



PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

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Date: 22 September 2026



Civil Engineering Report
Site 18B
260 MacArthur Ave, Hamilton
QLD, 4007

Prepared for:
Silverstone Developments

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29/07/26

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29/07/26

Date

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1 Introduction

EDGE Consulting Engineers Pty Ltd have been engaged by Silverstone Developments Pty Ltd to prepare a Civil Engineering Report for the development at Site 18B, 260 MacArthur Avenue, Hamilton. The development is proposed to take place over the following parcel of land:

Property Address:	Site 18B, 260 MacArthur Avenue, Hamilton
Property Description:	Lot 1 SP348282
Council:	Brisbane City Council
Developable Site Area:	6,623m ²

This report is for submission to Brisbane City Council (BCC) in support of a Development Application for a multi-tower residential development. The following civil engineering items associated with the development shall be addressed;

- Earthworks;
- Erosion and Sediment Control;
- Flooding;
- Stormwater Drainage;
- Stormwater Management (quality and quantity)
- Water Connection; and
- Sewer Connection.

This report investigates the proposed development and it's suitability to service the type and scale of development that is proposed. Please note that there was a previous Civil Engineering Report (Rev 01, 11/03/2025), prepared by Meliora Consulting Engineers, that was submitted to EDQ and approved (Approval no.: Dev2025/1602). This updated report, completed by EDGE Consulting Engineers, will also be assessed by EDQ under a minor change application.

2 Property Description

2.1 Site Locality

The proposed development is situated at Site 18B, 260 MacArthur Avenue, Hamilton. The property is located within the Brisbane City Council (BCC) Local Government Area.

The site is bounded by MacArthur Avenue along the southern boundary, Barcham Road along the western boundary and Karakul Road along the northern boundary. It is within an industrial area with Old Shoreline Park and the Royal Queensland Golf Course to the northeast and Brisbane River to the south and Northshore Riverside Park to the southeast. It has a registered area of the site is 6,623m².

A general locality plan is presented in Figure 2.1 below:



Figure 2.1 - Site Locality

2.2 Land Usage

The site is currently being used as a temporary sales office and associated car park. Historically, the site was occupied by an industrial warehouse with associated hardstand areas, with an estimated 83% impervious surface coverage.

2.3 Topography and Drainage

The detailed survey obtained for the project site indicates that the site is relatively flat (no significant grade).

A copy of the detailed survey by Land Partners has been attached to Appendix A of this report.

2.4 External Catchment

No external upstream catchments were identified for this site.

5 Stormwater Management

5.1 Lawful Point of Discharge

It is proposed that the site shall maintain its existing lawful point of discharge; the two existing stormwater connections that discharge to Karakul Road and MacArthur Avenue. Refer to the Engineering Drawings attached as Appendix C. This methodology complies with the requirements of a lawful point of discharge and will be maintained following the development of the site. It is not anticipated that any stormwater will be directed towards any adjacent properties.

The Queensland Urban Drainage Manual (QUDM), 2017, provides a three-part framework for the identification of a lawful point of discharge for a development site. The first assessment item is to consider if the proposed development will alter the site's stormwater discharge characteristics in a manner that may substantially damage a third-party property. As the proposed development is not considered likely to worsen the flows received by the existing stormwater infrastructure, the proposed point of discharge is considered to satisfy the requirements set out in Section 3.9.1 – Lawful Point of Discharge Test.

5.2 Stormwater Quality

5.2.1 Introduction

This section of the report aims to identify the requirements for stormwater quality management resulting from the proposed development and identify suitable stormwater treatment devices to comply with relevant requirements of the State Planning Policy.

5.2.2 State Planning Policy Assessment

An assessment has been undertaken to determine whether the development proposal necessitates compliance with the State Planning Policy (SPP) objectives. The following trigger questions are used to determine whether SPP compliance is required.

Table 5.1: State Planning Policy Trigger Questions

Trigger Question	Development Response
Material Change of Use for Urban Purposes with a land area greater than 2,500m ² and:	Yes
a) Will result in an impervious area greater than 25% of the net developable area; or	Yes
b) Will result in 6 or more dwellings.	No
Reconfiguration of Lot for Urban Purposes that involves a land area greater than 2,500m ² , and will result in 6 or more lots.	No

The above table indicates that the development triggers compliance with the SPP, and the proposed development will adopt SPP stormwater quality assessment.

5.2.3 Water Quality Objectives and Methodology

Table 5.1 above indicates that the proposed development triggers the requirement for the development to achieve the Water Quality Objectives outlined in the State Planning Policy and BCC. As such, the development must demonstrate the following minimum reductions in mean annual pollutant loads from the unmitigated development.

Table 5.2: SPP and BCC Water Quality Objectives

Pollutant	Minimum Reduction in Mean Load (%)
Total Suspended Solids (kg/yr)	80
Total Phosphorus (kg/yr)	60
Total Nitrogen (kg/yr)	45
Gross Pollutants (kg/yr)	90

To design and assess the achievement of these stormwater quality objectives the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) Version MUSICX 1.30.0 has been utilised to size suitable stormwater quality improvement devices as described in the following sections.

5.2.4 Catchment Area & Source Nodes

The catchment areas used in the MUSIC model for the site are limited to the net developable area of the development site and are outlined in Table 5.3 below. Please note that the site has been split into 2 catchments.

Table 5.3: Catchment Definitions

Catchment	Catchment Type	Imperviousness (%)	Area (m2)
A	Roof	100	1646
	Road	100	11
	Landscape	47	2597
B	Roof	100	1530
	Road	100	15
	Landscape	38	824
Total		71	6623

5.2.5 Rainfall Runoff Parameters

Rainfall-runoff parameters were taken in accordance with the Water By Design – MUSIC Modelling Guidelines (2010) using *Urban Residential* land use, as tabulated in Table 5.4 below.

Table 5.4: MUSIC Modelling Parameters

Parameter	Value
Rainfall threshold (mm)	1.00
Soil storage capacity (mm)	500
Initial storage (%)	10
Field capacity (mm)	200
Infiltration capacity coefficient a	211
Infiltration capacity exponent b	5.0
Initial depth (mm)	50
Daily recharge rate (%)	28
Daily baseflow rate (%)	27
Daily deep seepage rate	0

5.2.6 Pollution Export Parameters

Pollutant export parameters were taken in accordance with Water By Design – MUSIC Modelling Guidelines (2010) using *Urban Residential* land use. The split catchment approach was utilised for each surface type, with the input parameters shown in Table 5.5 below.

Table 5.5: Pollutant Export Parameters

Flow Type	Surface Type	TSS log ¹⁰ values		TP log ¹⁰ values		TN log ¹⁰ values	
Baseflow	Roof	N/A	N/A	N/A	N/A	N/A	N/A
	Roads	1.00	0.34	-0.97	0.31	0.20	0.20
	Ground	1.00	0.34	-0.97	0.31	0.20	0.20
Stormflow	Roof	1.30	0.39	-0.89	0.31	0.26	0.23
	Roads	2.43	0.39	-0.30	0.31	0.26	0.23
	Ground	2.18	0.39	0.39	0.31	0.26	0.23

5.2.7 Proposed Treatment Device Details

The proposed stormwater quality treatment train includes an ATLAN Environmental cartridge system to treat stormwater flows from the development site. This system is to provide primary treatment of stormwater flows. Flows from each catchment of the development site are proposed to be directed towards the allocated stormwater treatment chamber of the proposed development, as shown on the engineering drawings attached as Appendix C.

The ATLAN Filter cartridge system provides a significantly greater surface contact area to footprint ratio than other filters. With a flow rate of 2.83L/s per cartridge and underground installation, the ATLAN Filter provides excellent removal efficiency whilst maintaining site surface yield.

The high flow capacity and modular cartridge design means the ATLAN Filter system can be effectively deployed in a variety of structures including manholes, precast vaults, or cast-in-place structures.

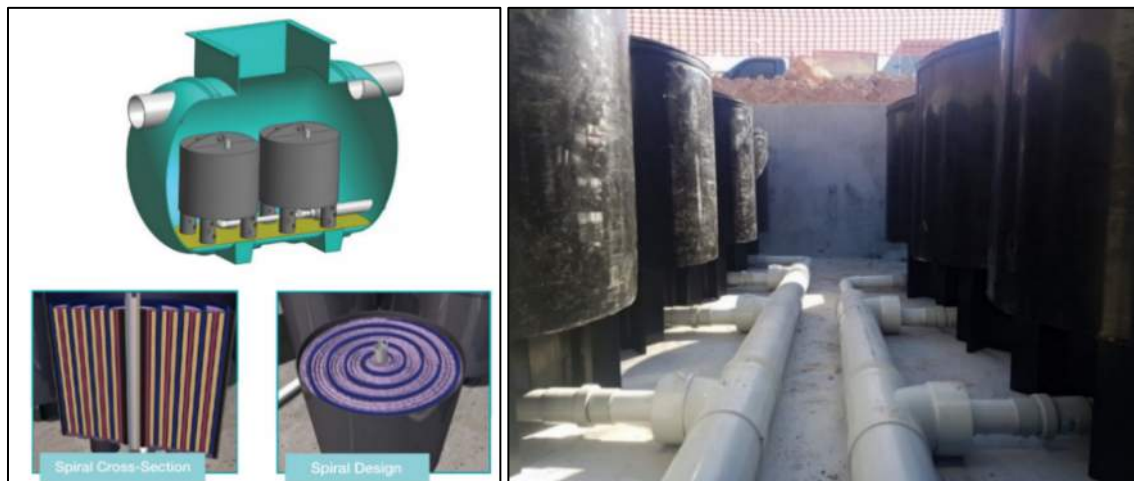


Figure 5.1: ATLAN Filter cartridge filter

The ATLAN Treatment Train system has proven compliance with the Queensland Water by Design Music Modelling Guidelines requirements (2010). The total requirement for treatment devices for the subject site is presented in Table 5.6 below.

Table 5.6: Catchment Treatment Train Requirements

Device Type	Number of Devices
ATLAN Filter Cartridges (Full Height)	7
ATLAN Stormsack Baskets	3

5.2.8 MUSIC Model Diagrams

A diagrammatic layout of the MUSIC model interface used to model the proposed development with the proposed treatment systems, is presented in Figure 5.2 below.

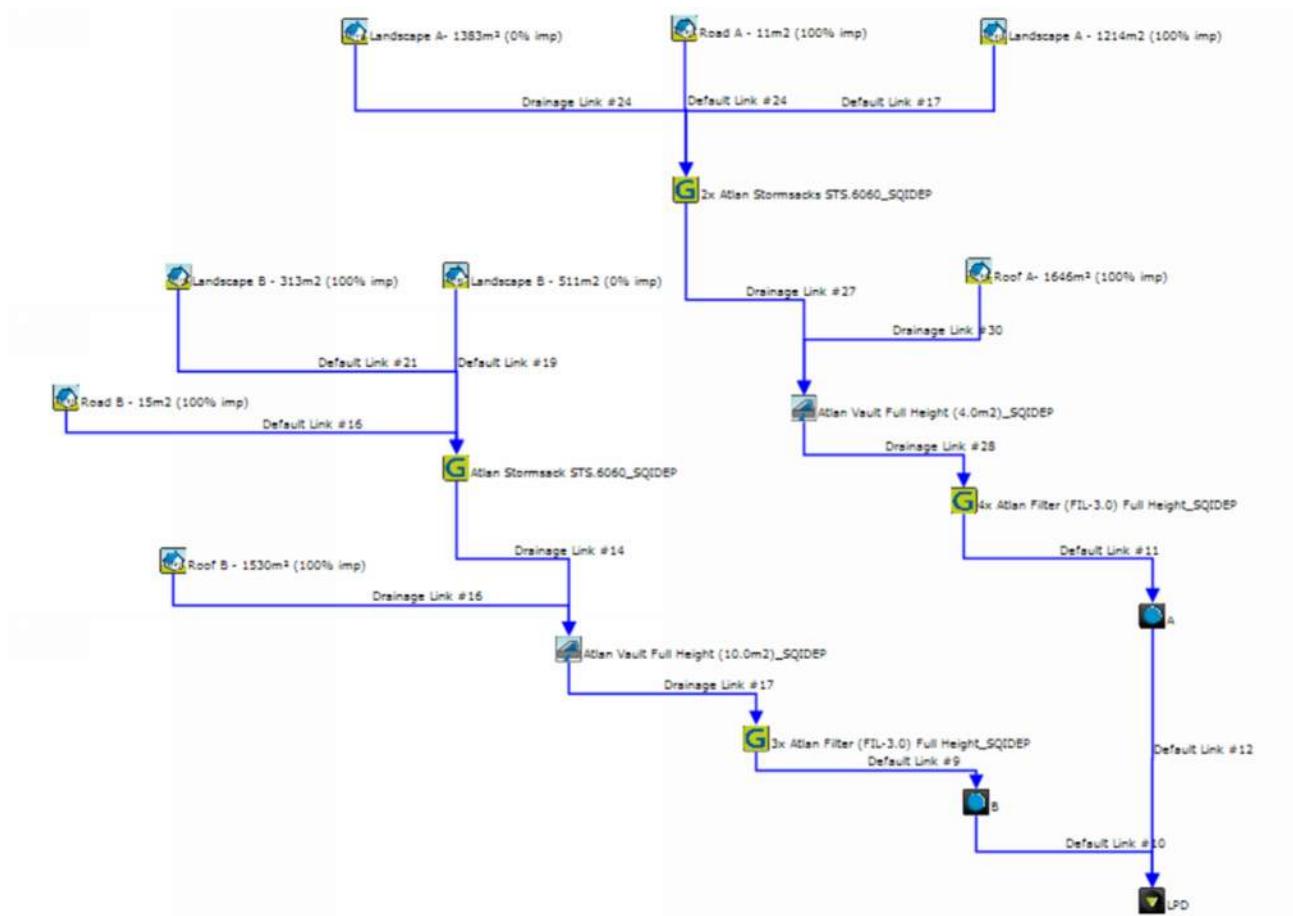


Figure 5.2: MUSIC Model

5.2.9 MUSIC Model Results

MUSIC was used to model the treatment train effectiveness in terms of the percentage of pollutants being removed from the system using the proposed treatment devices.

