



EPL 21807 Monitoring Report September 2023

SMWSASSM-PLD-1NL-NL000-EV-RPT-000002

Parklife Metro D&C

Document Approval

Revision	Author	Date	Comments	Reviewed by	Approved by
00	E.Chan	19/10/2023	Initial Draft	Colm Kennedy	Mark Chilton

Signature	
-----------	---

Contents

1	Introduction.....	4
1.1	Background	4
1.1.1	Stations, Systems, Trains, Operations and Maintenance (SSTOM) works.....	4
1.2	Scope of this report	6
1.3	Reporting requirements	6
1.4	Monitoring.....	8
1.4.1	Weather Monitoring	8
	Appendix A Weather Observations	11
	Appendix B EPL Premise Maps September 2023.....	12

Table of Tables

TABLE 1 LICENCE DETAILS	6
TABLE 2 EPL 21807 MONITORING REQUIREMENTS	7
TABLE 3 WEATHER SUMMARY AND TRIGGER WEATHER EVENTS FOR REPORTING PERIOD	9

1 Introduction

1.1 Background

Sydney Metro is Australia's biggest public transport program comprising four main packages of work including Metro North-West Line, Sydney Metro City and Southwest, Sydney Metro West, and Sydney Metro Western Sydney Airport (SMWSA, the Project). The SMWSA will become the transport spine for Greater Western Sydney, connecting communities and travellers with the new Western Sydney International (Nancy-Bird Walton) Airport (referred to as Western Sydney International) and the growing region.

The Sydney Metro Western Sydney Airport EIS was prepared in October 2020 to assess the impacts of construction and operation of the Project and was placed on public exhibition between 21 October 2020 and 2 December 2020. The Project was declared a Critical State Significant Infrastructure (CSSI) Project and is listed in Schedule 5 of State Environmental Planning Policy (State and Regional Development) 2011.

The Sydney Metro Western Sydney Airport Project was approved by the Minister for Planning and Public Spaces on 23 July 2021 (SSI 10051) under section 5.19 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act).

The Project involves the construction and operation of a new metro railway line around 23km in length that extends from the existing Sydney Trains suburban T1 Western Line at St Marys in the north to the new Aerotropolis Station in the south at Bringelly. The alignment includes a combination of tunnel, surface, bridges and viaduct sections, and comprises of six new metro stations between St Marys and the Aerotropolis Core precinct, as well as a stabling and maintenance facility and operational control centre to support the operation of the new metro railway line (see Figure 1).

1.1.1 Stations, Systems, Trains, Operations and Maintenance (SSTOM) works

Parklife Metro D&C has been engaged to deliver the Stations, Systems, Trains, Operations and Maintenance (SSTOM) works. The SSTOM works comprises the delivery of six new stations between St Marys and the new Aerotropolis, 12 new metro trains, rail systems and a stabling and maintenance facility at Orchard Hills.

The scope of the Stations, Systems, Trains, Operations and Maintenance (SSTOM) package comprises:

- construction of the six new stations
- installation of tracks, signalling, mechanical and electrical systems
- supplying new driverless trains
- construction of stabling and maintenance facility at Orchard Hills
- operation and maintenance of the line and its assets, and
- handback of operations and maintenance at the end of term.

