report is to be prepared every six months, starting six months from the commencement of operation. The report will be submitted within one month of its preparation throughout the operation of the MLP East Precinct, unless otherwise agreed by the Secretary, TfNSW and RMS.

### **3.2 Report Structure**

The outline and structure of the *Biannual Trip Origin Destination Report* is provided in Table 3-1.

Appendix A provides templates for presenting the data analysis required for each section within the report.

Section	Description	
Introduction	<ul> <li>This section will include the following subsections:</li> <li>Introduction</li> <li>Purpose</li> <li>Scope</li> <li>Period of Reporting.</li> </ul>	
Shipping container transport	<ul> <li>This section provides the total number of actual and standard 20-foot equivalent shipping containers dispatched and received during the period. This analysis will be primarily based on the operational data from logistical schedules.</li> <li>This section will include the following subsections: <ul> <li>Shipping containers received</li> <li>Shipping containers dispatched.</li> </ul> </li> <li>This data will be presented using a combination of tables (refer to template in Appendix A) and graphs.</li> </ul>	
Truck gate opening periods	<ul> <li>This section will detail the number of days in the period that the truck gate was open for dispatching trucks 24 hours a day, seven days a week and detail and exceptions to this and advise actual hours of operation. This analysis will be based on the operational data from logistical schedules and on-site monitoring (refer to Section 5.1.1).</li> <li>This section will include the following subsections:</li> <li>Period of opening</li> <li>Exceptions to full time opening</li> <li>Actual hours of opening.</li> <li>This data will be presented in a table (refer to template in Appendix A) with commentary of the results under each subsection.</li> </ul>	

Table 3-1: Report Outline and Structure

Section	Description
	This section will record the number of vehicles (split by Austroads light and heavy vehicle classification) accessing the site. This analysis will be based on logistical schedules, on-site monitoring and gate data (for the IMEX). Vehicles accessing the warehouse will be required to be recorded.
Traffic volumes	This section will include the following subsections:
	<ul> <li>Total vehicles accessing the site for reporting period.</li> </ul>
	The total vehicles accessing the site will be presented in tables (refer to template in Appendix A) and graphs. The mid-block traffic volume profiles will be presented in graphs.
	This section will provide representative vehicle origins and destinations (split by Austroads light and heavy vehicle classification), based on the cordon identified for the site.
	This section will include the following subsections:
Origin-destination results	Approach distribution (origin)
	Departure distribution (destination).
	The data will be presented on plans indicating approach/ departure routes with the proportion of the total vehicles arriving/ leaving the MPE site.
Employee numbers	The Workplace Travel Plan requires Annual reporting of employee numbers to DP&E, TfNSW and RMS. To minimise the requirement for an additional report, employee numbers will be also included in <i>Biannual Trip Origin Destination Report</i>
Summary	Provides an overview of the findings reported above

### **3.3 Process**

The process for preparing the *Biannual Trip Origin Destination Report* is illustrated in Figure 3-1.

#### Data collection (refer to Section 4)

- Commission traffic surveys in accordance with Section 4 of the Framework for Data Collection and Reporting
- Collate operational data from logistical schedules/ on-site monitoring.

#### Data verification and analysis

- Review and verify data
- Where data is incomplete provide qualification
- Analyse data.

#### Reporting (refer to Section 5)

- Prepare a report every six months of operation, to include:
  - Number of shipping containers
  - Number of days the truck gate was open 24/7
  - Number of vehicles accessing the site
  - Origin-destination analysis

#### Submission

Submit report to the Secretary, TfNSW and RMS within one month of its preparation

Figure 3-1: Biannual trip origin destination reporting process

## **4 ROLES AND RESPONSIBILITIES**

An overview of the key roles for the MLP East Precinct are provided in Figure 4-1. The responsibilities for the preparation and submission of the *Biannual Trip Origin Destination Report* and implementation of this framework for each of the key roles are outlined in Table 4-1.

