



EPL 21807 Monitoring Report October 2023

Parklife Metro D&C

Document Approval

Revision	Author	Date	Comments	Reviewed by	Approved by
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Signature	
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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.

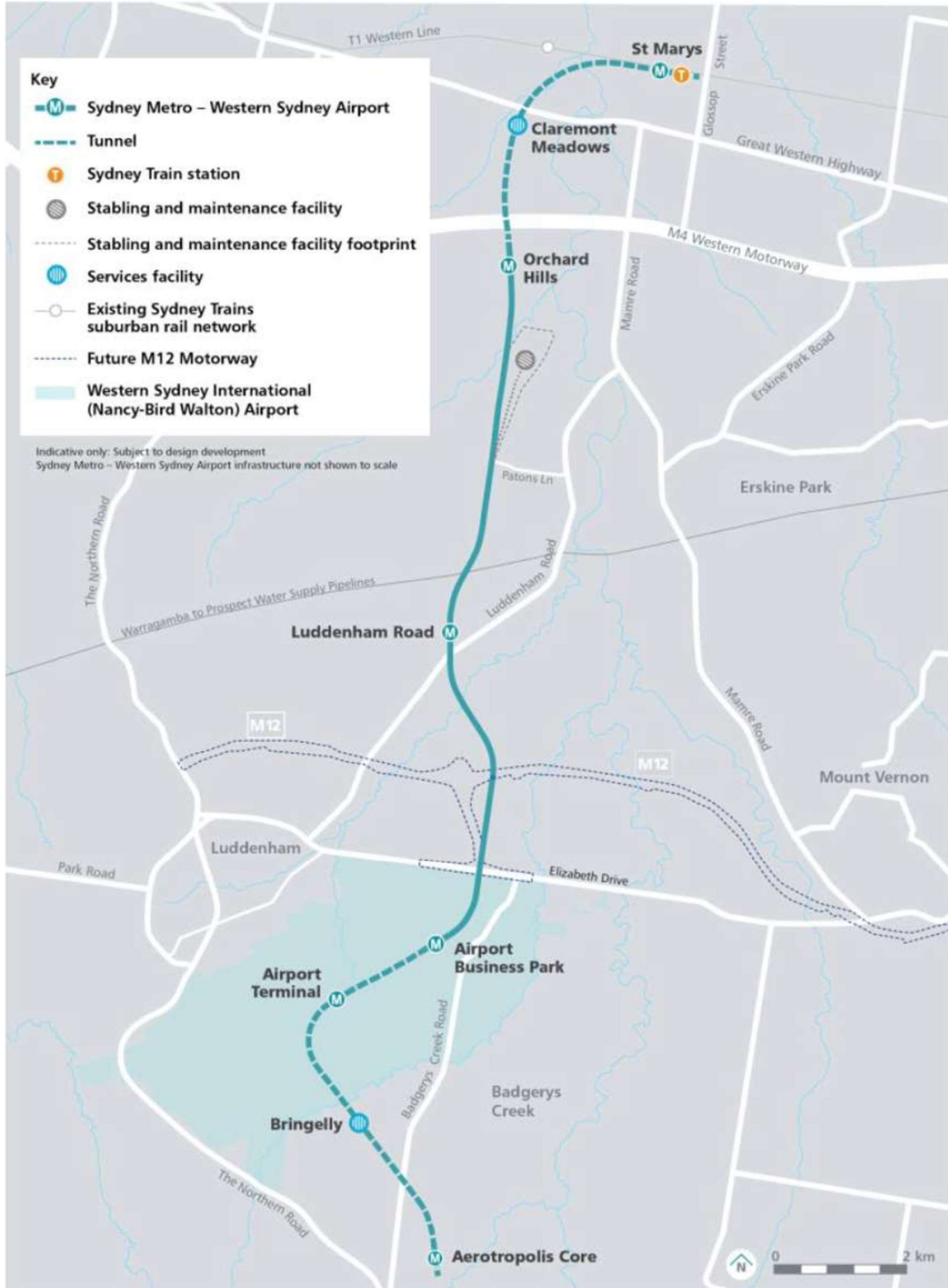


FIGURE 1 OVERVIEW OF SMWSA PROJECT

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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 October 2023 to 31 October 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 October can be found within Appendix A.

The total rainfall for this reporting period was 23.2 mm with 3 days exceeding 1mm of rain, 1 day exceeding 10mm of rain and 0 days exceeding 20mm of rain.