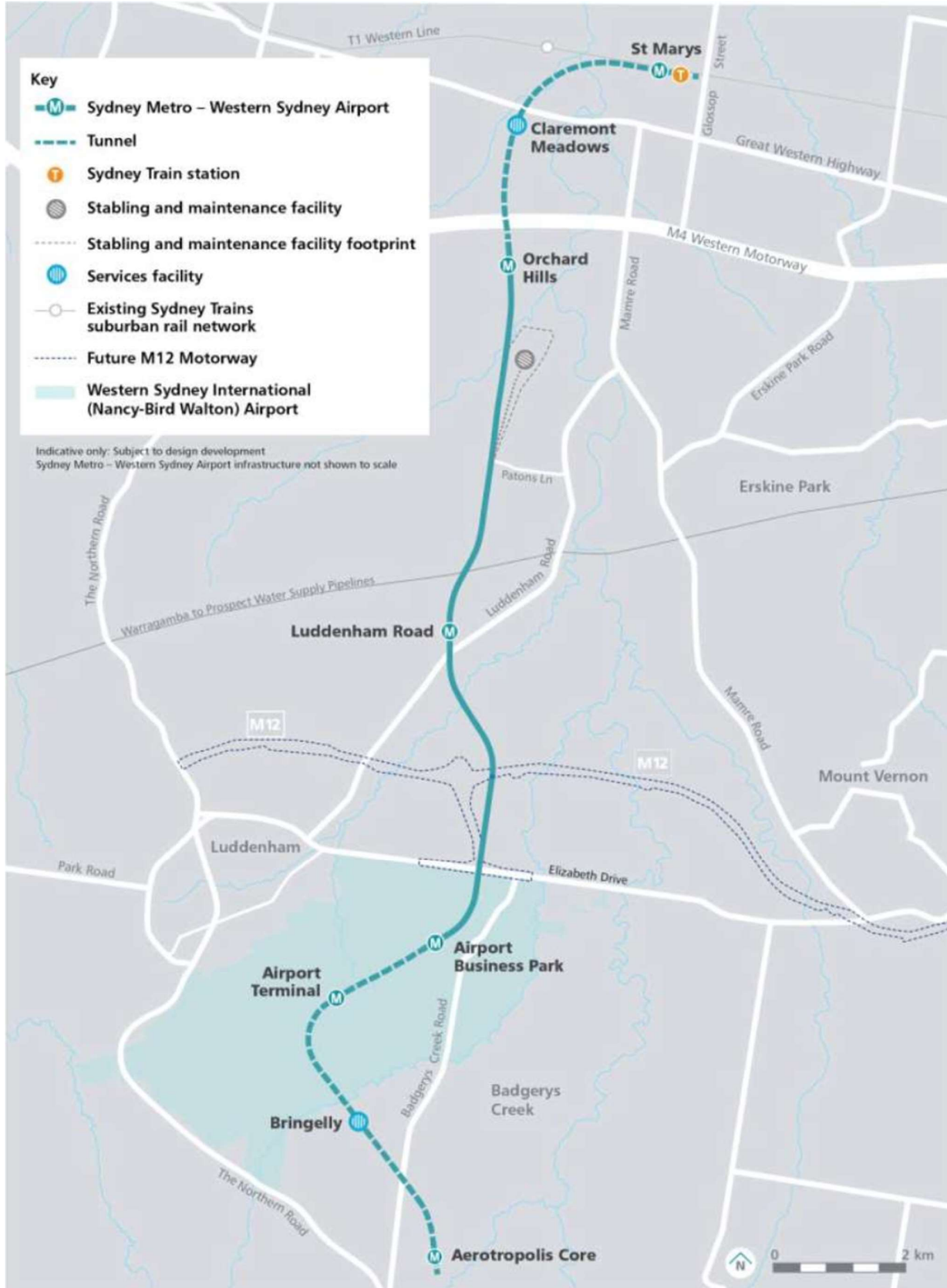


FIGURE 1 OVERVIEW OF SMWSA PROJECT

1.2 Scope of this report

Parklife Metro D&C have been issued an Environment Protection Licence (EPL No. 21807) from the NSW Environment Protection Authority (EPA) for the SMWSA SSTOM Works. The EPL applies to the works approved under the Infrastructure Approval SSI-10051 associated with the delivery of the off-airport portion of the SMWSA SSTOM Works, as detailed in Table 1. This EPL Monitoring Report provides the results of all pollution monitoring required to be measured or monitored by the licensee of EPL 21807 within the reporting period as required by Section 66 of the *Protection of the Environment Operations Act 1997* (POEO Act) and with reference to EPA Publication *Requirements for publishing pollution monitoring data* (Environment Protection Authority, 2013).

TABLE 1 LICENCE DETAILS

Licence Details	
Number	21807
Copy of Licence	ViewPOEOLicence (nsw.gov.au)
Anniversary Date	20-July
Licensee	WEBUILD S.P.A
Premises	SYDNEY METRO WESTERN SYDNEY AIRPORT SSTOM PACKAGE FOOTPRINT SYDNEY METRO WESTERN SYDNEY AIRPORT-STATIONS, SYSTEMS, TRAINS, OPERATION & MAINTENANCE PACKAGE
Scheduled Activity	Railway activities – railway infrastructure construction

1.3 Reporting requirements

Under the POEO Act, holders of environment protection licences (licensees) must publish or make pollution monitoring data available to members of the public.

The POEO Act Section 66 requires:

“Conditions requiring monitoring, certification or provision of information, and related offences

(1) Monitoring The conditions of a licence may require—

(a) monitoring by the holder of the licence of the activity or work authorised, required or controlled by the licence, including with respect to—

(i) the operation or maintenance of premises or plant, and

(ii) discharges from premises, and

(iii) relevant ambient conditions prevailing on or outside premises, and

(iv) anything required by the conditions of the licence, and

(b) the provision and maintenance of appropriate measuring and recording devices for the purposes of that monitoring, and

(c) the analysis, reporting and retention of monitoring data.

(2) False or misleading information A holder of a licence who supplies information, or on whose behalf information is supplied, to the appropriate regulatory authority under the conditions of the licence is guilty of an offence if the information is false or misleading in a material respect.”

The primary objective of the EPL Monitoring Report is that members of the public have access to the results of all pollution monitoring (which a licence specifies must be carried out) in a way that is meaningful to them.

The monitoring data that must be published and/or made available on request is any data that is obtained as a result of a monitoring condition on a licence that relates to air, water (surface or groundwater), noise and/or land pollution. The data to be published or provided is limited to data that relates to pollutants generated, discharged or emitted from the licensed premises.

The data is provided in tabular format that is easy for the general public to understand. Tables definitively display raw data values, while graphs and charts are useful for overviews and visualisation of long-term trends. Raw data will be provided upon request.

This EPL Monitoring Report will provide explanations as to why data may appear to be missing, which may be due to there being no discharge or the level of pollutant being below the detection level of the measurement instrument.

It's possible from time to time that incorrect data may get published in good faith. As soon as practicable after the licensee becomes aware that the published pollution monitoring data is incorrect or misleading, licensees must then publish a correction log to correct this data that is incorrect or misleading.

Table 2 provides a summary of the monitoring requirements of EPL 21807.

TABLE 2 EPL 21807 MONITORING REQUIREMENTS

EPL Condition	Requirement	Report Reference
Weather		
M3.1	<p>The licensee must monitor and record temperature, wind direction, wind velocity and rainfall at either the project weather station, or through analysis of equivalent weather information obtained from the Australian Bureau of Meteorology. Monitoring must:</p> <ul style="list-style-type: none"> a) be representative of the premises; b) commence prior to any works that may cause sediment to leave the premises; and c) continue to be operated until soil disturbance activities cease at the premises and the site has been stabilised. 	Section 1.4.1 Appendix A
Noise		
L4.9	<p>Works outside of standard construction hours – Regulatory Requirements In undertaking any works and activities outside of standard construction hours under condition L4.8, the licensee must comply with the following:</p> <ul style="list-style-type: none"> a) Prepare a construction noise and vibration impact assessment in accordance with the Interim Construction Noise Guideline (DEC, 2009) that is to include: <ul style="list-style-type: none"> i. a description of the proposed works and activities outside of standard construction hours; ii. predictions of LAeq (15 minute) dB noise levels at noise sensitive receivers from these works and activities, where noise levels are predicted to be greater than those permitted under condition L4.3; and iii. a monitoring plan to validate the noise predictions, based on monitoring at the boundary of representative sensitive receivers during noise generating activities that are representative of the works and activities, including during the period/s predicted to have the highest noise level impacts. b) Undertake noise monitoring in accordance with the monitoring plan required by condition L4.9(a)(iii). 	Not triggered