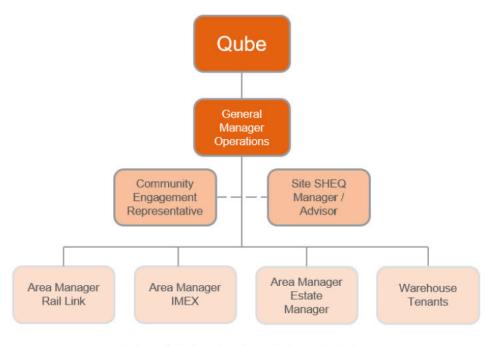


Figure 4-1: Key roles for MLP East Precinct

Table 4-1: Key roles and responsibilities

Role	Responsibility
	<ul> <li>Accountable for the operational activities and performance of the MLP East Precinct</li> </ul>
	<ul> <li>Provide sufficient resources to implement, develop and maintain the <i>Biannual Trip Origin Destination Report</i> and framework throughout the operating life of the MLP East Precinct</li> </ul>
General Manager Operations	<ul> <li>Define, document and communicate roles, responsibilities and authorities of all personnel to facilitate data collection, analysis and reporting</li> </ul>
	<ul> <li>Review and approve changes to the framework and Biannual Trip Origin Destination Report</li> </ul>
	<ul> <li>Based on the outcome of the review and validation of the data collected to support the development of the Biannual Trip Origin Destination Report, endorse the data as fit for purpose.</li> </ul>
Area Managers: • IMEX	Responsible for the implementation of the <i>Biannual Trip</i> Origin Destination Report and framework within the     areas of responsibility
<ul><li>Rail Link</li><li>Estate Manager</li></ul>	<ul> <li>Provide operational data to support the Biannual Trip Origin Destination Report, including logistical schedules and on-site monitoring data</li> </ul>

Role	Responsibility
	<ul> <li>Communicate the requirements of the Biannual Trip Origin Destination Report and framework and obligations to the operational team</li> </ul>
	<ul> <li>Monitor operations against the requirements of the CoC, collect data and maintain records required to inform the Biannual Trip Origin Destination Report</li> </ul>
	<ul> <li>Where required, implement changes to activities to manage ongoing operation to the satisfaction of TfNSW and RMS</li> </ul>
	<ul> <li>Report issues pertaining to the preparation of the Biannual Trip Origin Destination Report to the General Manager Operations.</li> </ul>
	<ul> <li>Act as the primary contact point for TfNSW and RMS in relation to the Biannual Trip Origin Destination Report</li> </ul>
	<ul> <li>Provide advice on matters specified in the CoC relating to the IMEX, Rail Link and Estate operations</li> </ul>
	<ul> <li>Review and implement <i>Biannual Trip Origin Destination</i> <i>Report</i> and framework and monitoring programs required under the CoC</li> </ul>
Site Safety, Health, Environment and Quality Manager / Advisor	<ul> <li>Monitor operations against the Biannual Trip Origin Destination Report and framework to evaluate compliance with the CoC</li> </ul>
(Site HSEQ Manager / Advisor)	<ul> <li>Commission surveys and collate data required to carry out analysis and produce the Biannual Trip Origin Destination Report</li> </ul>
	<ul> <li>Commission (if required), coordinate and manage resources to carry out the data collection, analysis and preparation of the <i>Biannual Trip Origin Destination</i> <i>Report</i></li> </ul>
	<ul> <li>Maintain the register of data collection and reports issued.</li> </ul>
Community Engagement	<ul> <li>Act as the 'control tower' for all public communications and be the central contact to keep nearby residential receivers informed of monitoring/ surveys</li> </ul>
Representative	<ul> <li>Communicate community concerns to the Qube Environmental Representative in relation to vehicle movements within the surrounding road network.</li> </ul>
Individual Tenants	<ul> <li>Support the compliance with the CoC and provide data and information to Qube to inform the development of the Biannual Trip Origin Destination Report as required.</li> </ul>

# **5 DATA COLLECTION FRAMEWORK**

## 5.1 Data Collection Scope and Methodology

The following intersection, mid-block and origin-destination (OD) surveys should be carried out concurrently.