During the reporting period, all 31 days recorded wind gusts of greater than 25km/hr, 8 days where the maximum wind gust recorded was greater than 50 km/h and 5 days where the maximum wind gust was greater than 60 km/hr. 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	6.5°C
Maximum temperature	36.8°C
Total rainfall	23.2mm
Number of days with rain (>1mm)	3
Number of days with rain (>10mm)	1
Number of days with rain (>20mm)	0
Number of days with >25km/h wind	31
Number of days with >50km/h wind	8
Number of days with >60km/h wind	5

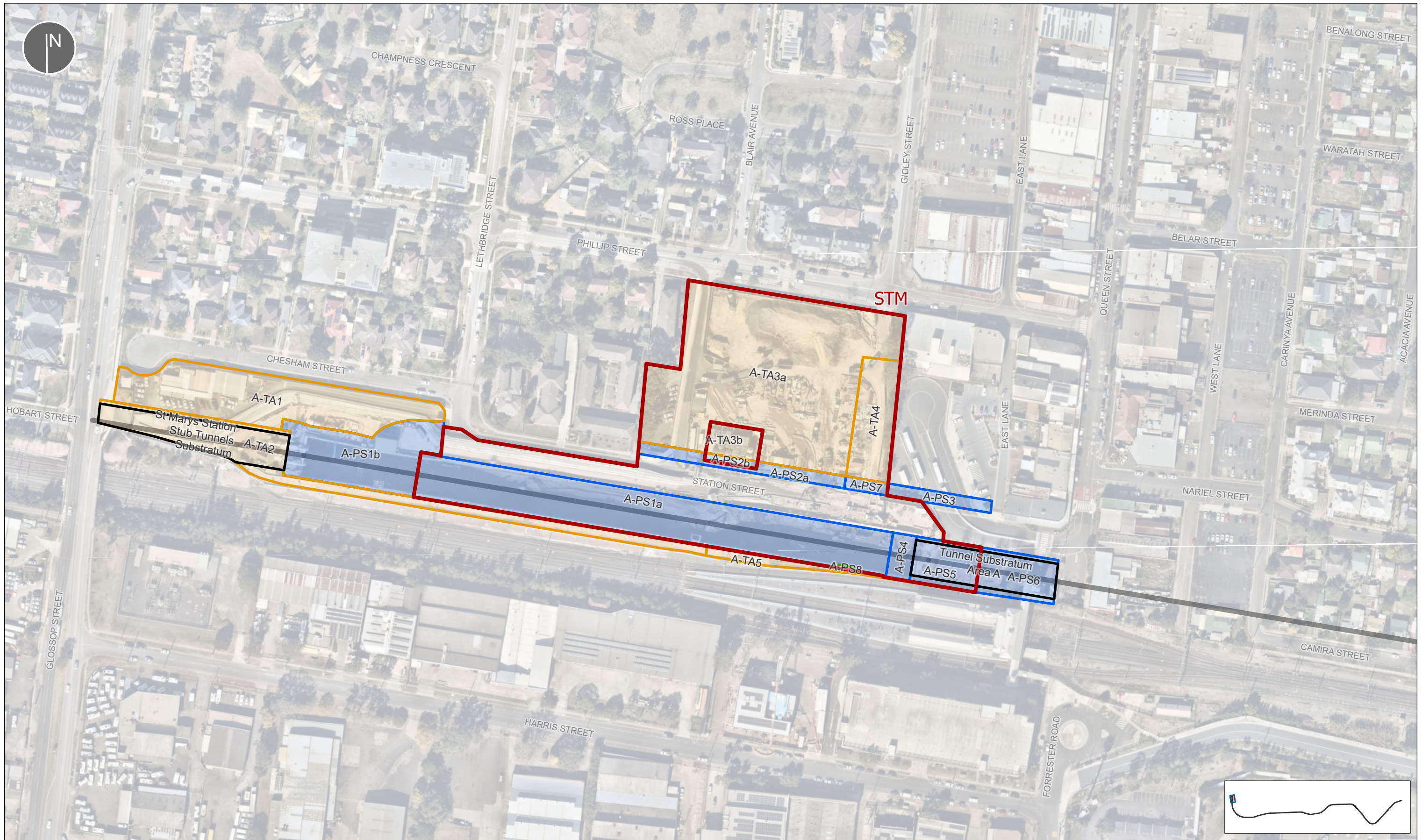
Appendices

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)
1/10/2023	11.2	36.4	0	WNW	70	12:26	20.2	59	NNE	11	1013.3	35.6	11	W	39	1008.3
2/10/2023	13.2	26.8	0	ESE	30	14:55	19.7	58	WSW	4	1023.6	25.5	43	E	11	1019.2
3/10/2023	13.2	36.8	0	N	56	14:06	20.7	65		Calm	1016.8	36	15	N	35	1011.1
4/10/2023	20.3	25.1	0	NNE	48	15:13	23.5	34	NNE	17	1011.2	23.6	50	NNE	22	1008.1
5/10/2023	10.5	21	15.4	W	54	3:26	15.4	43	WNW	28	1014.4	20.3	26	WSW	30	1016.3
6/10/2023	6.5	23	0	SE	30	14:26	15.6	52	SW	7	1024.7	16.4	75	SE	15	1024.8
7/10/2023	10.8	21	3.2	SE	28	15:43	13.8	58	SSW	15	1031.9	18.2	47	SE	15	1029.3
8/10/2023	8.4	23.2	0	ENE	31	15:30	14.3	74	SE	4	1032.8	22.6	34	NNW	6	1028.4
9/10/2023	7.2	28.2	0	ESE	26	16:18	14.4	72		Calm	1027.2	27.3	24	WNW	6	1021.1
10/10/2023	10.9	25.3	0	E	33	16:01	17	69	SW	9	1023.8	22.7	50	E	20	1020.2
11/10/2023	14.3	27.9	0	E	30	16:34	19.3	67	NE	6	1024.7	26.5	35	E	11	1020.3