M2.4	The licensee must undertake noise and vibration monitoring as directed by an authorised officer of the EPA. Where the monitoring is requested to take place on private land (for example a residential property) the licensee must request permission to access the premises in advance and keep a record of permission requests and responses. If a licensee is unable to obtain permission, the licensee must undertake the monitoring at an indicative location where possible and they must provide the response (including any nil response) to the EPA.	Not triggered
Community Agreements		
E1.4	A noise validation monitoring plan must be submitted to the EPA for approval as part of the community agreement documentation prior to any OOHW occurring.	Not triggered
E1.5	Validation monitoring must be undertaken for any OOHW that are the approved under condition E1.1 and must: a) be undertaken in accordance with the monitoring plan prepared under condition E1.4; b) be performed by a Competent Person; c) be performed on at least the first 2 occasions (day, evening, nights) where OOHW will be undertaken and are likely to impact Noise Sensitive Receivers; d) be performed on any other occasion (day, evening, night) where the nature of the works is likely to cause greater noise impacts than the first 2 occasions; e) be representative of the impacts in terms of monitoring locations, time and duration of measurements; and f) be recorded and provided to an EPA officer upon request.	Not triggered
Additional Monitoring Conditions		
M2.5	The licensee must undertake monitoring, sampling, video recording and/or take photographs: a) if the EPA or licensee reasonably suspects that an event has occurred at the premises or in connection with the carrying out of the activities that has caused, is causing, is likely to cause or has the potential to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies); b) as soon as practicable; and c) as directed by an authorised officer.	Not triggered

1.4 Monitoring

This section presents summaries of the monitoring completed in the reporting period from 1 September 2023 to 30 September 2023.

Detailed monitoring results for each program are presented in the Appendices.

1.4.1 Weather Monitoring

Meteorological observations were captured using the Bureau of Meteorology Weather Stations - Badgerys Creek (Station 067108). Meteorological data for the month of September can be found within Appendix A.

The total rainfall for this reporting period was 4.4 mm with 0 days exceeding 20mm of rain. Winds gusts exceeding 54km/h accounted for 3 days in this reporting period.

Detailed weather observation records for the reporting period are presented in Appendix A.

This information is used daily on site to assess daily activities and consider mitigation measures as required.

TABLE 3 WEATHER SUMMARY AND TRIGGER WEATHER EVENTS FOR REPORTING PERIOD

Weather Event	Observation
Minimum temperature	1.3 °C
Maximum temperature	35.9°C
Total rainfall	7.2 mm
Number of days with rain (>1mm)	2
Number of days with rain (>10mm)	0
Number of days with rain (>20mm)	0
Number of days with >25km/h wind	23
Number of days with >50km/h wind	4
Number of days with >60km/h wind	3