## 5.1.1 Operational Data Collection

#### **Other Operational Data**

The following operational data will be obtained from the logistical schedules or via onsite monitoring:

- Total vehicles accessing the site (B28 [c])
- Number of shipping containers (20-foot equivalent) dispatched and received by the site (B28 [a])
- Truck gate opening periods (B28 [b]).

#### **IMEX Gate Data Collection**

The IMEX accesses will be gated and data will be recorded to determine the number of vehicles entering and exiting the site (classified in accordance with Austroads vehicle classifications). In accordance with MPE Stage 1 (SSD 6766) CoC F6, a vehicle booking system will be implemented with all trucks fitted with Radio-Frequency Identification (RFID) readers. Road Operators will pre-book the Truck Visit with IMEX using 1-Stop, and data on road operator, container, truck details, and arrival and departure time(s). This data will be rechecked again on exit from the terminal to confirm load manifests.

Further detail on this process will be included within the Operational Traffic Management Plan developed in consultation with the Cargo Movement Coordination Centre.

The gate data will also be used to determine the periods during which the gates were open for the reporting period. The Area Managers will be responsible for recording the reasons for any potential periods of gate closure.

#### Warehouse Access Data Collection

The warehouse access will not be gated. Therefore, data will need to be collected to record the number of vehicles entering and exiting the site (classified in accordance with Austroads vehicle classifications) through the installation of permanent tube counters or detector loops.

#### **Logistical Schedules**

Logistical schedules maintained by the Area Managers will need to record the total number of 20-foot equivalent shipping containers that are received and dispatched by the MPE site for the reporting period.

### 5.1.2 Traffic Surveys

Traffic surveys will be commissioned to provide representative vehicle origins and destinations for the MPE site for a cordon area (see Figure 5-1) of the surrounding road network (B28 [d]). This requires collection of:

- Origin-destination (OD) surveys
- Intersection surveys at access points and key intersections.

#### **OD Surveys**

OD surveys will be undertaken to understand the traffic distribution of the MPE site on Moorebank Avenue, the M5 South Western Motorway, Anzac Road, Cambridge Avenue as well as all the access points of the MPE site. This data will be collected on the same day as the intersection surveys and will be analysed to provide representative vehicle origins and destinations for the site for a cordon area of the surrounding road network. This will be combined with classification counts in accordance with Austroads vehicle classifications and an hourly and daily summary.

OD surveys will be required as follows:

- During the following network peak periods on a typical weekday (not within two weeks before or after school holidays):
  - Peak morning period (7am to 9am)
  - Evening period (4pm to 6pm)
- During the following expected traffic peak periods for facility operations based on shift patterns and peak heavy vehicle movements Monday to Sunday:
  - 4:30am to 6:30am
  - 8am to 10am
  - 1pm to 3pm
  - 8pm to 11pm

Therefore, the OD surveys will be undertaken during the following times on weekdays:

- 4:30am to 6:30am
- 7am to 10am
- 1pm to 3pm
- 4pm to 6pm
- 8pm to 11pm.

The survey company commissioned to carry out the OD surveys is required to capture all vehicles passing the OD stations. A detailed report will be prepared by the survey company to summarise:

- The data collection process
- Data processing and analysis approach
- Outputs
- Data errors and expansion factors adopted to address incomplete data sets.

#### Intersection Surveys

Intersection turn counts are to be surveyed at the key MPE accesses along Moorebank Avenue. This data will be used to analyse the general network peak period volumes captured by the OD surveys, which will be undertaken concurrently to provide representative vehicle origins and destinations for the site. This data will also be used to confirm the data recorded at the gates and accesses of the facility during the peak periods.