The results of the MUSIC modelling compared to the stated Water Quality Objectives (WQO's) are presented below.

Table 5.7: MUSIC Modelling Results

Potential Pollutant	Target WQO's (%)	MUSIC Results (%)
Total Suspended Solids (kg/yr)	80	80.64
Total Phosphorus (kg/yr)	60	72.39
Total Nitrogen (kg/yr)	45	54.27
Gross Pollutants (kg/yr)	90	100

The results indicate that the proposed treatment devices are efficient in achieving the water quality objectives and exceeds the minimum required pollutant reduction targets.

5.3 Stormwater Quantity

The proposed development reduces the site's impervious area from approximately 83% under the pre-development condition to 71% under the post-development condition. This reduction is expected to result in a minor decrease in peak stormwater runoff compared with existing conditions. Accordingly, on-site stormwater detention is not required.

The site is serviced by two existing stormwater connections, which were designed with sufficient capacity to accommodate runoff from the fully developed site.

In addition, Site 18B is located within the lower third of the contributing catchment and is approximately 170 m from the Brisbane River. Given the site's proximity to the lawful point of discharge, the reduced post-development runoff, and the available downstream drainage capacity, the provision of on-site stormwater detention is considered unnecessary.

6 Stormwater Drainage

There are two existing stormwater manholes on site; one in the northwestern corner and one in the southwestern corner of the site. The northwestern manhole connects to an existing gully pit in Karakul Road via an existing 525mm diameter stormwater pipe. The southwestern manhole connects to an existing gully pit in MacArthur Avenue via an existing 600mm diameter stormwater pipe.

In the developed case, it is proposed that the development site will discharge to both existing stormwater pipes. The treatment tanks will be installed to connect to existing onsite stormwater pipes downstream of the manholes.

The proposed stormwater drainage arrangement for the development is shown in the Engineering Drawings attached as Appendix C.

7 Water and Sewer

7.2 Sewer Connection

There is an existing 315mm diameter PE sewer main and manhole in MacArthur Avenue. The existing 160mm diameter sewer property connection and manhole at the southwester boundary will be modified to suit the new basement and upgraded connection size. Refer to the Engineering Drawings in Appendix C.

7.3 Water Connection

There are three existing water mains adjacent to the site; a 180mm diameter PE main in Karakul Road, a 180mm diameter PE main in Barcham Road and a 180mm diameter main in MacArthur Avenue. There is an existing 32mm diameter PE water property connection with 20mm meter located at the northwestern boundary which will be used for temporary construction purposes and removed at completion of construction. Two new water property connections will be constructed from the existing main in Karakul Road, with exact size/meter arrangement to be confirmed in Detailed Design by the Hydraulic Engineer. Refer to the Engineering Drawings in Appendix C.

8 Earthworks

The earthworks associated with the proposed development will predominantly involve the construction of the access driveway, general lot shaping and servicing the site. Refer to the Engineering Drawings in Appendix C.

The development is shown as being impacted by the 'potential and actual acid sulfate soils' overlay, according to BCC's City Plan 2014 interactive map.



Figure 8.1: Acid Sulfate Soils Overlay Map (OM14)

A site-specific Acid Sulfate Soils assessment may therefore be required for this site. This is to be prepared by a suitably qualified geotechnical engineer.

9 Conceptual Erosion and Sediment Control Plan

9.2 Introduction

During construction, it shall be the responsibility of the Principal Contractor to ensure that the development complies with the relevant erosion and sediment control objectives, as outlined in the State Planning Policy and the Brisbane Planning Scheme.

This section of the report provides suggested inclusions in an erosion and sediment control plan for the proposed development site. This plan includes recommendations for monitoring & reporting responsibilities and the construction of site-specific sedimentation and erosion control measures. Detailed drawings specifying the proposed erosion and sediment control measures are to be provided at the Operational Works stage of the development.

9.3 General Erosion and Sediment Control Measures

It shall be the responsibility of the Principal Contractor to ensure the following erosion and sediment control measures are implemented on site:

- Clean stormwater runoff from upstream allotments is to be directed away from the development site using earth bunds or cut-off drains, as deemed appropriate by a suitable supervisor;
- The prevention of sediment runoff towards other allotments via the effective implementation of silt fences or other mitigation devices as deemed appropriate by a suitable supervisor;
- Sediment runoff shall also be prevented from entering the Council stormwater drainage system via the implementation of control measures such as gully pit sediment barriers;
- Erosion shakedown points shall be established at all vehicular access points, with shakedown areas regularly swept clean and sediment removed; and
- Erosion and sediment control measures are not to be removed from the development site until the site is completely rehabilitated and the surface is capable of resisting erosion.

9.4 Spoil and Stockpile Management Measures

It shall be the responsibility of the Principal Contractor to ensure the following spoil and stockpile management measures are implemented on site:

- Where the stockpiling of spoil and excess earthworks is necessary on the development site, stockpiles shall be established as far away as possible from stormwater inlets and pipelines to reduce the likelihood of sediment runoff; and
- Stockpiles are to be established within a designated zone of fill material and should be surrounded with appropriate erosion and sediment control measures.

9.5 Training Requirements

It shall be the responsibility of the Principal Contractor to ensure the following training protocols are implemented on the development site:

Site induction courses shall include details of an environmental management reporting system, through which personnel will be able to report perceived erosion and sediment control issues on site.

10 Summary

This study has reviewed the proposed development of two multi-storey buildings at Site 18B, 260 MacArthur Avenue, Hamilton, and its engineering constraints and serviceability requirements. The development proposal allows the site to be sufficiently serviced by existing road and utility infrastructure as well as new connections.

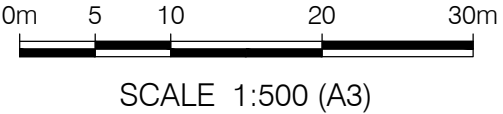
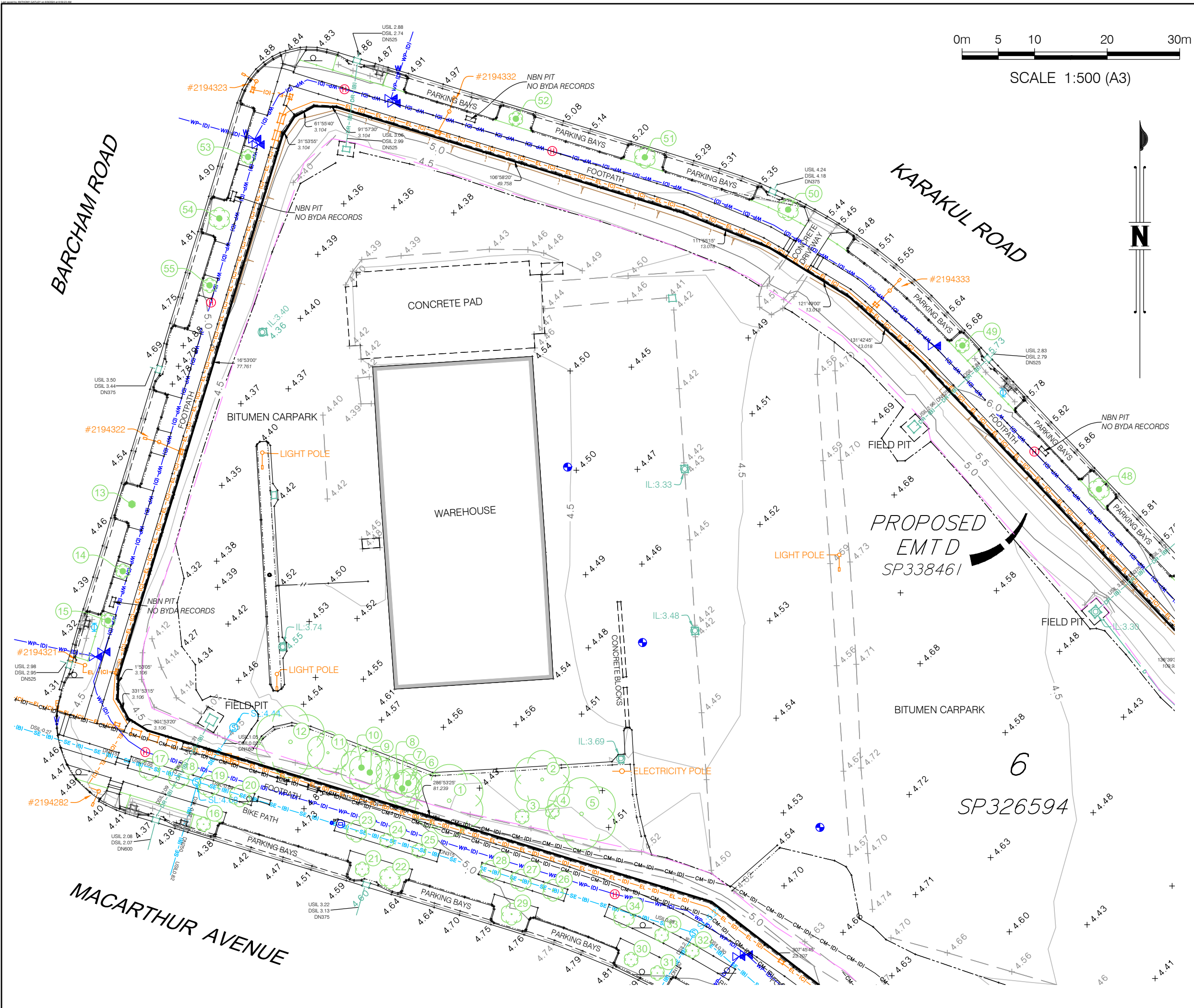
Based on this study the following conclusions have been drawn:

- On-site detention is not required for the site; and
- A stormwater quality system of 7 cartridge ATLAN Filters and 3 ATLAN Stormsacks are to be installed to treat flows generated from the proposed development site.
- The proposed civil design meets the serviceability requirements for the site.

This report is compliant with EDQ's Northshore Hamilton Priority Development Area Development Scheme Amendment, November 2025 as well as BCC's City Plan 2014, version 21, codes and the State Planning Policy.

11 Appendices

Appendix A – Survey



CLIENT

SILVERSTONE DEVELOPMENTS

PROJECT

DETAIL SURVEY
OF
LOT 6 ON SP326594
(MACARTHUR AVE, HAMILTON)

NOTES

(i) The title boundaries shown hereon were marked at the time of survey.

(ii) Survey data inside the subject lot fencing is taken from previous LandPartners plan BRMM7695-000-245-1, surveyed on 6/10/2022

(iii) Services shown hereon have been located where possible by field survey. If not able to be so located, services have been plotted from the records of relevant authorities where available and have been noted accordingly on the plan.

(iv) Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

1	6/09/2024	AJG	AJG	MLM	4/09/2024
REV	DATE	DRAWN	CHECKED	APPROVED	SURVEY DATE



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Brisbane Office
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Milton QLD 4064

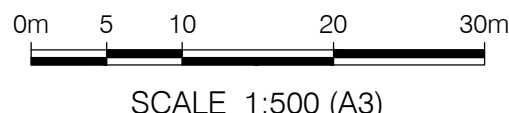
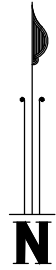
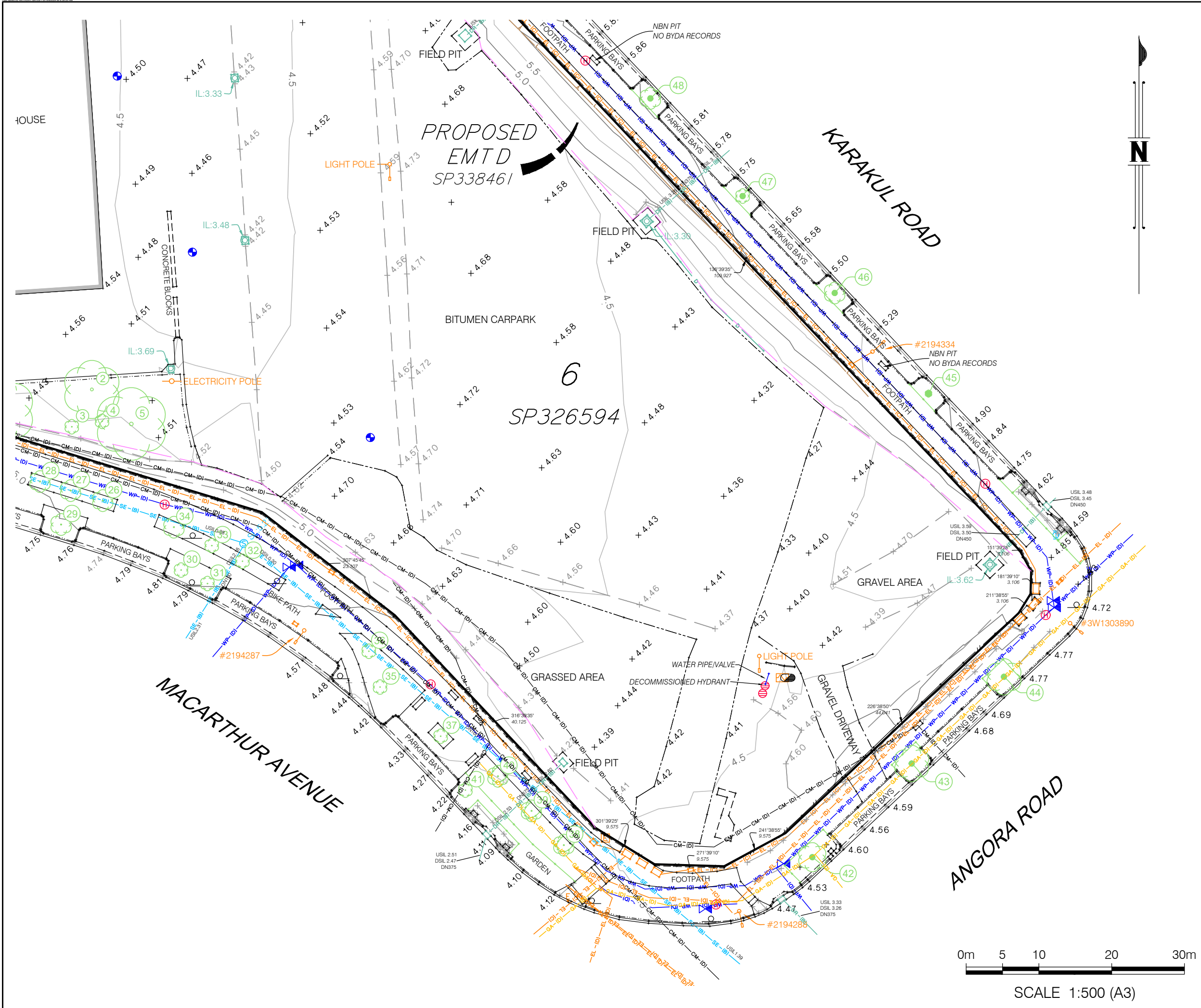
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e: info@landpartners.com.au
w: www.landpartners.com.au