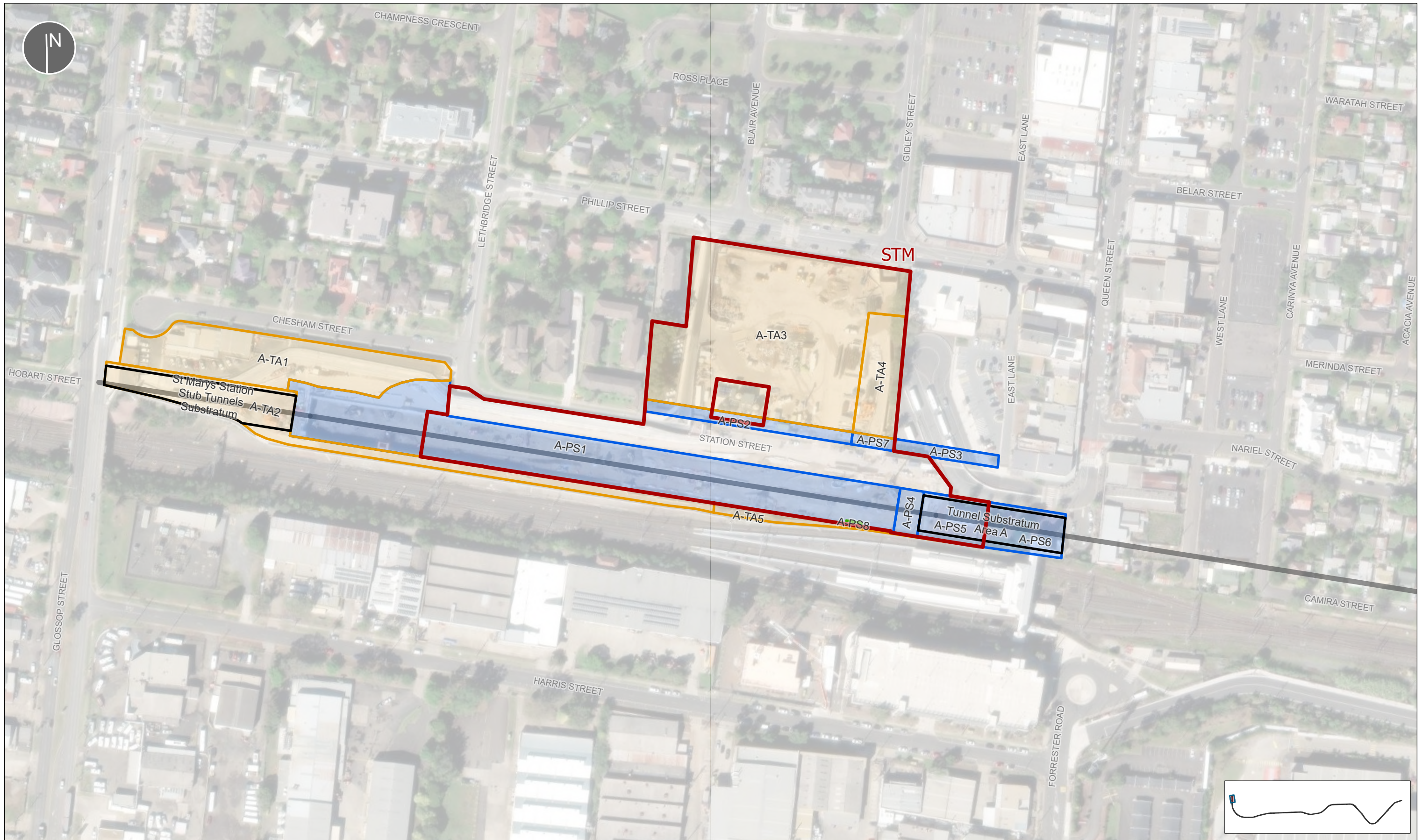
Appendices

Appendix A Weather Observations

SSTOM Weather Monitoring Data																
Observations were drawn from Badgerys Creek AWS {station 067108}																
Date	Temperature		Rainfall	Wind Observations			Morning (9am) Weather Observation					Afternoon (3pm) Weather Observation				
	Minimum (°C)	Maximum (°C)	In the 24 hours to 9am (mm)	Direction of maximum wind gust	Speed of maximum wind gust (km/h)	Time of maximum wind gust	Temperature (°C)	9am relative humidity (%)	Wind direction	Wind speed (km/h)	9am MSL pressure (hPa)	Temperature (°C)	9am relative humidity (%)	Wind direction	Wind speed (km/h)	3pm MSL pressure (hPa)
1/09/2023	5.8	20.3	0.2	WSW	35	11:47	14.8	61	NW	9	1020	17.2	44	NNW	20	1018.9
2/09/2023	5.8	20.7	0	NNE	26	15:15	13.4	57	WSW	15	1023.8	18.9	46	N	15	1019.6
3/09/2023	6.8	21	0	N	26	16:15	14.3	70	NW	2	1022.5	20.2	36	N	7	1017.9
4/09/2023	6.6	23.6	0	ENE	24	14:14	14.6	73	N	4	1017.2	22.8	47	NNE	15	1010.4
5/09/2023	10.2	23.9	0.2	SW	52	9:39	19.4	36	SW	20	1011.2	23.1	18	SSW	13	1011.8
6/09/2023	3.6	24.5	0	E	30	15:07	14.4	52	NNW	4	1023.1	23.7	18	E	17	1018.6
7/09/2023	3.8	29	0	SSE	61	22:00	14.4	64	ENE	7	1019.9	28.5	33	E	24	1012.4
8/09/2023	12.6	18.9	2.8	S	63	14:56	12.6	80	SE	11	1016.8	17.7	29	S	41	1015.1
9/09/2023	6.1	19.5	0.8	W	33	14:50	13.5	38	S	11	1025.1	18	24	W	20	1023.4
10/09/2023	1.3	20.1	0	N	31	16:30	12.6	51	SW	7	1030.5	20	26	WNW	7	1027
11/09/2023	3.3	21.2	0	NNE	24	16:20	13.4	56	W	4	1032.5	20.3	32	E	6	1029
12/09/2023	5	21.2	0	ENE	17	11:59	14.7	66	NNE	2	1031.1	20.1	42	N	6	1027.3
13/09/2023	3.9	25.7	0	E	30	13:23	14.7	65	WNW	2	1029	24.1	34	N	15	1025.2
14/09/2023	6.2	27.6	0	NNE	22	13:34	17.7	57		Calm	1029	26.9	22	NE	7	1025.1
15/09/2023	7.5	31.1	0	E	22	16:07	16.8	57	SE	4	1025.5	30.4	18	E	9	1020.4
16/09/2023	7.6	33	0	SSE	41	14:15	20.2	46	SSE	4	1022.4	32.4	17	S	20	1017.8
17/09/2023	9.4	32.7	0	WSW	35	13:51	22.5	39	SW	2	1023	31.8	11	SW	20	1018.5
18/09/2023	9.2	35.9	0	SE	26	14:28	21.4	34	SE	6	1021.6	35.5	13	SE	17	1015.6
19/09/2023	9.4	34.3	0	SSW	43	14:03	24.3	32	SE	7	1017.4	33.3	15	S	28	1011.2
20/09/2023	12.7	34.7	0	NNW	65	13:35	28.9	21	SSE	20	1010.7	34.3	14	SSE	24	1006
21/09/2023	12.3	24.8	0	ESE	37	14:20	19.9	33	SW	9	1016.3	20.1	49	ESE	24	1016.9
22/09/2023	9.6	20	0.4	SSW	28	7:55	15.9	54	S	15	1029.8	17.1	46	ENE	15	1027.5
23/09/2023	6.1	21.9	0	NE	28	11:51	16.5	54	S	4	1030.7	19.8	39	ENE	9	1027
24/09/2023	7.3	22.4	0	ENE	26	17:19	17	58	N	4	1029.4	21.5	37	N	4	1024.4
25/09/2023	5.9	28.9	0	NNE	20	14:15	16.3	60	SSW	2	1024.1	27.6	28	NNE	9	1019
26/09/2023	10.7	25.2	0	SE	24	17:15	21.5	49	NW	4	1022.2	21.4	57	ESE	13	1018.8
27/09/2023	14.2	25.9	2.4	SE	28	16:57	18.4	73	SSW	2	1020.8	23.9	48	E	4	1017.3
28/09/2023	14.1	22.6	0.4	S	31	5:18	16.3	86	SSW	6	1029.4	22.2	56	NNE	13	1025.5
29/09/2023	10	31.7	0	SE	33	16:26	18.7	75	N	4	1024.4	31.3	14	ESE	4	1019.7
30/09/2023	8.7	31.1	0	NNE	26	11:41	18.8	63	NNW	2	1023.4	30.7	28	NNE	9	1015.9