12/10/2023	10.3	34	0	WSW	69	20:10	17.2	73	E	4	1018	33.5	16	NNW	28	1009.3
13/10/2023	9.9	25.5	0.8	SW	46	12:21	15.6	47	SW	13	1018	24.2	25	SSW	24	1014.8
14/10/2023	8.1	28.8	0.2	W	46	12:20	17.9	49	NNW	7	1017.9	27.8	25	WSW	22	1012.5
15/10/2023	12	28.9	0	WSW	33	23:55	18.5	45		Calm	1018.5	27	30	NE	9	1012
16/10/2023	9.4	26.2	0	W	87	13:27	18.2	56		Calm	1011.6	21.4	38	W	31	1010.7
17/10/2023	9.8	19.1	0.2	S	48	14:34	13.7	55	SSW	30	1026.7	17.9	52	S	24	1028
18/10/2023	10.5	23.2	1	E	28	14:33	15.2	81	SW	6	1030.9	20.7	45	ESE	15	1027.6
19/10/2023	11.3	24.6	0	E	31	17:59	16.4	70	ENE	6	1026.5	23.5	39	NNE	11	1020.5
20/10/2023	9.2	30.4	0	NE	33	13:53	18	64	NE	4	1020	29.4	30	E	15	1014.4
21/10/2023	13	30.4	0	ESE	31	14:24	19.3	75	SSE	6	1017.2	29.1	42	E	22	1011.6
22/10/2023	14.1	30.9	0	NW	52	12:37	22.4	49	SW	7	1009.7	28.6	13	W	31	1007.7
23/10/2023	9.5	30.1	0	ESE	31	17:19	19	38	SW	11	1014.1	28.7	21	ENE	6	1010
24/10/2023	10.5	34.8	0	NE	30	14:14	20.4	44	S	6	1014.9	32.7	15	NNE	15	1008.2
25/10/2023	14.3	28.4	0	SSW	35	7:33	22.8	32	SSW	22	1011.4	25.1	47	ESE	17	1009.6
26/10/2023	11.3	18	0	SE	37	16:39	13.9	55	SSW	17	1022.6	14.7	44	SSE	22	1023
27/10/2023	10.6	20.5	1.6	S	43	10:18	14.6	64	SSW	24	1030.4	14.2	72	S	20	1030
28/10/2023	8.7	22.7	0.8	ENE	30	15:03	16.1	55	SW	9	1030.1	19.4	39	ENE	11	1026.4
29/10/2023	6.5	29.3	0	ENE	30	16:35	15.9	61	NE	4	1021.6	28.1	19	NNE	9	1015.5
30/10/2023	9.3	35.6	0	WNW	65	17:14	18.5	57	NE	6	1013.4	33.1	14	NW	28	1006.2
31/10/2023	18.3	28.7	0	WNW	104	1:52	26	23	W	24	1009.4	28	9	SW	30	1011.7