LEVEL DATUM AHD	LOCAL AUTHORITY BRISBANE C.C.
LEVEL ORIGIN PSM186779 RL 4.325m	CONTOUR INTERVAL 0.5 Metre
MERIDIAN MGA	CO-ORD SYSTEM LOCAL ARBITRARY
UDN	SHEET 1 OF 3

BRMM8547-000-3-1

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CLIENT

SILVERSTONE DEVELOPMENTS

PROJECT

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LOT 6 ON SP326594
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1	6/09/2024	AJG	AJG	MLM	4/09/2024
REV	DATE	DRAWN	CHECKED	APPROVED	SURVEY DATE


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w: www.landpartners.com.au

LEVEL DATUM AHD	LOCAL AUTHORITY BRISBANE C.C.
LEVEL ORIGIN PSM186779 RL 4.325m	CONTOUR INTERVAL 0.5 Metre
MERIDIAN MGA	CO-ORD SYSTEM LOCAL ARBITRARY
UDN	SHEET 2 OF 3

BRMM8547-000-3-1

TREE NUMBER	HEIGHT (m)	TRUNK DIAMETER (mm)	CANOPY SPREAD (m)
1	8	900	10
2	8	400	8
3	4	250	2
4	4	250	2
5	8	400	10
6	5	250	4
7	6	200	5
8	8	400	6
9	5	400	6
10	5	400	6
11	5	400	6
12	4	600	10
13	3	80	1
14	3	80	2
15	3	80	2
16	3	80	2
17	4	150	3
18	4	100	3
19	4	100	3
20	3	80	3
21	4	100	2
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23	4	100	3
24	3	50	2
25	3	80	2
26	3	100	3
27	4	100	3
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30	3	100	2
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38	4	80	3
39	4	80	3
40	3	100	3
41	3	100	2
42	4	150	4
43	4	150	5
44	4	150	5
45	3	80	1
46	4	100	3
47	4	100	2
48	3	100	3
49	3	80	2
50	4	100	3
51	3	100	3
52	4	100	2
53	3	100	2
54	3	100	3
55	3	80	2

SYM	DESCRIPTION	SYM	DESCRIPTION
	BENCHMARK		SIGNS
	BOLLARD		INSPECTION OPENING
	COLUMN / PILLAR		SEWERAGE MANHOLE
	ELECTRICAL BOX		STREET NAME SIGN
	ELEC CONDUIT MARKER		SPRINKLER
	ELEC/LIGHT POLE		TREE
	ELECTRICAL PIT		STOP/SUICE VALVE
	ELECTRICITY POLE		SURVEY STATION
	ELECTRICITY STAY POLE		STORMWTR. MANHOLE
	FIRE HYDRANT GROUND		TAP
	FIRE HYDRANT PILLAR		TELECOM PIT
	FLAG POLE		TELECOM MANHOLE
	GAS MANHOLE		TRANSFORMER O/HEAD
	GAS MARKER		TELEPHONE POLE
	GAS VALVE		TRAFFIC LIGHTS
	GUIDE POST		TRAFFIC PIT
	GUIDE SIGN		WATER AIR VALVE
	GULLY TRAP		WATER END CAP
	HOSE BOX/REEL		WATER METER
	HYDRANT MARKER		WATER MANHOLE
	MANHOLE UNKNOWN		WATER REDUCER
	PALM TREE		WATER REFLUX VALVE
	TELECOM PILLAR		WATER SAMPLE POINT
	PARKING METER		WATER SCOUR VALVE
	PERM. SURVEY MARK		WATER TEE JUNCTION
	SEWERAGE VENT		WATER VALVE
	SHRUB		WATER VALVE MARKER

Symbols shown are indicative only. The symbol size and orientation does not necessarily represent the real size or orientation of the feature.

LINE TYPE LEGEND	
	AWNING/EAVE
	BANK BOTTOM
	BANK TOP
	BITUMEN EDGE
	BUILDING
	CHANGE OF GRADE
	CONCRETE EDGE
	CREEK CENTRELINE
	DRAIN CENTRELINE
	DRAIN CHANNEL CONCRETE
	ELECTRICAL CABLE OVERHEAD
	ELECTRICAL HIGH VOLTAGE
	FENCE
	GRAVEL ROAD EDGE
	GULLY CENTRELINE
	KERB AND CHANNEL INVERT
	KERB LIP
	KERB ONLY
	KERB TOP BACK
	KERB TOP FRONT
	LINE MARKING SINGLE CONTINUOUS
	LINE MARKING SINGLE BROKEN
	LINE MARKING CONTINUOUS/BROKEN
	LINE MARKING DOUBLE CONTINUOUS
	ROAD CENTRELINE
	ROAD CROWN
	ROAD DRIVEWAY
	STORMWATER PIPE
	TRACK CENTRELINE
	WATER EDGE
	WATER PIPE ABOVEGROUND
	WATER PIPE UNDERGROUND
	VEGETATION EDGE
	WALL BOTTOM
	WALL TOP

SUBSURFACE UTILITIES LEGEND

The Subsurface Utilities shown on this plan have been coloured, denoted and classified as per AS 5488.1.2019:

Communications:	CM--(B)--
Drainage:	DR--(B)--
Electrical:	EL--(B)--
Fire Service:	FR--(B)--
Gas:	GA--(B)--
Petroleum:	PT--(B)--
Recycled Water:	WR--(B)--
Sewer:	SE--(B)--
Unidentified:	UN--(B)--
Potable Water:	WP--(B)--

Linetype examples above are Quality B classification.

Refer to the *Subsurface Utilities Quality Classifications and Accuracies* notes below to understand accuracies and methods of location.

Refer to the colour, lettering and quality classification of the linework on this plan to understand the type of utility that was located and its accuracy limitations.

DISCLAIMER

LandPartners makes all reasonable efforts to locate sub-surface utilities, however some utilities can remain undetected for various reasons beyond our control. We note:

- LandPartners relies on Before You Dig Australia (BYDA) plans to indicate the presence of sub-surface utilities. BYDA plans do not necessarily document all the Underground Services within an area. BYDA plans are limited to public areas, not private land holdings. BYDA plans may not reflect recent installation activity by an asset owner.
- Electromagnetic Locators (EML) and/or Ground Penetrating Radar (GPR) instruments are used to locate the presence of underground services. The effectiveness of using EML and GPR instruments depends on site conditions including soil density, depth of the targeted underground service, moisture content of the soil, electrical interference from adjoining services and wire fences and the material / installation methodology of the targeted underground service. EML and GPR both have operating limitations and do not locate to infinite depths.

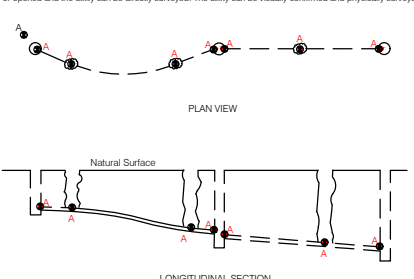
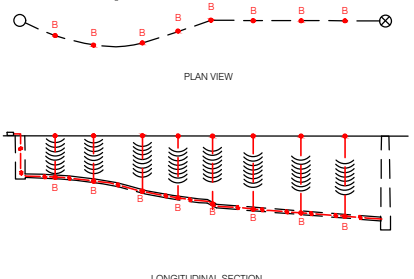
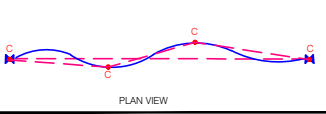
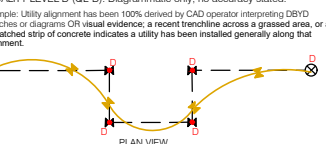
LandPartners advises our clients that:

- The BYDA search used to complete this work contains Duty Of Care conditions and advice from asset owners. The client is ultimately responsible for reviewing and ensuring compliance with asset owner's Duty of Care obligations. LandPartners can provide the BYDA search documentation that was used at the time of the locate.
- The position and depth of the sub-surface utilities shown hereon is not absolute. The Quality Classification for this data indicates the relative accuracy.
- For any digital CAD data that forms part of this plan: the Quality Classification of the data prevails over absolute co-ordinate values.
- The purpose of this plan / file is to assist in detailed design only. LandPartners recommends the underground services need to be re-located, confirmed and clearly marked out prior to mechanical excavation / construction.
- LandPartners are not liable for the accuracy and correctness of 3rd party datasets that may be shown on this plan, e.g. BYDA, Council GIS etc. LandPartners will note the source of 3rd party datasets.

LandPartners has endeavoured to identify, locate and survey sub-surface utilities within the scope of works area. We have indicated the relative accuracies of the results, however the client is ultimately responsible for their own assessment of these results and decisions around managing latent condition risk.

SUBSURFACE UTILITIES QUALITY CLASSIFICATIONS AND ACCURACIES

The relative accuracies of Located Subsurface Utilities shown on this plan have been Classified as per AS 5488.1.2019 (Diagrams based on AS 5488.1.2019)

QUALITY LEVEL A (QL-A): Absolute accuracy Horizontal and Vertical $\pm 50\text{mm}$ Example: QL-A points are observed points that accurately confirm Position and Depth. The utility has been sighted and the exposed pipes / cables / conduits are clearly visible, a manhole, pit or grate can be accessed or opened and the utility can be directly surveyed. The utility can be visually confirmed and physically surveyed. 	QUALITY LEVEL B (QL-B): Relative accuracy Horizontal $\pm 300\text{mm}$ & Vertical $\pm 500\text{mm}$ Example: A clear, reliable induced signal is traced from the surface to indicate Position and Depth. The surface trace can be derived using an Electromagnetic Locator, a Ground Penetrating Radar unit or a combination of both technologies 	QUALITY LEVEL C (QL-C): Relative accuracy Horizontal $\pm 300\text{mm}$, Depth unknown. Example: Surface fittings have been surveyed and a direct line is drawn between those fittings to represent the utility OR a surface trace resulted in a consistent signal to indicate Position but an inconsistent signal for Depth, hence no Depth was recorded. 
QUALITY LEVEL D (QL-D): Diagrammatic only, no accuracy stated. Example: Utility alignment has been 100% derived by CAD operator interpreting DBVD sketches or diagrams OR visual evidence, a recent trenchline across a grassed area, or a re-patched strip of concrete indicates a utility has been installed generally along that alignment 		

CLIENT

SILVERSTONE DEVELOPMENTS

PROJECT

DETAIL SURVEY OF LOT 6 ON SP326594 (MACARTHUR AVE, HAMILTON)

NOTES

- The title boundaries shown hereon were marked at the time of survey.
- Survey data inside the subject lot fencing is taken from previous LandPartners plan BRMM7695-000-245-1, surveyed on 6/10/2022
- Services shown hereon have been located where possible by field survey. If not able to be so located, services have been plotted from the records of relevant authorities where available and have been noted accordingly on the plan.
- Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