NOTE: Red Text denotes data that was missing from Badgerys Creek AWS {Station 067108} and has been sourced from Penrith Lakes AWS {Station 067113}

Appendix B EPL Premise Maps September 2023



LEGEND	
	EPL Premise Boundary
	Metro alignment
	Watercourse
	Site Access Schedule
	Aerial Stratum
	Project Site
	Substratum
	Temporary Area

TITLE
EPL 21807 PREMISE BOUNDARY

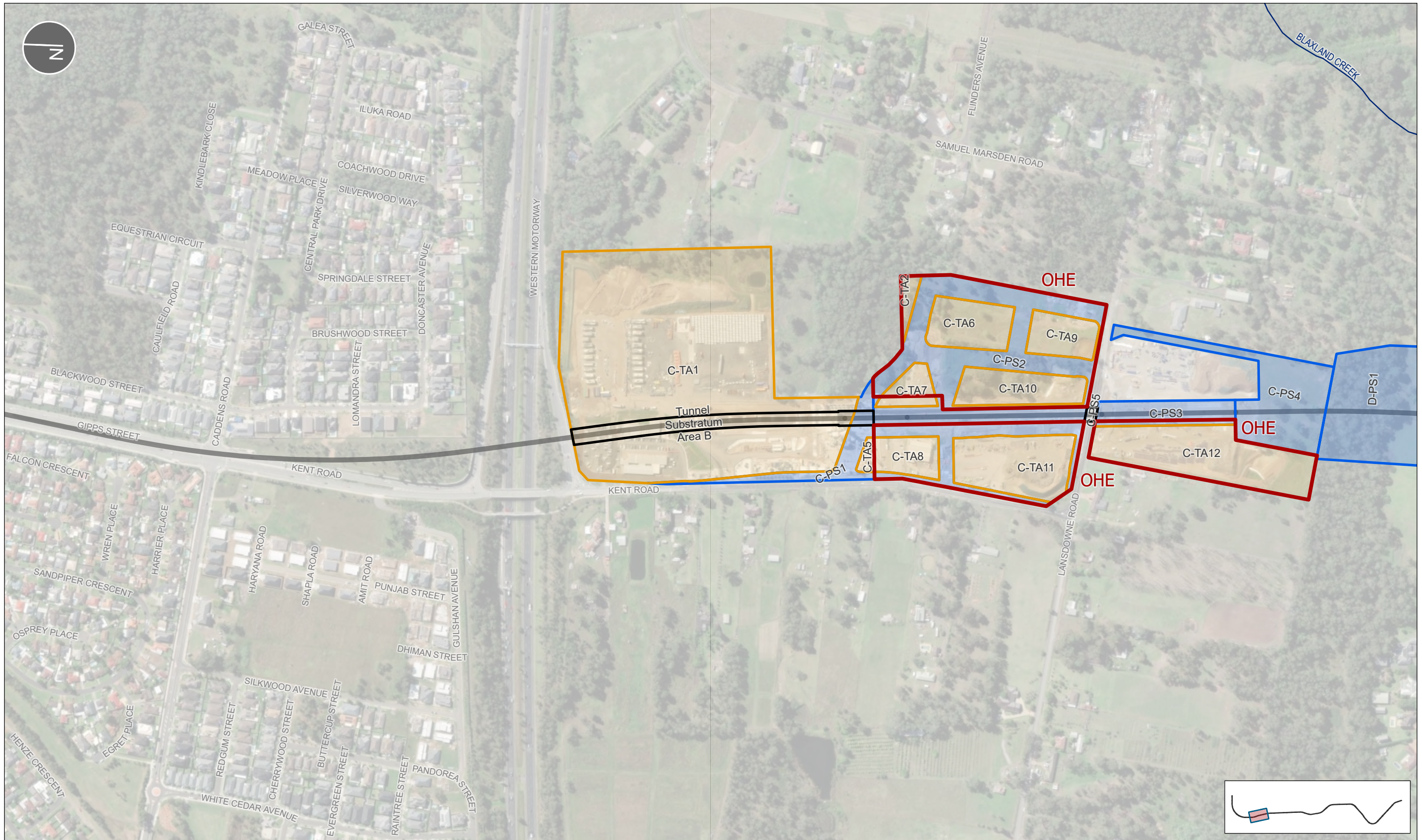
NOTES	
EPL Premise Boundary Map	

PROJECT	CLIENT
Sydney Metro – Western Sydney Airport - SSTOM	Sydney Metro

SCALE	A3	DRAWN BY	APPROVED	MAP #	REV
1:2,000		DD	CK	SMWSASSM-PLD-1NL-ENV-GIS-000001_06	06

DATE	REVIEW	DATE
28/09/2023	CK	

REV	DATE	DESCRIPTION
01	31.07.2023	EPL amendment
02	25.08.2023	EPL amendment
03	04.09.2023	EPL amendment
04	14.09.2023	EPL amendment
05	25.09.2023	EPL amendment
06	28.09.2023	EPL amendment