Intersection surveys will be required for:

- Network peak morning period (7am to 9am) and evening period (4pm to 6pm) on a typical weekday (not within two weeks before or after school holidays)
- Expected facility peak periods of 4:30am to 6:30am, 8am to 10am, 1pm to 3pm, and 8pm to 10pm Monday to Sunday

- Classification counts in accordance with Austroads vehicle classifications
- 15-minute intervals
- Peak hour identified and reported.

The survey at the Moorebank Avenue/ M5 South Western Motorway is a full interchange survey with the through lanes on the M5 South Western Motorway recorded as well as the movements at the traffic signals.

### 5.1.3 Survey Locations

The suggested locations of the survey are provided in Figure 5-1, including:

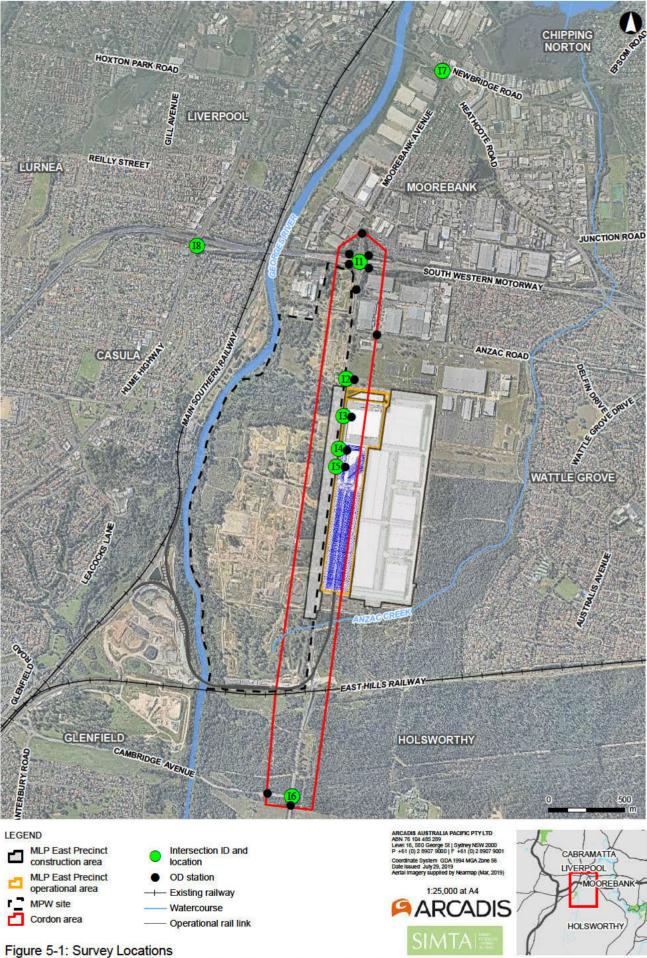
- OD surveys at the following stations:
  - Moorebank Avenue, about 350 metres north of the M5 South Western Motorway
  - Moorebank Avenue, about 300 metres south of the M5 South Western Motorway
  - Moorebank Avenue, south of Cambridge Avenue
  - M5 South Western Motorway on and off ramps to and from Moorebank Avenue
  - Cambridge Avenue
  - Anzac Road
  - Site accesses at MPE warehouse access, MPE IMT truck access and MPE IMT staff access.
- Intersection surveys:
  - I1 Moorebank Avenue/ M5 South Western Motorway interchange (full interchange survey to include M5 South Western Motorway through lanes)
  - I2 Moorebank Avenue/ Defence Joint Logistics Unit (DJLU) access
  - I3 Moorebank Avenue/ MPE warehouse access
  - I4 Moorebank Avenue/ MPE IMT truck access
  - I5 Moorebank Avenue/ MPE IMT staff access
  - I6 Moorebank Avenue/ Cambridge Avenue
  - I7 Moorebank Avenue/ Newbridge Road
  - I8 M5 South Western Motorway/ Hume Highway.