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 October



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

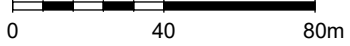


TITLE
EPL 21807 PREMISE BOUNDARY

SCALE
1:2,000

DATE
1 of 6

COORDINATE SYSTEM
GDA2020 MGA Zone 56



NOTES
EPL Premise Boundary Map

PROJECT
Sydney Metro – Western Sydney Airport - SSTOM

SCALE
1:2,000

DATE
1 of 6

COORDINATE SYSTEM
GDA2020 MGA Zone 56

REV	DATE	DESCRIPTION
03	04.09.2023	EPL amendment
04	14.09.2023	EPL amendment
05	25.09.2023	EPL amendment
06	28.09.2023	EPL amendment
07	12.10.2023	EPL amendment
08	31.10.2023	EPL amendment

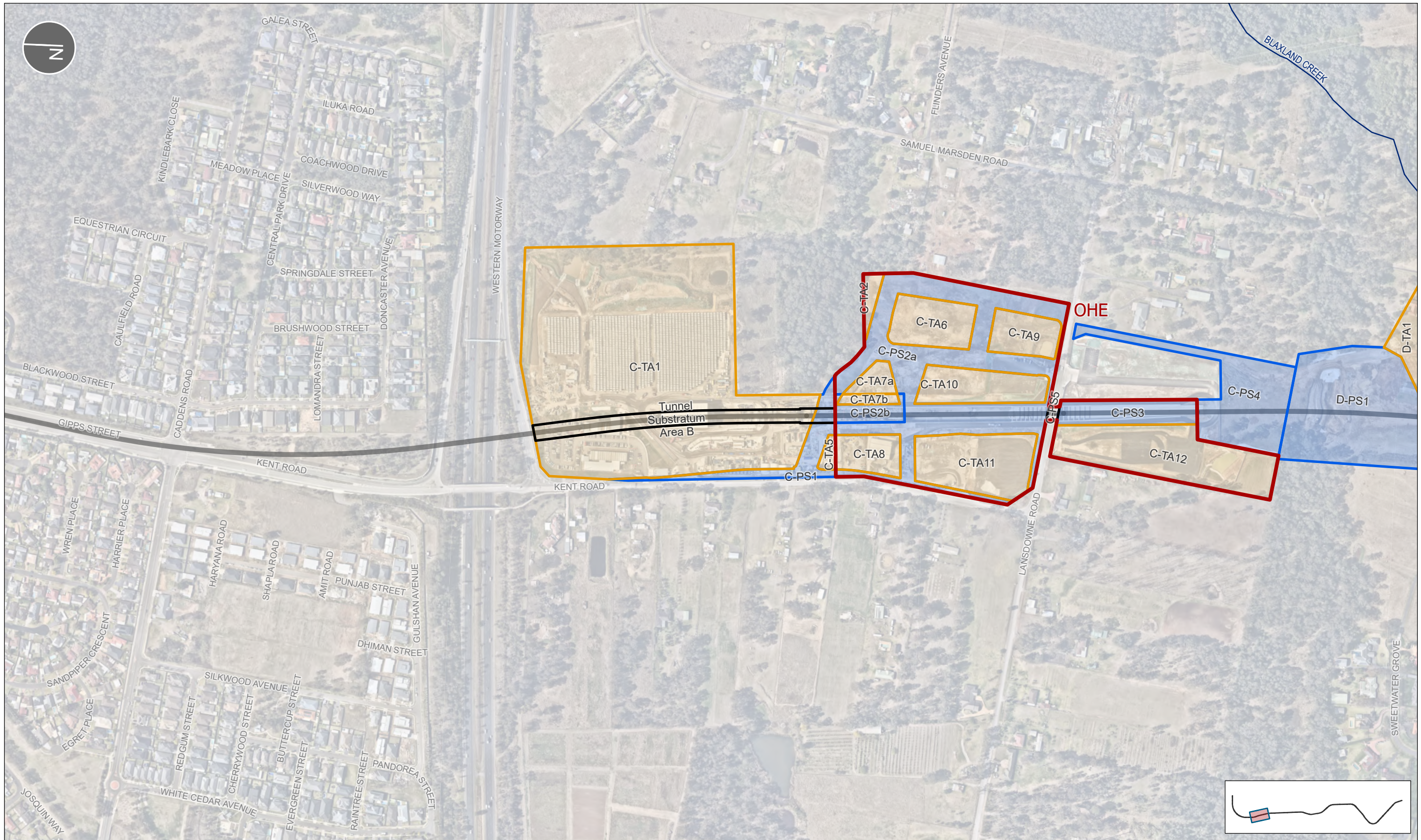
CLIENT
Sydney Metro

APPROVED
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DATE
31/10/2023

MAP #
SMWSASSM-PLD-1NL-
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REV
08



- LEGEND**
- EPL Premise Boundary
 - Metro alignment
 - Watercourse
 - Project Site
 - Substratum
 - Temporary Area