- LEGEND**
- EPL Premise Boundary
 - Metro alignment
 - Watercourse

- Site Access Schedule**
- Aerial Stratum
 - Project Site
 - Substratum
 - Temporary Area



TITLE
EPL 21807 PREMISE BOUNDARY

0 100 200m

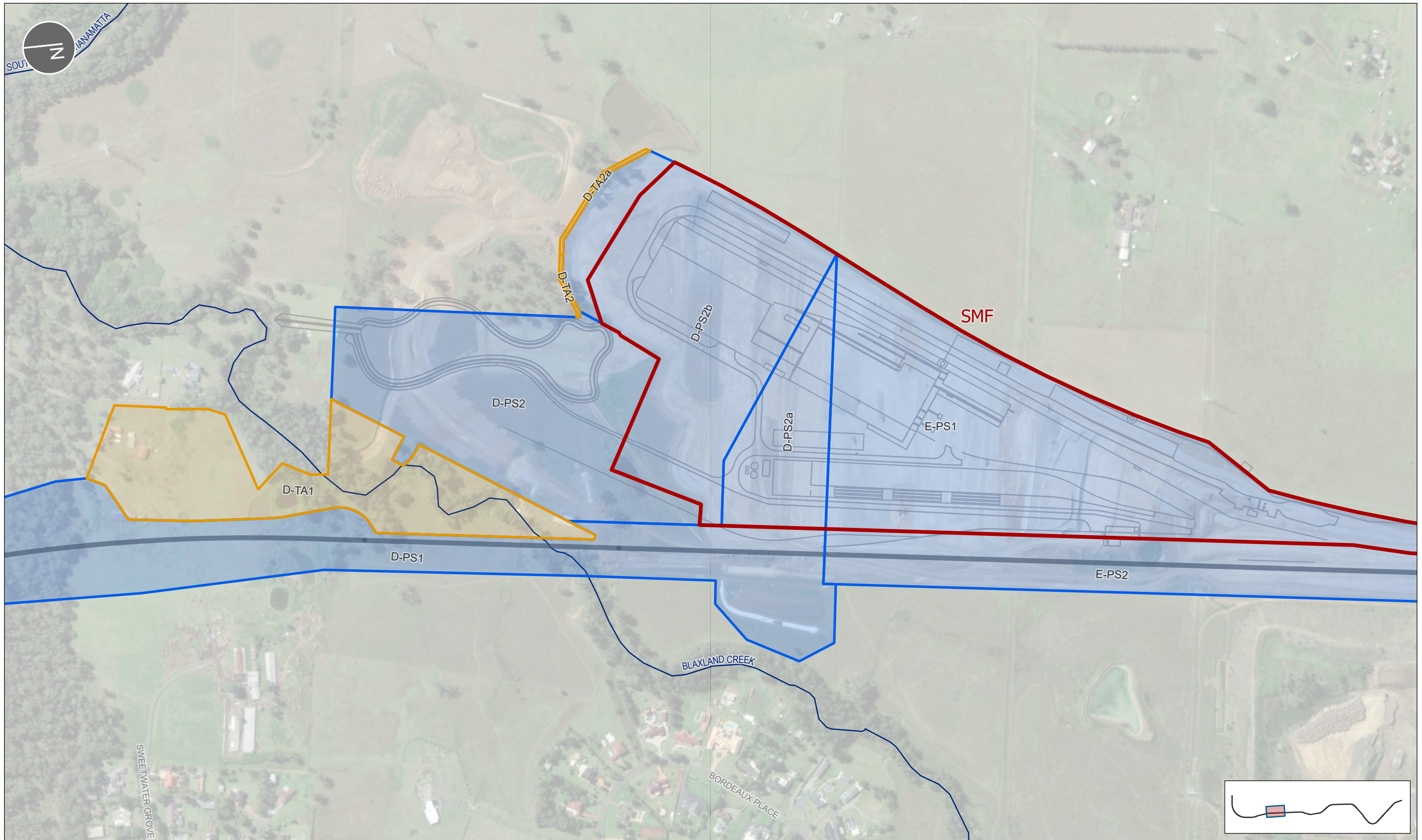
NOTES

EPL Premise Boundary Map

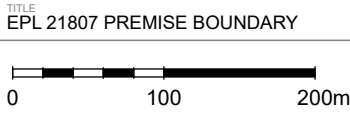
PROJECT	Sydney Metro – Western Sydney Airport - SSTOM
SCALE	1:5,000
SHEET	2 of 5
COORDINATE SYSTEM	GDA2020 MGA Zone 56

REV	DATE	DESCRIPTION
01	31.07.2023	EPL amendment
02	25.08.2023	EPL amendment
03	04.09.2023	EPL amendment
04	14.09.2023	EPL amendment
05	25.09.2023	EPL amendment
06	28.09.2023	EPL amendment