1	6/09/2024	AJG	AJG	MLM	4/09/2024
REV	DATE	DRAWN	CHECKED	APPROVED	SURVEY DATE



LANDPARTNERS
surveyors and planners



Brisbane Office
Level 1
18 Little Cribb Street
Milton QLD 4064

PO Box 1399
Milton
QLD 4064

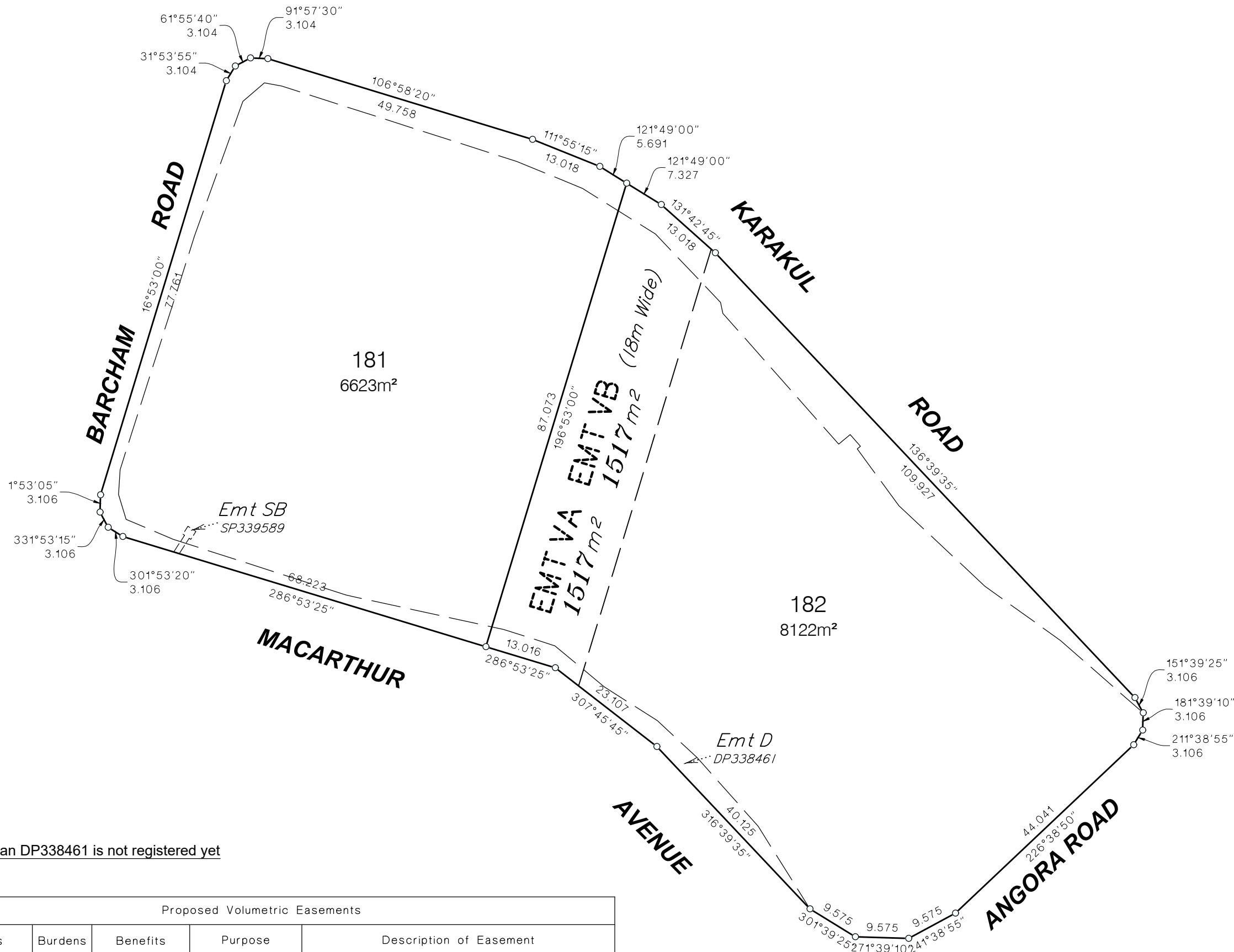
p: (07) 3842 1000
f: (07) 3842 1001
e: info@landpartners.com.au
w: www.landpartners.com.au

LEVEL DATUM AHD	LOCAL AUTHORITY BRISBANE C.C.
LEVEL ORIGIN PSM186779 RL 4.325m	CONTOUR INTERVAL 0.5 Metre
MERIDIAN MGA	CO-ORD SYSTEM LOCAL ARBITRARY

UDN

SHEET 3 OF 3

BRMM8547-000-3-1



The Survey Plan DP338461 is not registered yet

Proposed Volumetric Easements				
Easements	Burdens	Benefits	Purpose	Description of Easement
Emt VA (Volumetric)	Lot 182	Lots 181	Light & Air	Volumetric easement 18m wide - from finished Ground Level to 85m AHD
Emt VB (Volumetric)	Lot 182	Brisbane City Council	Public Access	Volumetric easement 18m wide - from finished Ground Level to 6m above

NOTE: ALL DIMENSIONS AND AREAS ON THIS PLAN ARE SUBJECT TO SURVEY AND REQUIREMENTS FOR LODGEMENT OF SURVEY PLANS IN THE DEPARTMENT OF NATURAL RESOURCES AND MINES, MANUFACTURING, AND REGIONAL AND RURAL DEVELOPMENT

CLIENT

SILVERSTONE

PROJECT

PROPOSED
RECONFIGURATION
Lots 181, 182 and VOLUMETRIC
EASEMENTS VA & VB
CANCELLING LOT 6 on SP326594

LOCAL AUTHORITY

BRISBANE CITY COUNCIL

NOTES

(i) This plan has been prepared for the exclusive use of SILVERSTONE and their consultants for design purposes and is not to be used for any other purpose or by any other entity without the express permission of LandPartners Pty Ltd.

(ii) This digital data has been calculated from design, field survey and from plans of survey registered in the Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development. The location and dimensions of the boundaries which may be derived from the data is subject to registration by the above authorities.

(iii) The boundaries may change subject to survey, engineering design or council requirements.

(iv) This data should not be used for construction purposes without confirmation by LandPartners Pty Ltd.

(v) This data should not be reproduced in any way without the permission of LandPartners Pty Ltd. Any reproduction of this data must contain these notes.

1	SAR	17/12/2024	INITIAL ISSUE

SCALE BAR

0m510203040m

SCALE 1:750 (A3)



LANDPARTNERS
surveyors and planners



bsi

ISO 9001
Quality
Management
Systems
CERTIFIED



ISO 45001
Occupational
Health and Safety
Management
CERTIFIED



CERTIFIED
LOCATOR

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e: info@landpartners.com.au
w: www.landpartners.com.au

LEVEL DATUM

N/A

LEVEL ORIGIN

N/A

CONTOUR INTERVAL

N/A

DRAWN

SAR

DATE

17/12/2024

CHECKED

MLM

DATE

17/12/2024

APPROVED

MLM

DATE

17/12/2024

UDN

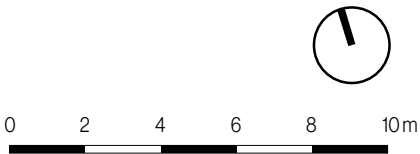
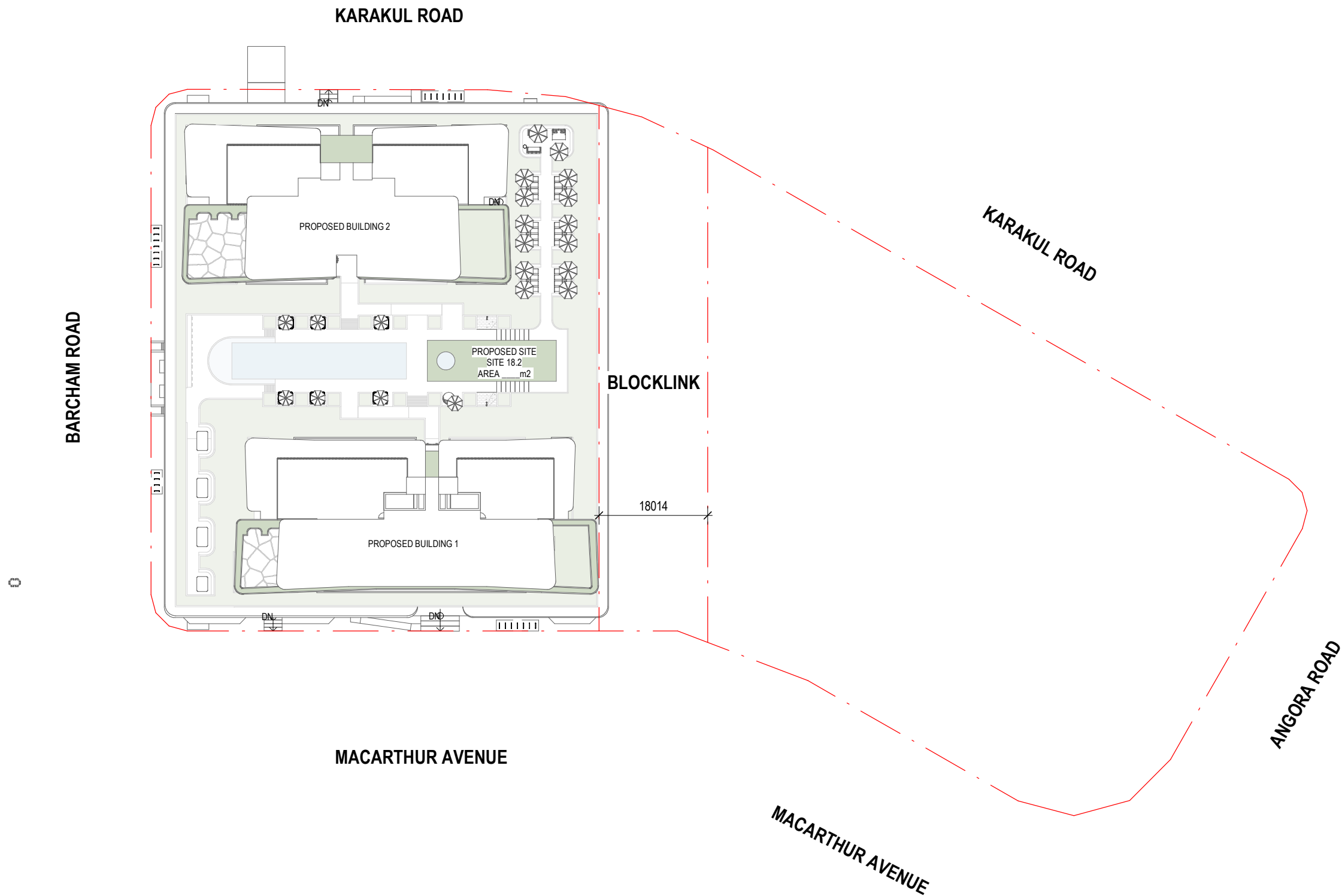
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SHEET 1 OF 1

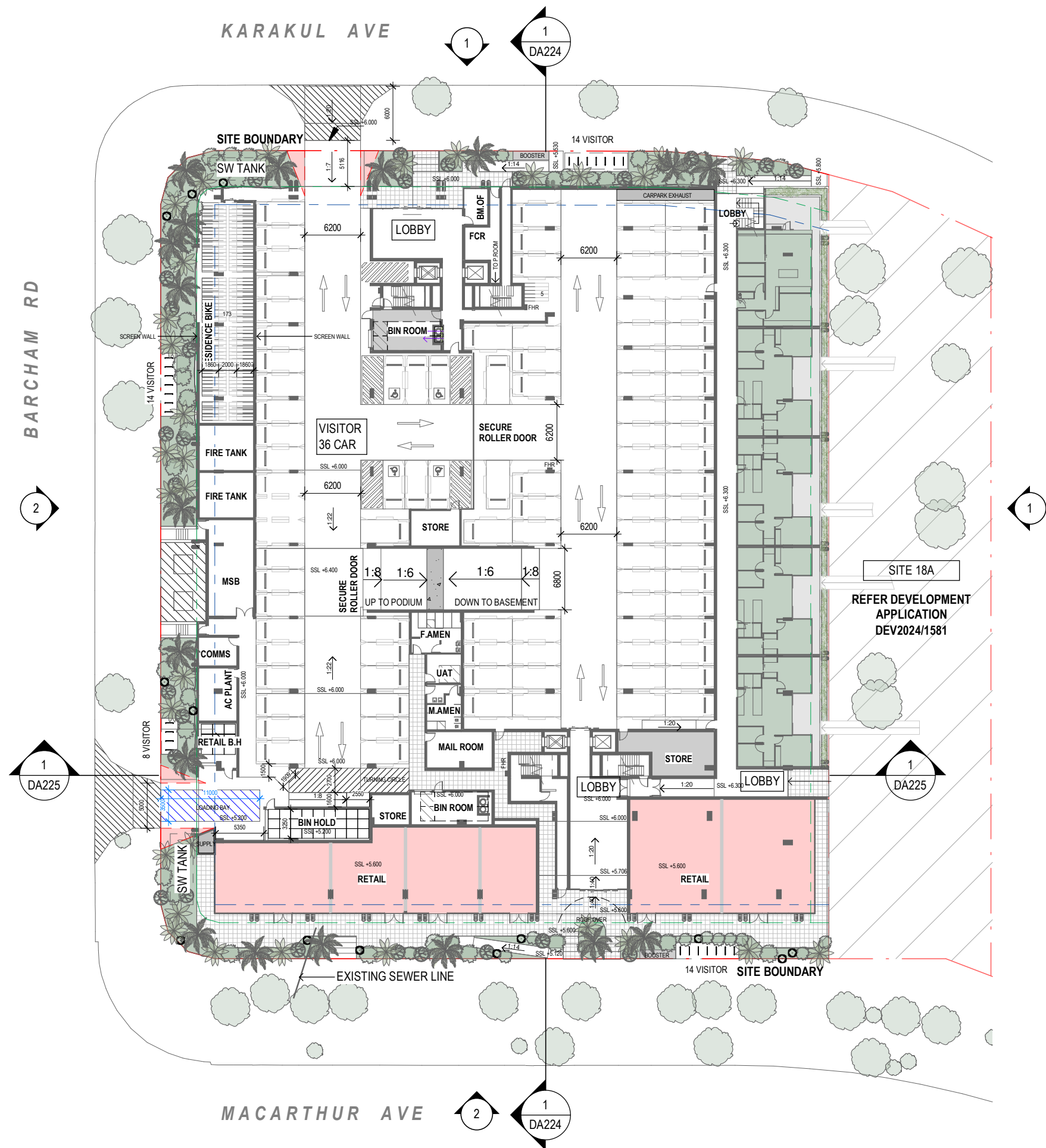
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Appendix B – Architectural Plans