TITLE
EPL 21807 PREMISE BOUNDARY

PROJECT
Sydney Metro – Western Sydney Airport - SSTOM

SCALE
1:5,000

SHEET
2 of 6

COORDINATE SYSTEM
GDA2020 MGA Zone 56

SCALE BAR
0 100 200m

NOTES
EPL Premise Boundary Map

REV	DATE	DESCRIPTION
03	04.09.2023	EPL amendment
04	14.09.2023	EPL amendment
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08	31.10.2023	EPL amendment

CLIENT
Sydney Metro

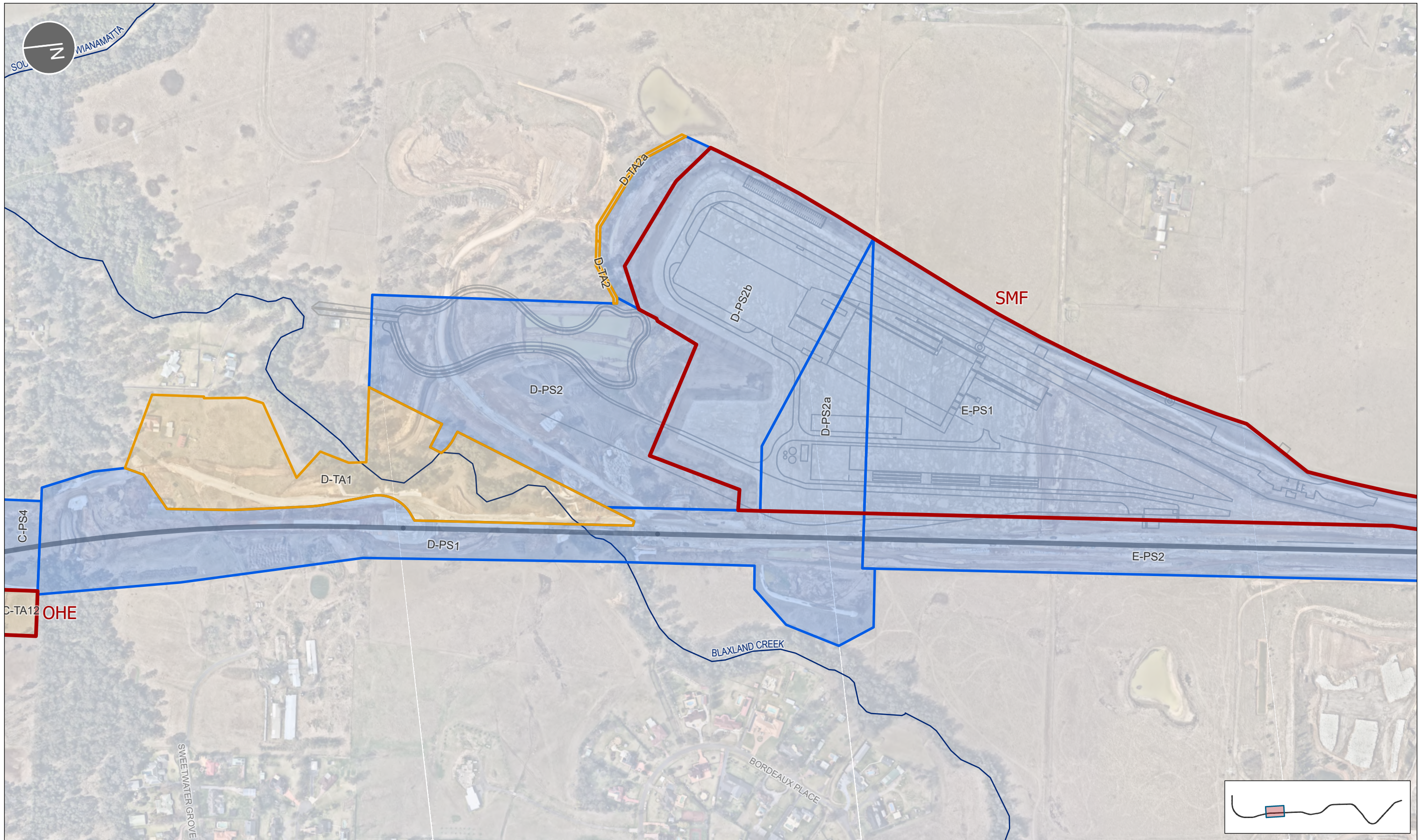
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DATE
31/10/2023

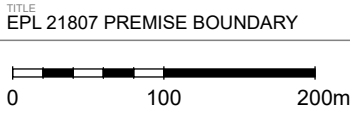
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REV
08