The OD survey locations were determined in consultation with a survey company to adequately capture the vehicle movements generated by the site for a recommended survey cordon, which includes the M5 South Western Motorway as well as RMS and TfNSW. The recommended cordon is considered appropriate to provide a representative OD pattern for the site.

Given that the Hume Highway is designed to accommodate substantial heavy vehicle movements, it is considered too far for the recommended cordon and heavy vehicles generated by the site would be absorbed in the existing traffic volumes on this part of the network.

OD stations have been included on Cambridge Avenue and Anzac Road to capture the travel patterns of all vehicles generated by the site. These stations would also identify any heavy vehicles using these routes, which are not designated heavy vehicle routes.

### **Biannual Trip Origin Destination Report Framework**



## 5.2 Using the Data in the Report

#### **Providing Comparable Data**

Data collection in accordance with this framework and carrying out surveys using methodology specified in Section 5.1 enables a comparative assessment of traffic accessing the site and growth in operational activities for the MPE facility.

Within the report, the data should be presented to provide a comparison between the current six-month period and preceding period. Table templates are provided in Appendix A, which will be used to present the data collected for each reporting period to satisfy CoC B28.

#### **Data Completeness**

Where data is incomplete, or data collection is flawed, the report will provide qualifying commentary, including:

- · Reason for missing/ erroneous data
- Impact on the analysis of the data
- Mitigation implemented for addressing the shortfall in data collection (if any).

#### **Data Validation**

All data collected will be reviewed and validated to confirm it is fit for purpose in addressing the requirements of the CoC.

#### **Data Provision**

All traffic survey data files will be provided to Transport for NSW and RMS, in addition to the summaries documented in the reporting tables.

# **APPENDIX A REPORTING TABLE TEMPLATES**

### Shipping Container Transport

Total number of shipping containers received/ dispatched by month

Reporting period	Month	Total containers received/ dispatched	Cumulative total for period		
	January				
	February				
Period 1 2019	March				
Penda 1 2019	April				
	Мау				
	June				

## Truck Gate Opening Period

Truck gate closure record

Date	Period of closure	Reason for closure

### **Traffic Volumes**

Traffic volumes accessing site by month

Poporting	Month	Vehic	les in	Vehicles out	
Reporting period		Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles
	January				
Desired 4 0040	February				
Period 1 2019	March				
	April				

Reporting period		Vehicles in		Vehicles out	
	Month	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles
	Мау				
	June				

Traffic volumes accessing site by week

Reporting		Vehicles in		Vehicles out	Vehicles out	
period	Week	Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles	
	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
Period 1 2019	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					

Reporting period	Week	Vehicles in		Vehicles out	
		Light vehicles	Heavy vehicles	Light vehicles	Heavy vehicles
	22				
	23				
	24				
	25				
	26				

# OD Surveys All Vehicles (count of matched plates)

		To station						
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total	
OD1							90	
OD2							94	
OD3								
OD4								
OD5								
OD6								
Total								

## OD Surveys Light Vehicles (count of matched plates)

		To station						
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total	
OD1								
OD2								
OD3	5						18	
OD4								
OD5								

	To station
OD6	
Total	

# OD Surveys Rigid Heavy Vehicles (count of matched plates)

		To station						
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total	
OD1	2							
OD2								
OD3								
OD4								
OD5								
OD6								
Total								

## OD Surveys Articulated Heavy Vehicles (count of matched plates)

	To station						
From station	OD1	OD2	OD3	OD4	OD5	OD6	Total
OD1							
OD2							
OD3							
OD4							
OD5							
OD6	13						
Total							

### **Employee Numbers**

Employee numbers per area of the site

Reporting period	Month	IMEX	Rail Link	Tenanted area				
	January							
	February							
Period 1 2019	March							
Pendu 1 2015	April							
	Мау							
	June							