SITE PLAN - PROPOSED



OVERALL FLOOR PLANS - GROUND





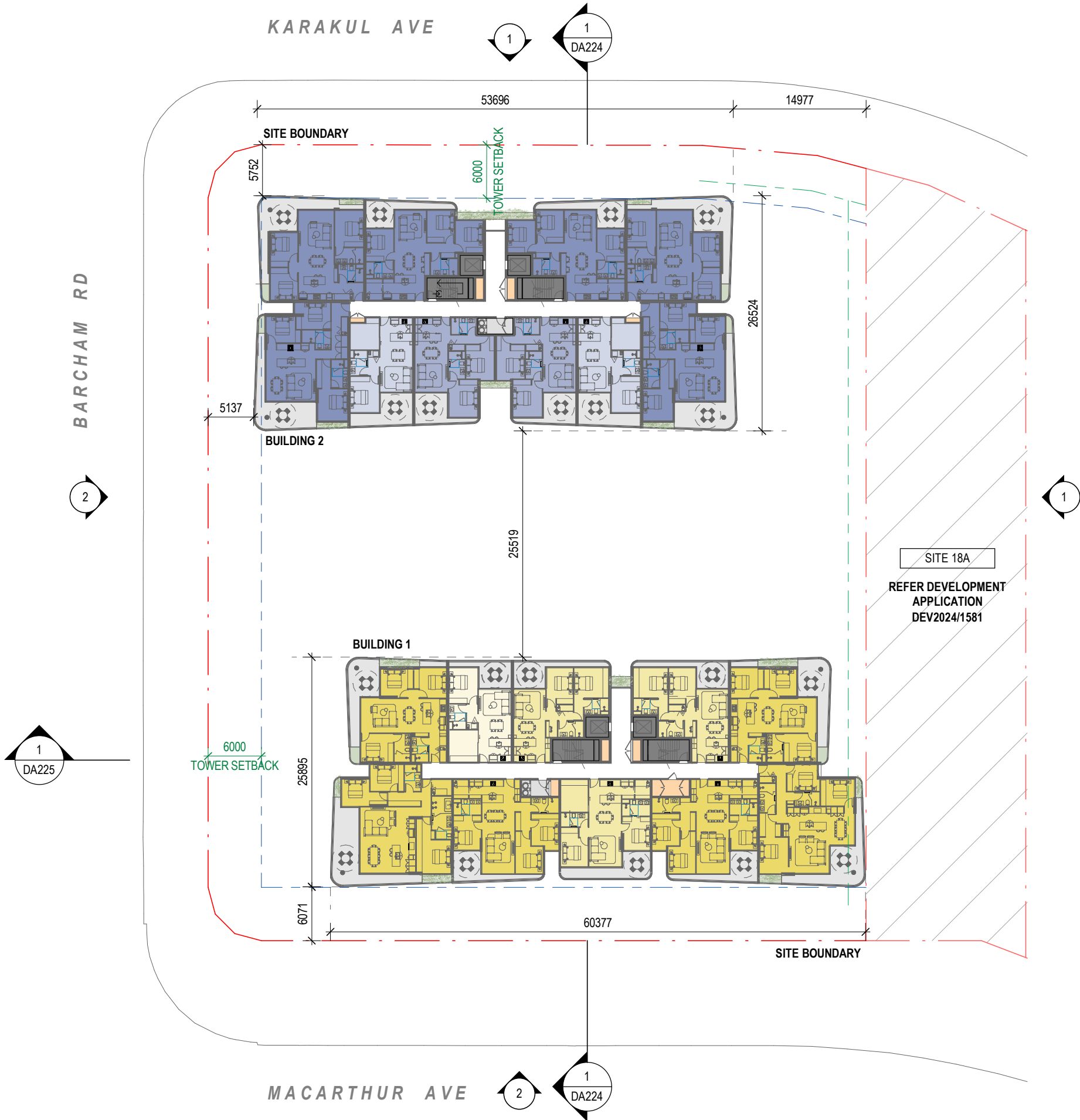
OVERALL FLOOR PLANS - LEVEL 02



OVERALL FLOOR PLANS - LEVEL 03 - PODIUM ROOF



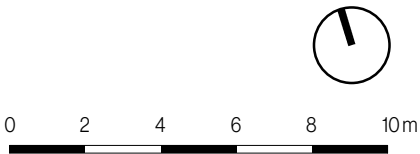
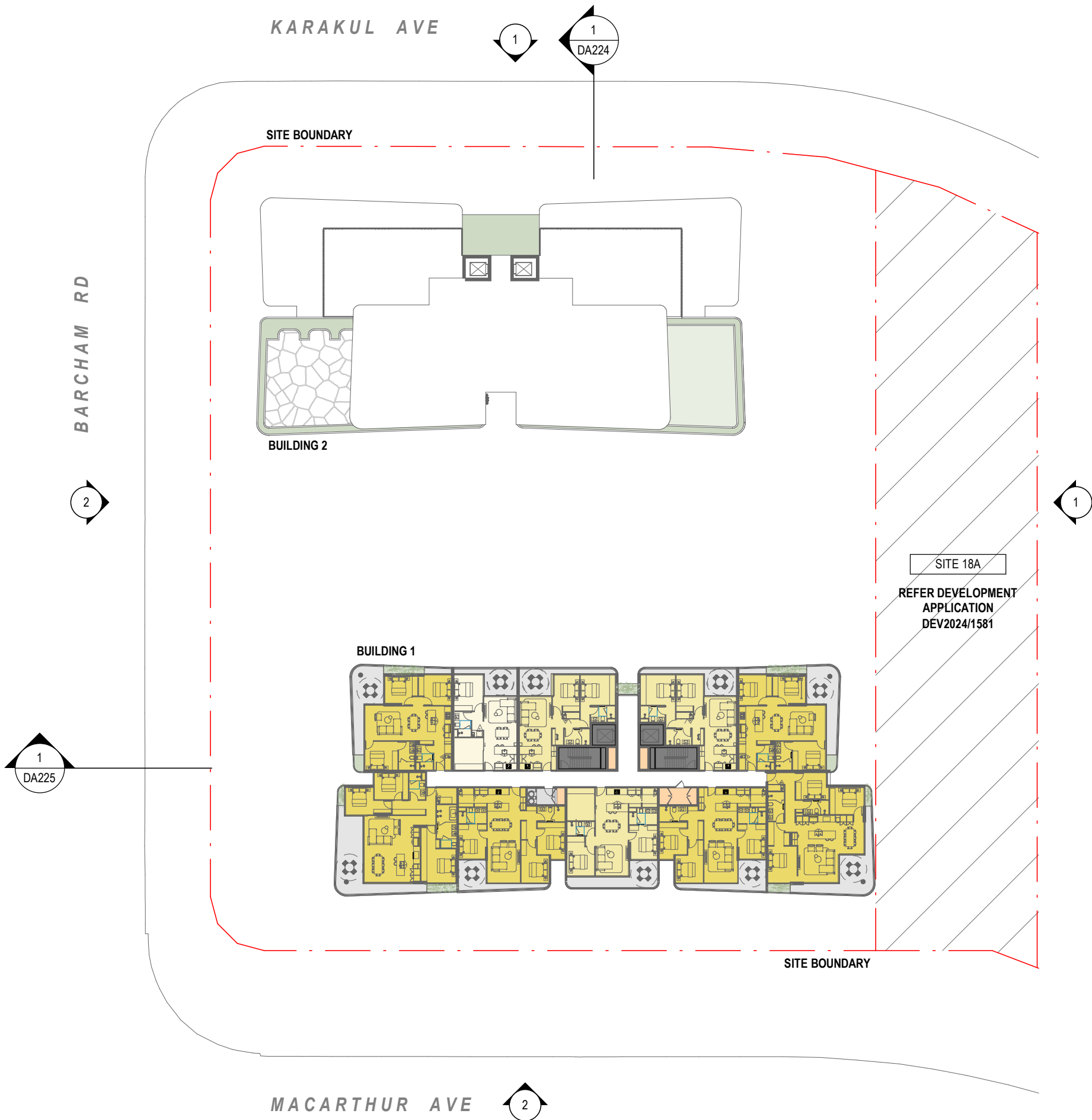
OVERALL FLOOR PLANS - LEVEL 04-12 TYPICAL



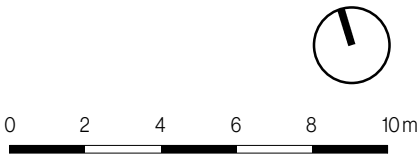
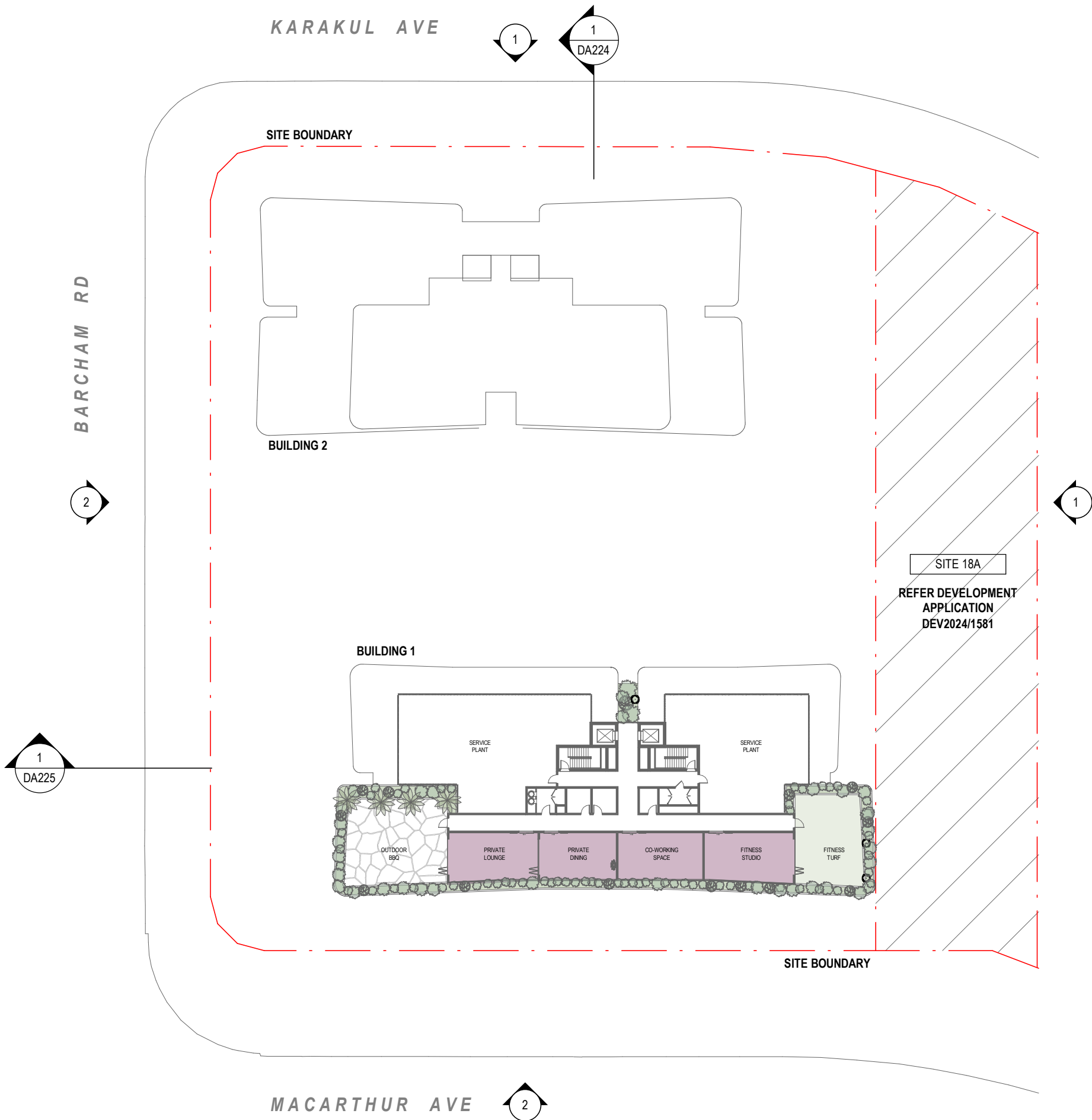
OVERALL FLOOR PLANS - LEVEL 13 - BUILDING 2 ROOFTOP



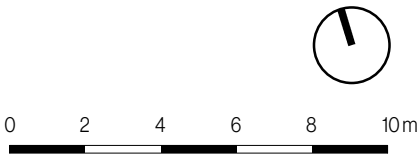
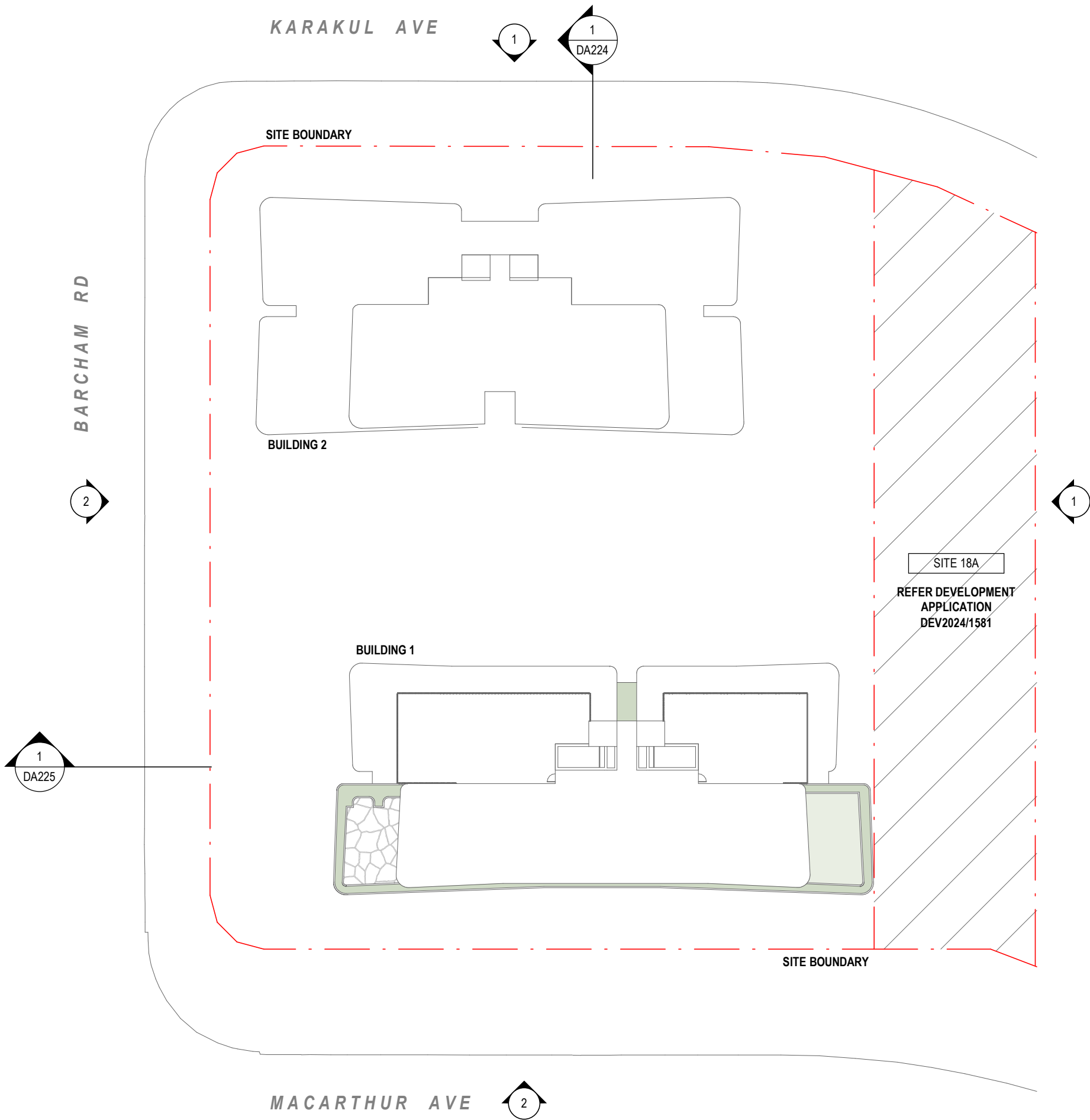
OVERALL FLOOR PLANS - LEVEL 14-16 TYPICAL - BUILDING 2 ROOF