CLIENT	Sydney Metro
APPROVED	CK
DATE	28/09/2023
MAP #	SMWSASSM-PLD-1NL-ENV-GIS-000001_06
REV	06

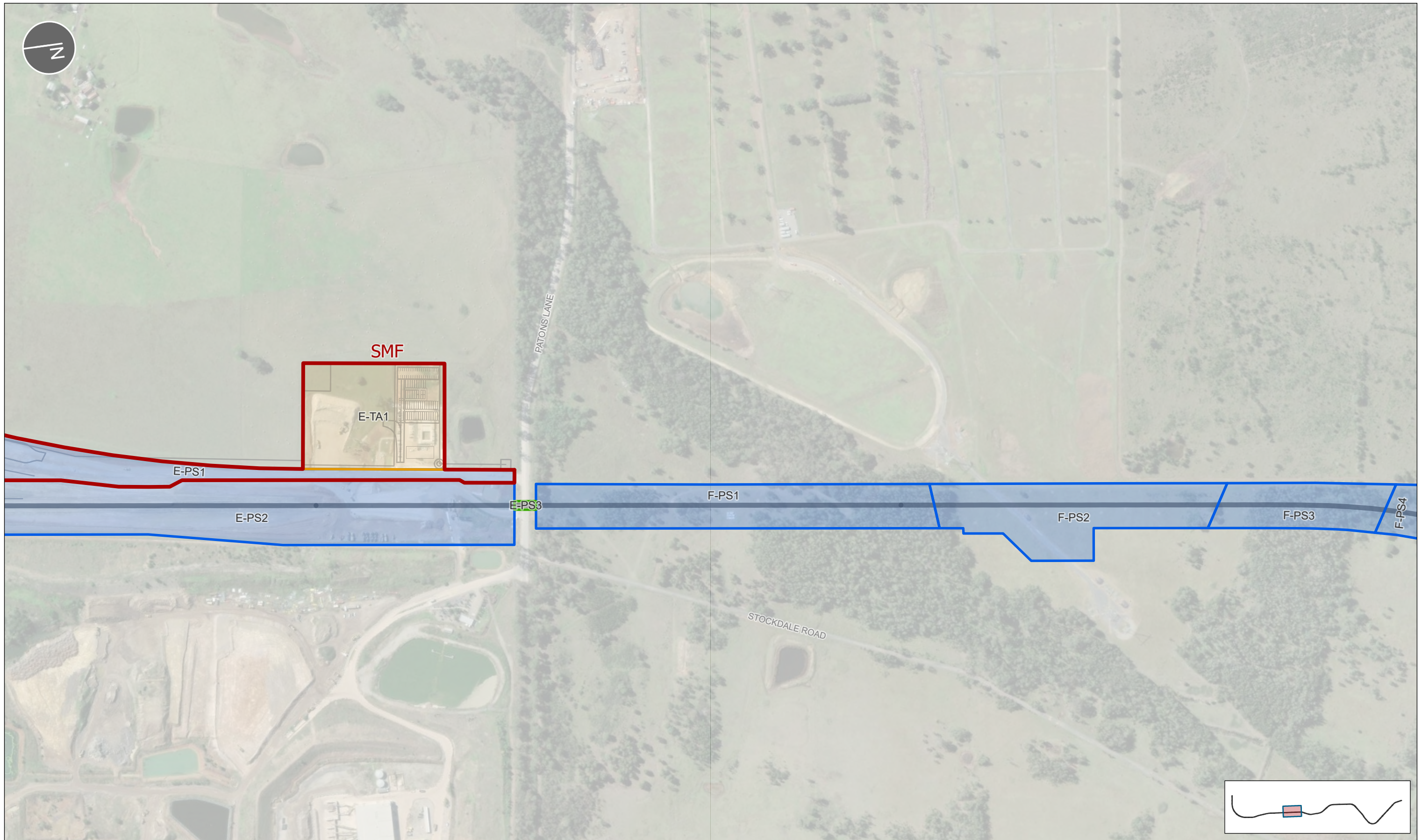


LEGEND	
	EPL Premise Boundary
	Metro alignment
	Watercourse
	Site Access Schedule Aerial Stratum
	Project Site
	Substratum
	Temporary Area

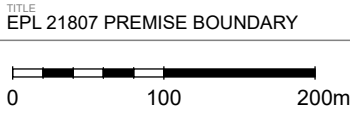


NOTES		REV		DATE	DESCRIPTION
EPL Premise Boundary Map		01	31.07.2023	EPL amendment	
		02	25.08.2023	EPL amendment	
		03	04.09.2023	EPL amendment	
		04	14.09.2023	EPL amendment	
		05	25.09.2023	EPL amendment	
		06	28.09.2023	EPL amendment	