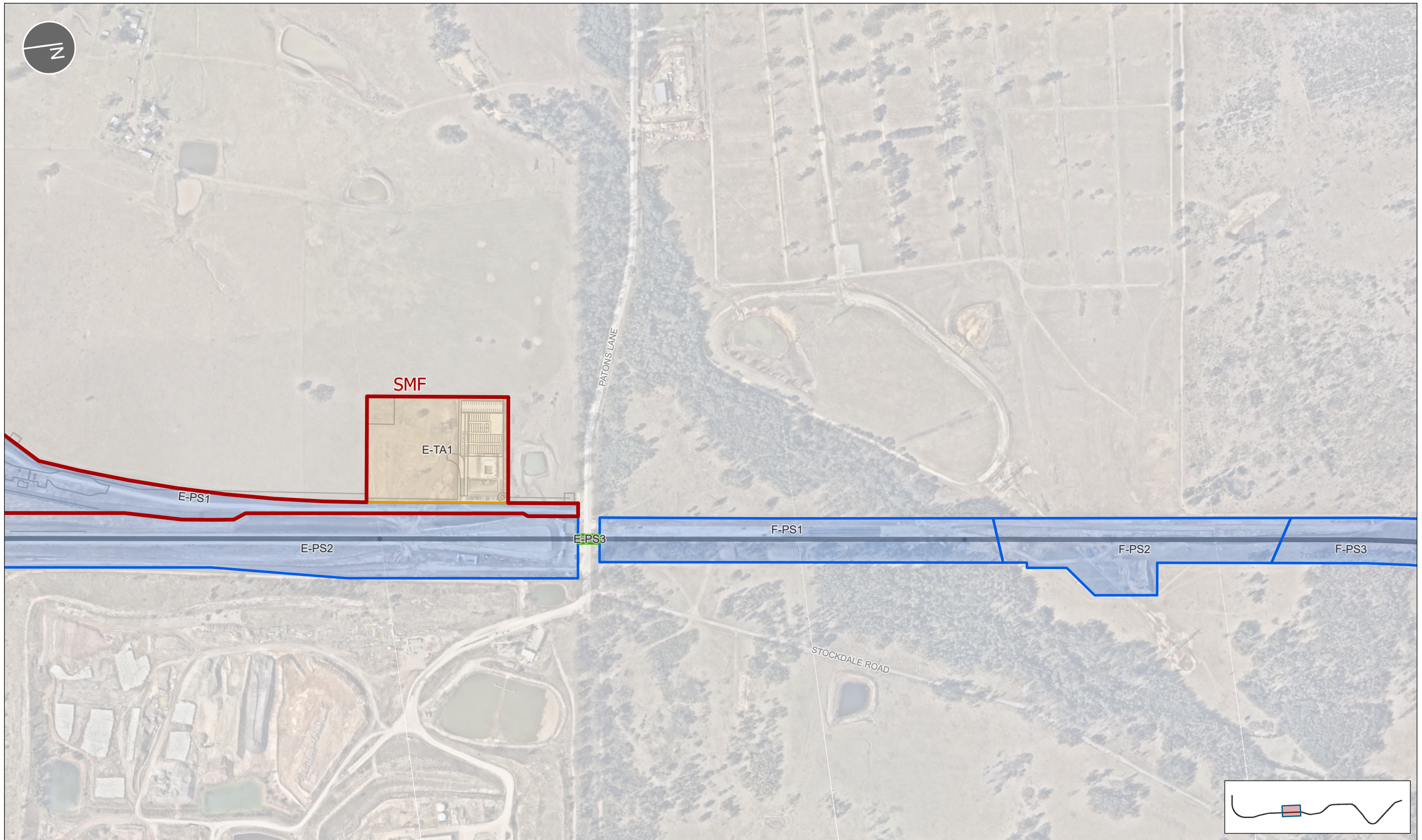


LEGEND	
	EPL Premise Boundary
	Metro alignment
	Watercourse
	Temporary Area
	Project Site
	Site Access Schedule

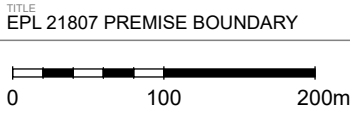


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		COORDINATE SYSTEM	GDA2020 MGA Zone 56	MAP #	SMWSASSM-PLD-1NL-ENV-GIS-000001_08
		SHEET	3 of 6	DATE	31/10/2023
		REVIEW	JB	REV	08