OVERALL FLOOR PLANS - BUILDING 1 ROOFTOP



OVERALL FLOOR PLANS - BUILDING 1 ROOF



SITE ELEVATIONS - NORTH + WEST

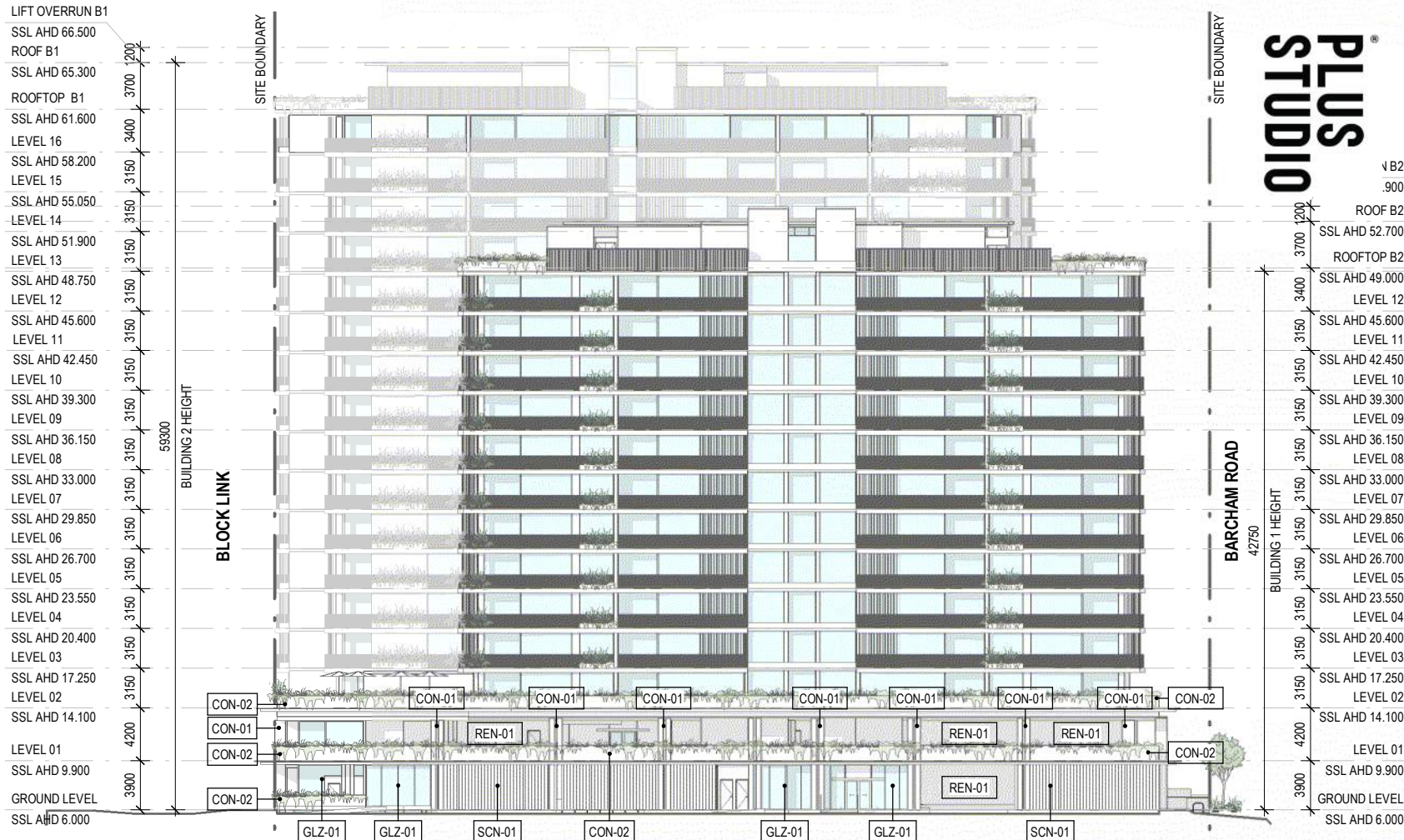
LEGEND

CON-01	APPLIED FINISH - SANDSTONE LOOK FINISH
CON-02	APPLIED FINISH - WARM WHITE FINISH
REN-01	APPLIED FINISH - SANDSTONE LOOK FINISH
GLZ-01	GLAZING - CLEAR
BAL-01	VERTICAL METAL BALUSTRADE
SCN-01	ALUMINIUM LOUVRE BATTEN SCREEN
SCN-02	ALUMINIUM VERTICAL BATTEN SCREEN

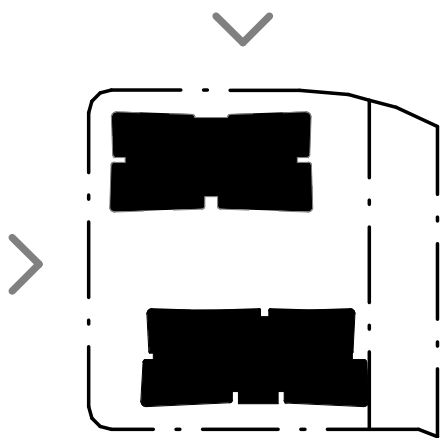
NOTE: LANDSCAPE & PLANTING INDICATIVE ONLY. REFER LANDSCAPE ARCHITECT DRAWING FOR MORE INFORMATION



2 DA SITE ELEVATION - WEST
SCALE 1:500 @ A3



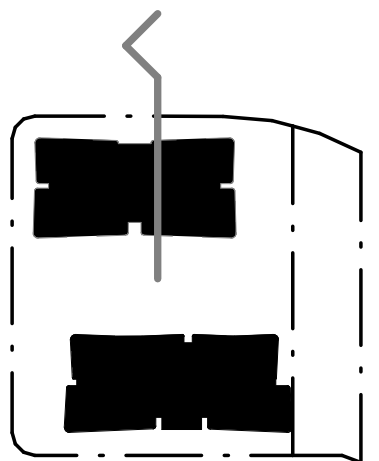
1 DA SITE ELEVATION - NORTH
SCALE 1:500 @ A3



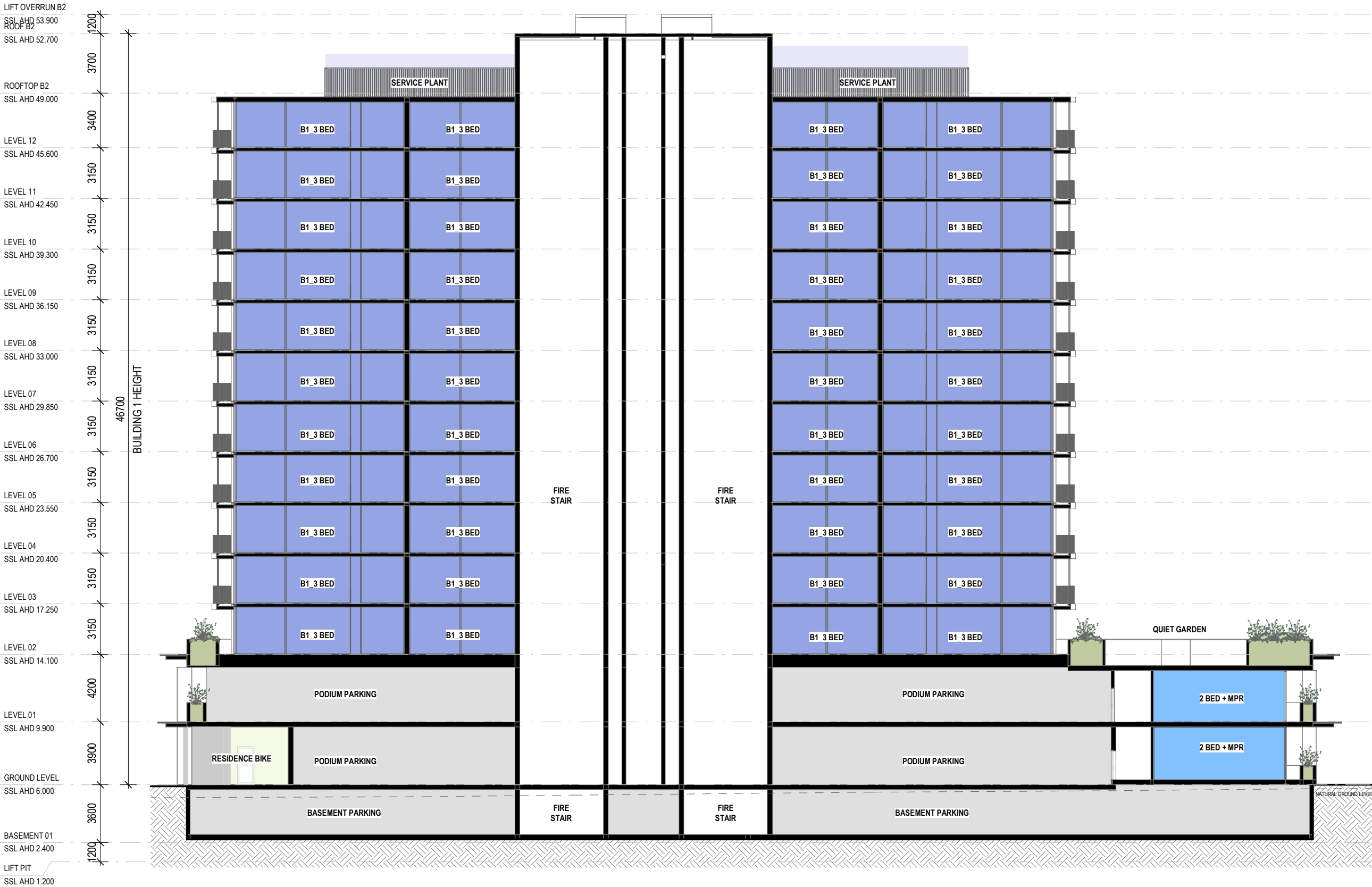
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SCALE As indicated @ A3 SIZE

SCALE As indicated @ A3 SIZE

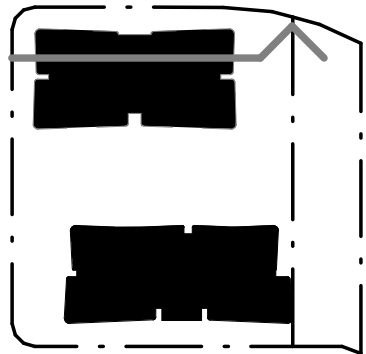


SECTION B



1 BUILDING SECTION B

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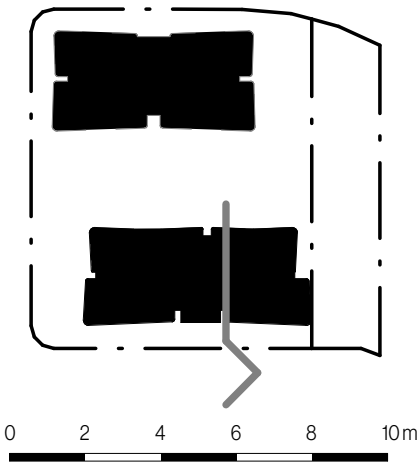
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SECTION C