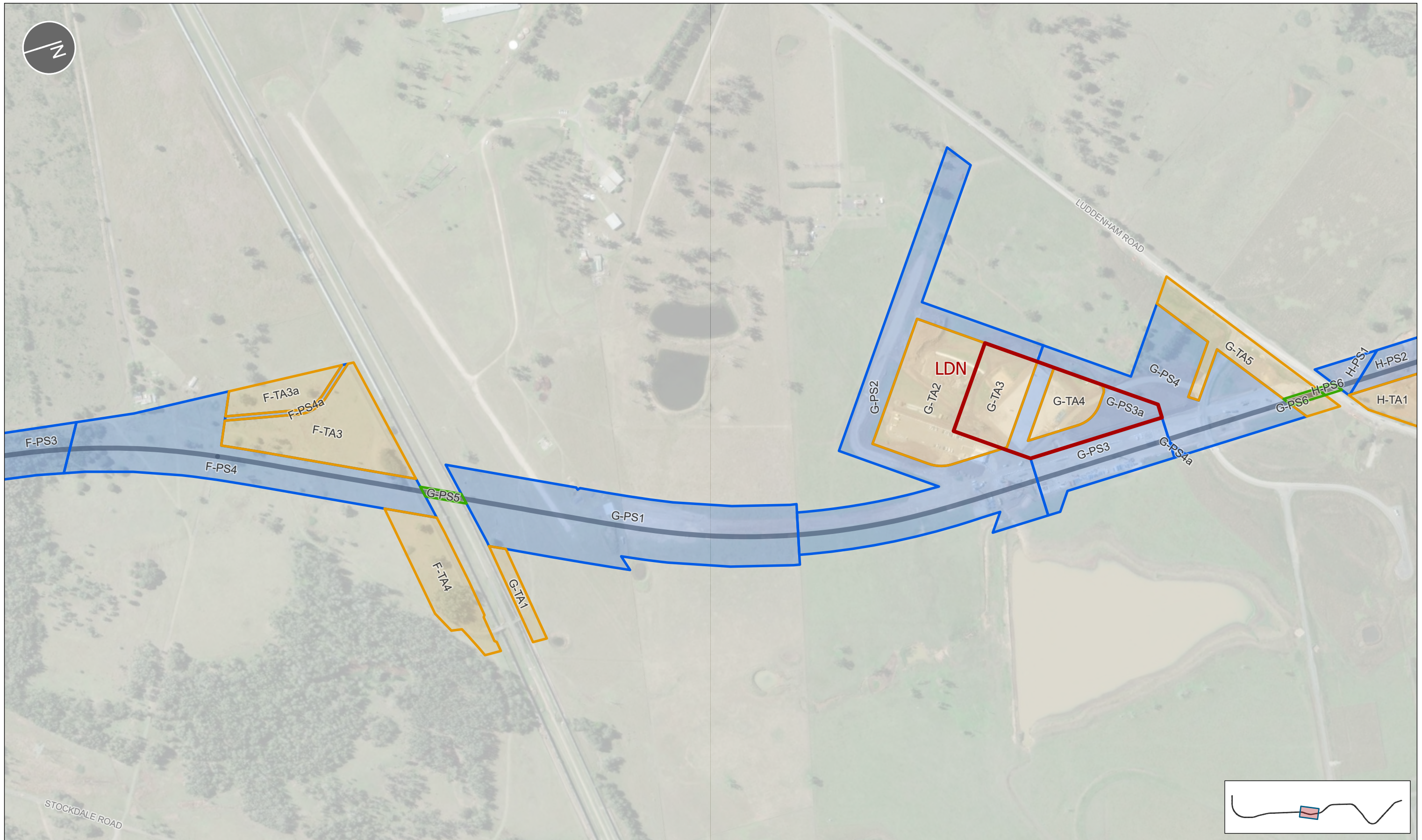
TITLE EPL 21807 PREMISE BOUNDARY	PROJECT Sydney Metro – Western Sydney Airport - SSTOM	CLIENT Sydney Metro
SCALE 1:5,000	A3	DRAWN BY DD
SHEET 3 of 5	COORDINATE SYSTEM GDA2020 MGA Zone 56	REVIEW CK
	DATE 28/09/2023	APPROVED CK
	MAP # SMWSASSM-PLD-1NL- ENV-GIS-000001_06	REV 06



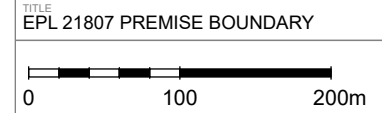
LEGEND	
	EPL Premise Boundary
	Metro alignment
	Watercourse
	Site Access Schedule
	Aerial Stratum
	Project Site
	Substratum
	Temporary Area



NOTES EPL Premise Boundary Map		<table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td>01</td><td>31.07.2023</td><td>EPL amendment</td></tr> <tr><td>02</td><td>25.08.2023</td><td>EPL amendment</td></tr> <tr><td>03</td><td>04.09.2023</td><td>EPL amendment</td></tr> <tr><td>04</td><td>14.09.2023</td><td>EPL amendment</td></tr> <tr><td>05</td><td>25.09.2023</td><td>EPL amendment</td></tr> <tr><td>06</td><td>28.09.2023</td><td>EPL amendment</td></tr> </tbody> </table>		REV	DATE	DESCRIPTION	01	31.07.2023	EPL amendment	02	25.08.2023	EPL amendment	03	04.09.2023	EPL amendment	04	14.09.2023	EPL amendment	05	25.09.2023	EPL amendment	06	28.09.2023	EPL amendment
REV	DATE	DESCRIPTION																						
01	31.07.2023	EPL amendment																						
02	25.08.2023	EPL amendment																						
03	04.09.2023	EPL amendment																						
04	14.09.2023	EPL amendment																						
05	25.09.2023	EPL amendment																						
06	28.09.2023	EPL amendment																						
TITLE EPL 21807 PREMISE BOUNDARY		PROJECT Sydney Metro – Western Sydney Airport - SSTOM																						
CLIENT Sydney Metro		MAP # SMWSASSM-PLD-1NL- ENV-GIS-000001_06																						
SCALE 1:5,000	A3	DRAWN BY DD	APPROVED CK																					
SHEET 4 of 5	COORDINATE SYSTEM GDA2020 MGA Zone 56	REVIEW CK	DATE 28/09/2023																					
<small>MAPOLOGY for CHBJV - GIS MAP file : SSTOM_ENV_EPL C:\Live_Projects\sstom_gis\current\maps\Environment\SSTOM_ENV_EPL.aprx</small>		06																						



LEGEND	
	EPL Premise Boundary
	Metro alignment
	Watercourse
	Site Access Schedule
	Aerial Stratum
	Project Site
	Substratum
	Temporary Area



NOTES		REV		DATE	DESCRIPTION
EPL Premise Boundary Map		01	31.07.2023	EPL amendment	
		02	25.08.2023	EPL amendment	
		03	04.09.2023	EPL amendment	
		04	14.09.2023	EPL amendment	
		05	25.09.2023	EPL amendment	
		06	28.09.2023	EPL amendment	

TITLE EPL 21807 PREMISE BOUNDARY	PROJECT Sydney Metro – Western Sydney Airport - SSTOM	CLIENT Sydney Metro
SCALE 1:5,000	A3	DRAWN BY DD
SHEET 5 of 5	COORDINATE SYSTEM GDA2020 MGA Zone 56	APPROVED CK
	REVIEW CK	MAP # SMWSASSM-PLD-1NL- ENV-GIS-000001_06
	DATE 28/09/2023	REV 06