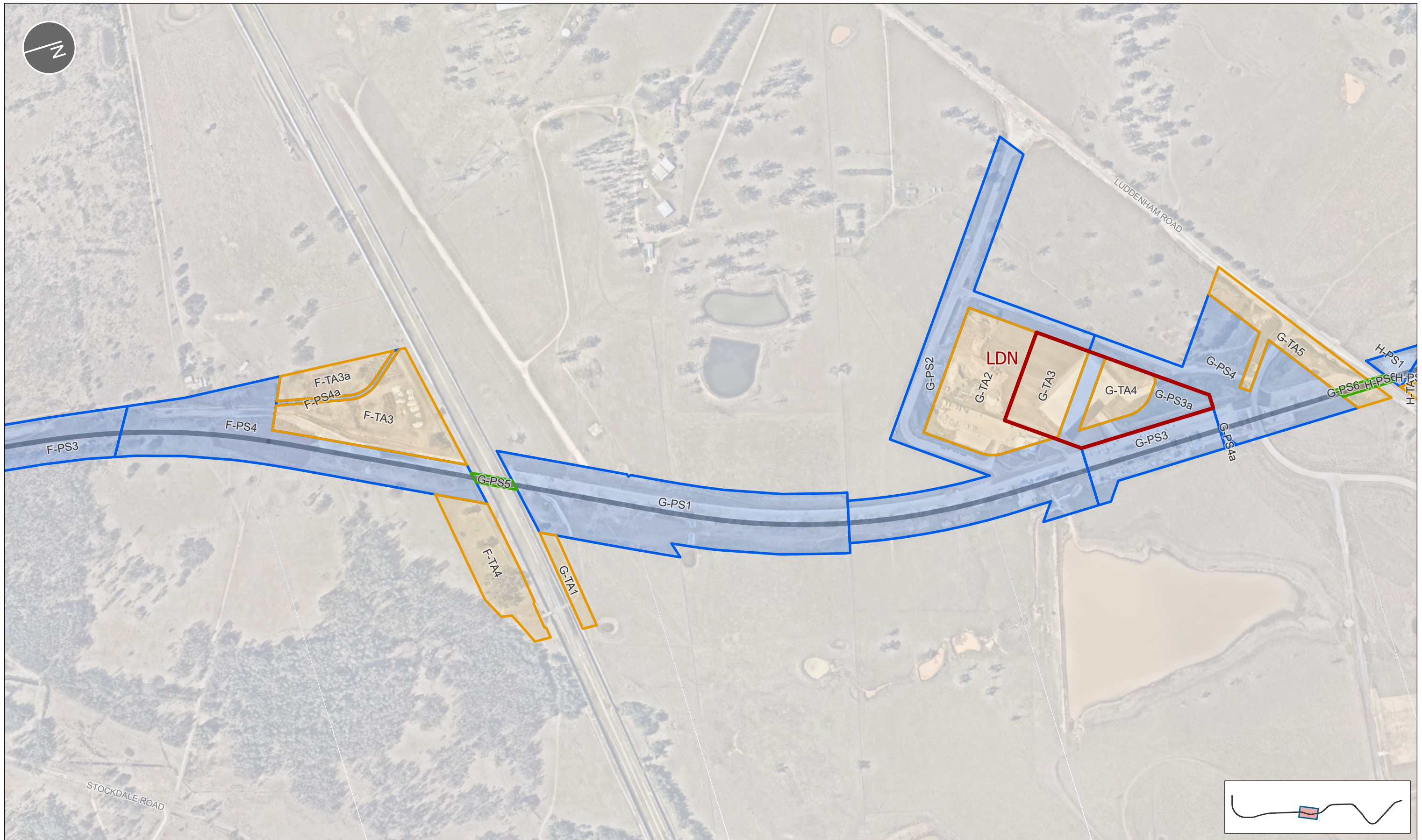


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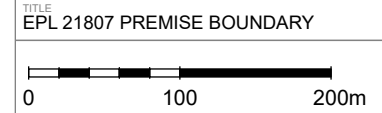


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		08	31.10.2023	EPL amendment	