1 BUILDING SECTION C

SCALE 1:250 @ A3



SCALE As indicated @ A3 SIZE

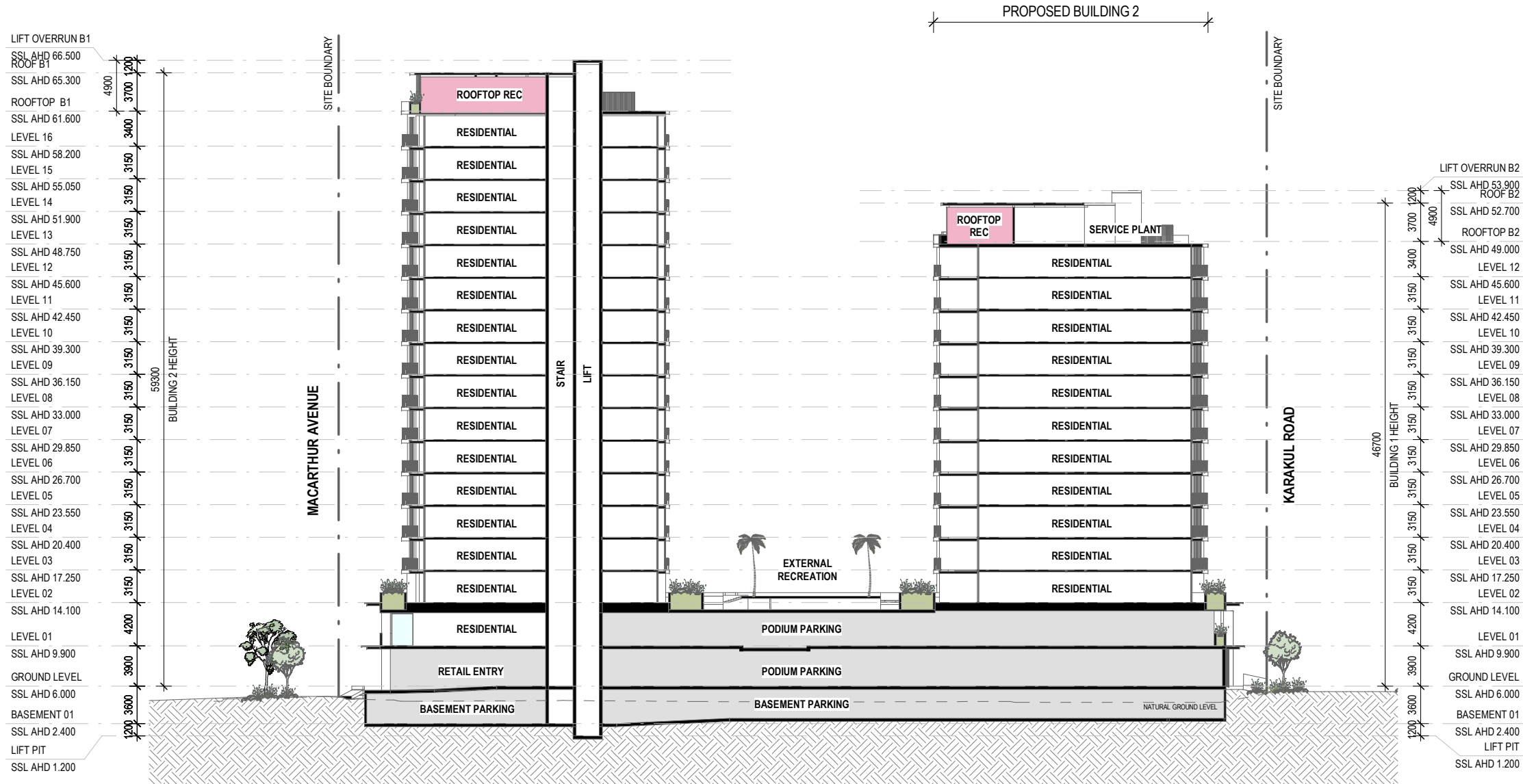
SECTION D



1 BUILDING SECTION D

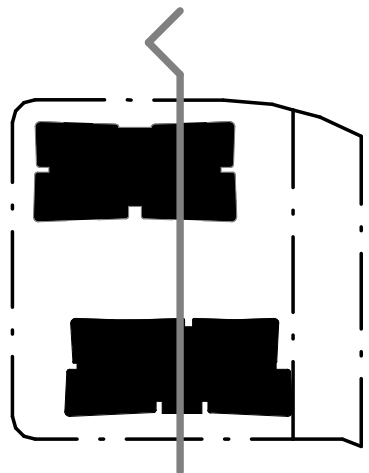
- SCALE 1:250 @ A3

SITE SECTION 1



1 SITE SECTION 1

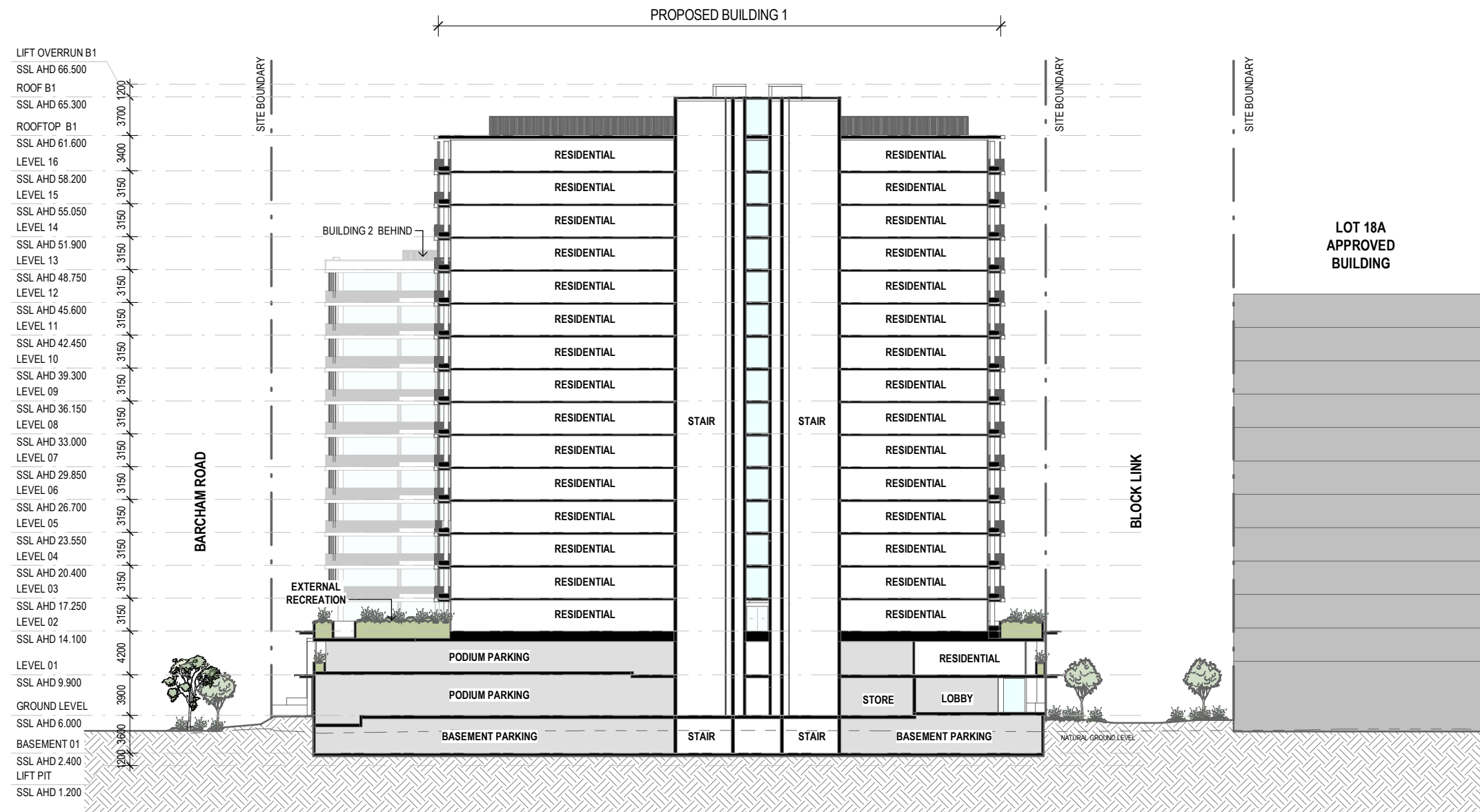
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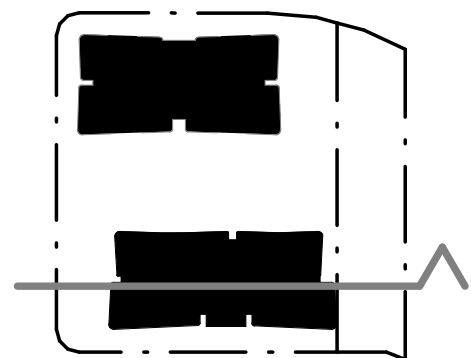
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SCALE As indicated @ A3 SIZE

SITE SECTION 2



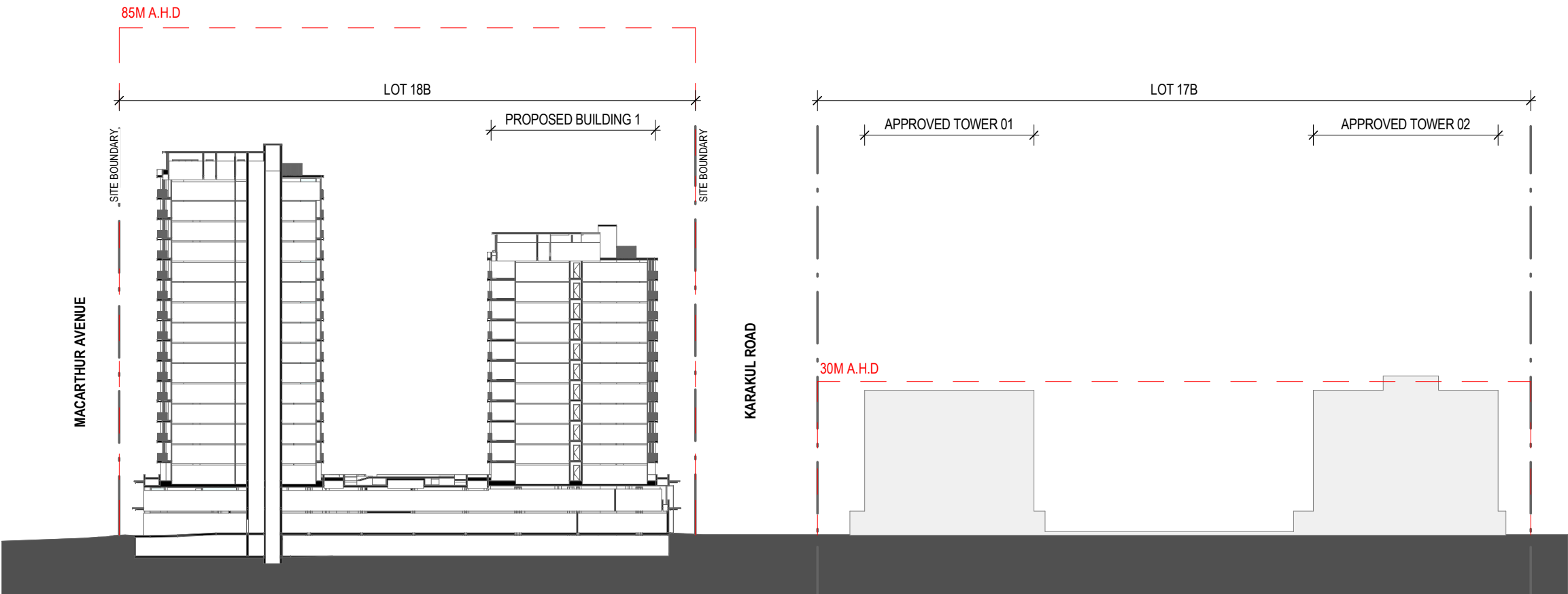
1 SITE SECTION 2
- SCALE 1:500 @ A3



A horizontal scale bar with markings at 0, 2, 4, 6, 8, and 10m.

SCALE As indicated @ A3 SIZE

BUILDING HEIGHT CONTEXT SECTION



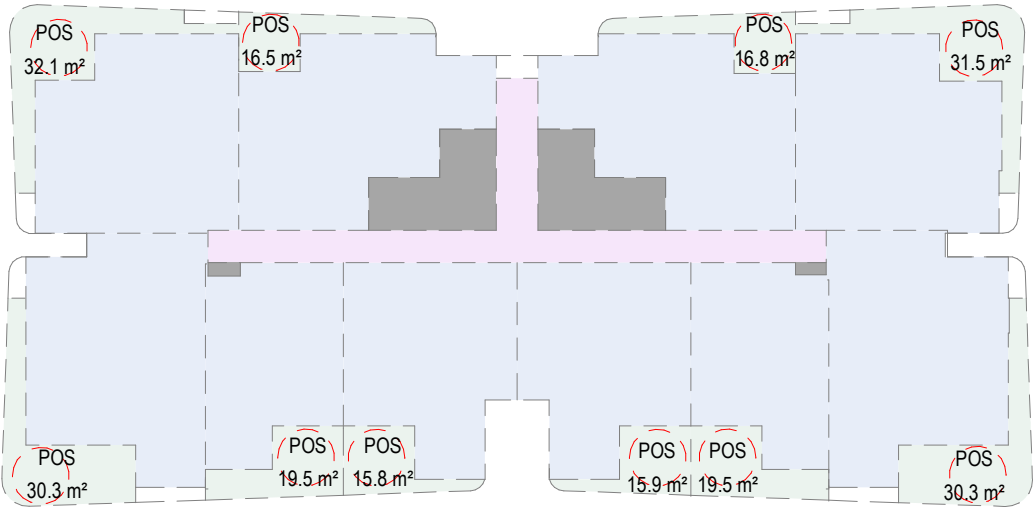
1 SITE SECTION - BUILDING HEIGHTS 1

- SCALE 1:800 @ A3



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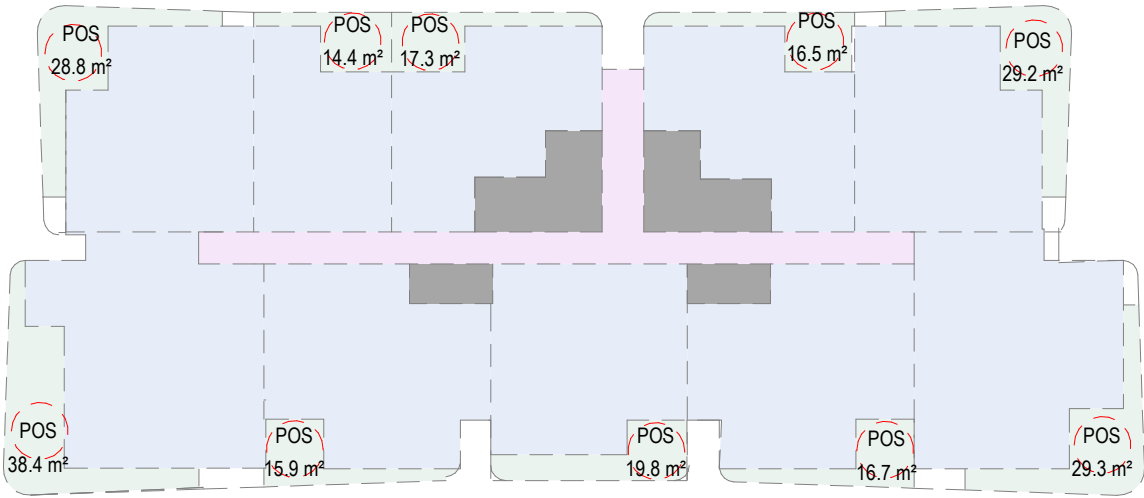
PRECINCT ANALYSIS - BUILDING FOOTPRINTS