TITLE EPL 21807 PREMISE BOUNDARY	PROJECT Sydney Metro – Western Sydney Airport - SSTOM	CLIENT Sydney Metro
SCALE 1:5,000	A3 DRAWN BY DD	APPROVED JB
SHEET 4 of 6	COORDINATE SYSTEM GDA2020 MGA Zone 56	REVIEW JB
	DATE 31/10/2023	MAP # SMWSASSM-PLD-1NL- ENV-GIS-000001_08
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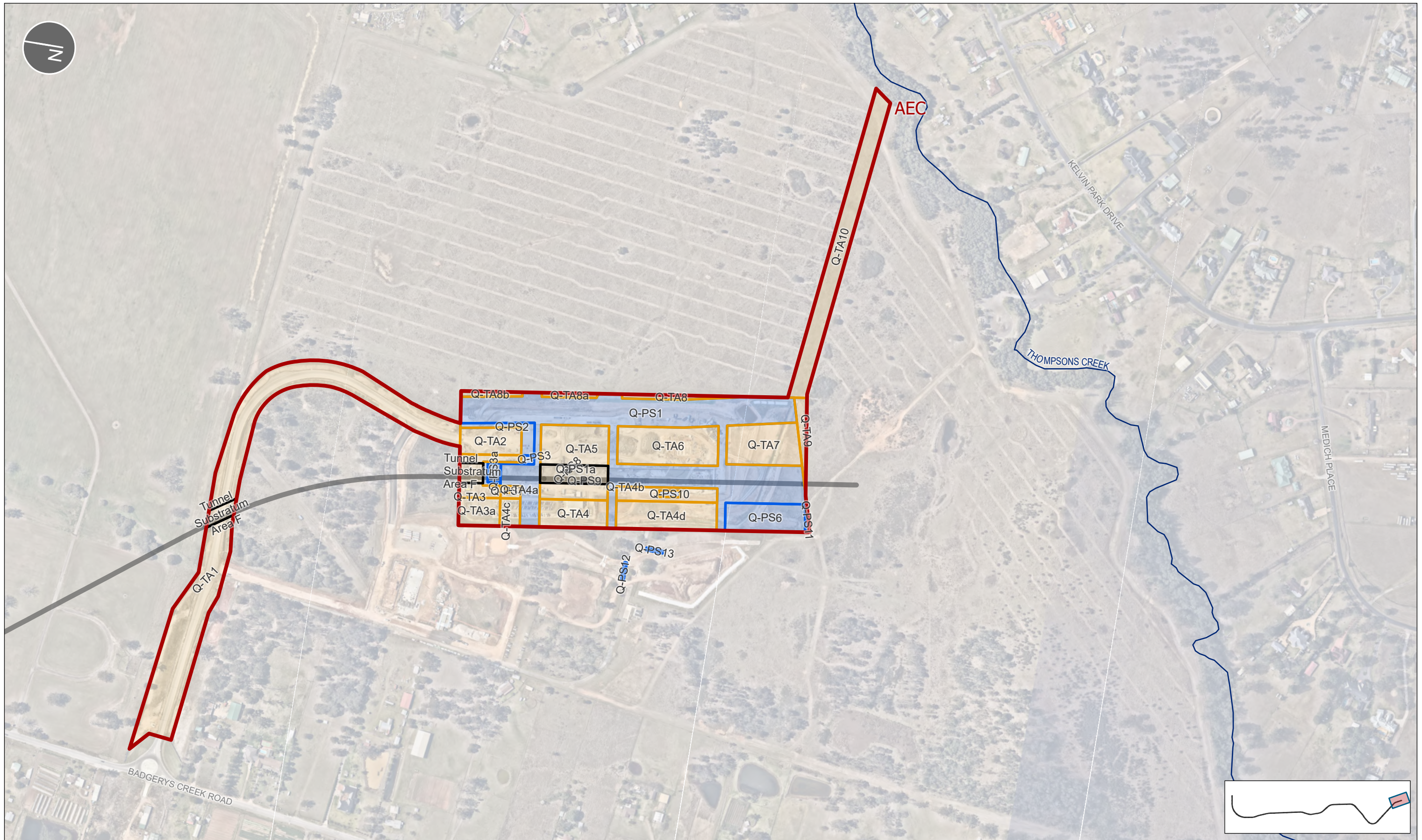


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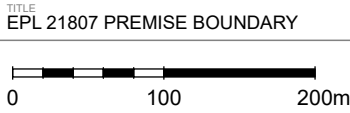


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		08	31.10.2023	EPL amendment	

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 6	COORDINATE SYSTEM GDA2020 MGA Zone 56	REVIEW JB
DATE 31/10/2023		MAP # SMWSASSM-PLD-1NL- ENV-GIS-000001_08
		REV 08



LEGEND	
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SCALE 1:5,000	A3 DRAWN BY DD	APPROVED JB
SHEET 6 of 6	COORDINATE SYSTEM GDA2020 MGA Zone 56	REVIEW JB
	DATE 31/10/2023	MAP # SMWSASSM-PLD-1NL- ENV-GIS-000001_08