Building Footprint Legend

- APARTMENTS
- BALCONY
- CIRCULATION
- SERVICES

BUILDING 2 TYPICAL FLOOR PLATE		
AREA TYPE	AREA	Percentage
APARTMENTS	958.9m²	78%
BALCONY	143.1m²	12%
CIRCULATION	73.3m²	6%
SERVICES	54.3m²	4%
	1229.6m²	



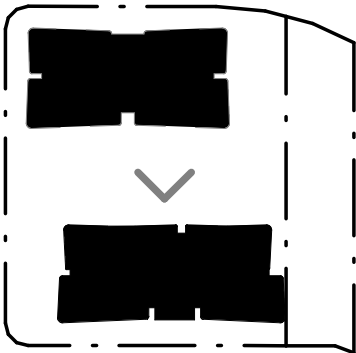
BUILDING 1 TYPICAL FLOOR PLATE		
AREA TYPE	AREA	Percentage
APARTMENTS	549.1m²	60%
BALCONY	226.3m²	25%
CIRCULATION	83.3m²	9%
SERVICES	53.5m²	6%
	912.2m²	

BUILDING ELEVATIONS - BUILDING 1 - NORTH

LEGEND

- CON-01** APPLIED FINISH - SANDSTONE LOOK FINISH
- CON-02** APPLIED FINISH - WARM WHITE FINISH
- REN-01** APPLIED FINISH - SANDSTONE LOOK FINISH
- GLZ-01** GLAZING - CLEAR
- BAL-01** VERTICAL METAL BALUSTRADE
- SCN-01** ALUMINIUM LOUVRE BATTEN SCREEN
- SCN-02** ALUMINIUM VERTICAL BATTEN SCREEN

NOTE: LANDSCAPE & PLANTING INDICATIVE ONLY. REFER LANDSCAPE ARCHITECT DRAWING FOR MORE INFORMATION



1 BUILDING ELEVATION - BUILDING 1 - NORTH

SCALE 1:250 @ A3

0 2 4 6 8 10m

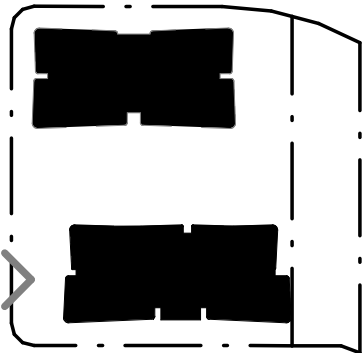
SCALE As indicated @ A3 SIZE

BUILDING ELEVATIONS - BUILDING 1 - WEST

LEGEND

CON-01	APPLIED FINISH - SANDSTONE LOOK FINISH
CON-02	APPLIED FINISH - WARM WHITE FINISH
REN-01	APPLIED FINISH - SANDSTONE LOOK FINISH
GLZ-01	GLAZING - CLEAR
BAL-01	VERTICAL METAL BALUSTRADE
SCN-01	ALUMINIUM LOUVRE BATTEN SCREEN
SCN-02	ALUMINIUM VERTICAL BATTEN SCREEN

NOTE: LANDSCAPE & PLANTING INDICATIVE ONLY. REFER LANDSCAPE ARCHITECT DRAWING FOR MORE INFORMATION



LIFT OVERRUN B1 SSL AHD 66.500	1200
ROOF B1 SSL AHD 65.300	3700
ROOFTOP B1 SSL AHD 61.600	3400
LEVEL 16 SSL AHD 58.200	3150
LEVEL 15 SSL AHD 55.050	3150
LEVEL 14 SSL AHD 51.900	3150
LEVEL 13 SSL AHD 48.750	3150
LEVEL 12 SSL AHD 45.600	3150
LEVEL 11 SSL AHD 42.450	3150
LEVEL 10 SSL AHD 39.300	3150
LEVEL 09 SSL AHD 36.150	3150
LEVEL 08 SSL AHD 33.000	3150
LEVEL 07 SSL AHD 29.850	3150
LEVEL 06 SSL AHD 26.700	3150
LEVEL 05 SSL AHD 23.550	3150
LEVEL 04 SSL AHD 20.400	3150
LEVEL 03 SSL AHD 17.250	3150
LEVEL 02 SSL AHD 14.100	4200
LEVEL 01 SSL AHD 9.900	3900
GROUND LEVEL SSL AHD 6.000	

BUILDING 2 HEIGHT



SITE BOUNDARY

MACARTHUR AVENUE

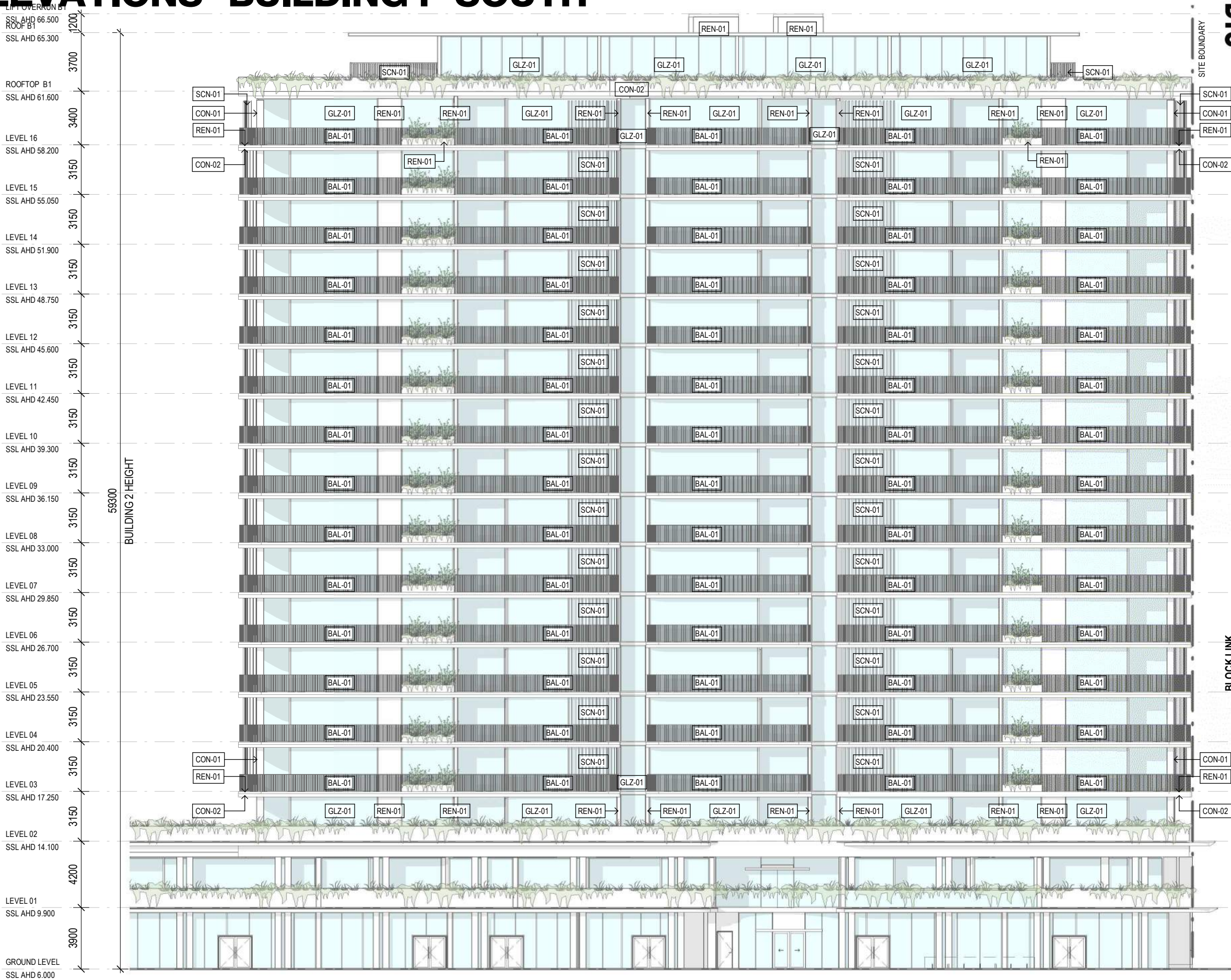
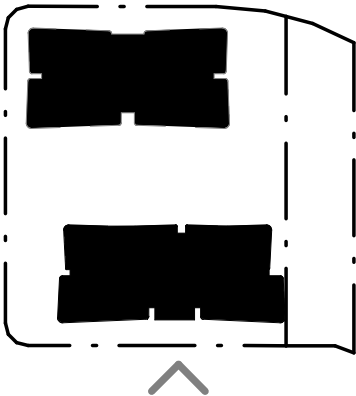


BUILDING ELEVATIONS - BUILDING 1 - SOUTH

LEGEND

- CON-01** APPLIED FINISH - SANDSTONE LOOK FINISH
- CON-02** APPLIED FINISH - WARM WHITE FINISH
- REN-01** APPLIED FINISH - SANDSTONE LOOK FINISH
- GLZ-01** GLAZING - CLEAR
- BAL-01** VERTICAL METAL BALUSTRADE
- SCN-01** ALUMINIUM LOUVRE BATTEN SCREEN
- SCN-02** ALUMINIUM VERTICAL BATTEN SCREEN

NOTE: LANDSCAPE & PLANTING INDICATIVE ONLY. REFER LANDSCAPE ARCHITECT DRAWING FOR MORE INFORMATION



1 BUILDING ELEVATION - BUILDING 1 - SOUTH

SCALE 1:250 @ A3

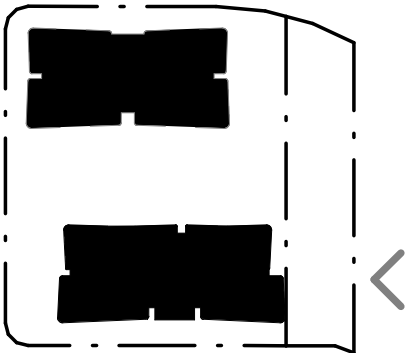
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BUILDING ELEVATIONS - BUILDING 1 - EAST

LEGEND

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CON-02	APPLIED FINISH - WARM WHITE FINISH
REN-01	APPLIED FINISH - SANDSTONE LOOK FINISH
GLZ-01	GLAZING - CLEAR
BAL-01	VERTICAL METAL BALUSTRADE
SCN-01	ALUMINIUM LOUVRE BATTEN SCREEN
SCN-02	ALUMINIUM VERTICAL BATTEN SCREEN

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1 BUILDING ELEVATION - BUILDING 1 - EAST

SCALE 1:250 @ A3



SCALE As indicated @ A3 SIZE

BUILDING ELEVATIONS - BUILDING 2 - NORTH

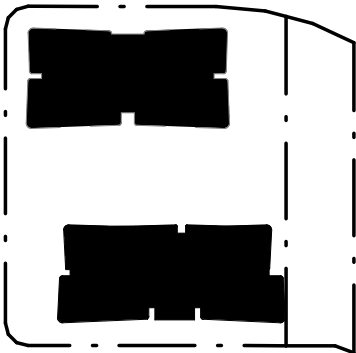
LEGEND

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REN-01	APPLIED FINISH - SANDSTONE LOOK FINISH
GLZ-01	GLAZING - CLEAR
BAL-01	VERTICAL METAL BALUSTRADE
SCN-01	ALUMINIUM LOUVRE BATTEN SCREEN
SCN-02	ALUMINIUM VERTICAL BATTEN SCREEN
NOTE: LANDSCAPE & PLANTING INDICATIVE ONLY. REFER LANDSCAPE ARCHITECT DRAWING FOR MORE INFORMATION	

LIFT OVERRUN B2	SSL AHD 53.900
ROOF B2	SSL AHD 52.700
ROOFTOP B2	SSL AHD 49.000
LEVEL 12	SSL AHD 45.600
LEVEL 11	SSL AHD 42.450
LEVEL 10	SSL AHD 39.300
LEVEL 09	SSL AHD 36.150
LEVEL 08	SSL AHD 33.000
LEVEL 07	SSL AHD 29.850
LEVEL 06	SSL AHD 26.700
LEVEL 05	SSL AHD 23.550
LEVEL 04	SSL AHD 20.400
LEVEL 03	SSL AHD 17.250
LEVEL 02	SSL AHD 14.100
LEVEL 01	SSL AHD 9.900
GROUND LEVEL	SSL AHD 6.000

BUILDING 1 HEIGHT

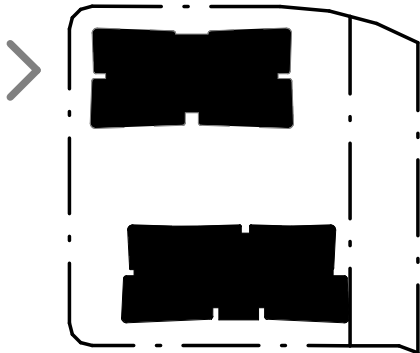
1 BUILDING ELEVATION - BUILDING 2 - NORTH
SCALE 1:250 @ A3



BUILDING ELEVATIONS - BUILDING 2 - WEST

LEGEND

CON-01	APPLIED FINISH - SANDSTONE LOOK FINISH
CON-02	APPLIED FINISH - WARM WHITE FINISH
REN-01	APPLIED FINISH - SANDSTONE LOOK FINISH
GLZ-01	GLAZING - CLEAR
BAL-01	VERTICAL METAL BALUSTRADE
SCN-01	ALUMINIUM LOUVRE BATTEN SCREEN
SCN-02	ALUMINIUM VERTICAL BATTEN SCREEN
NOTE: LANDSCAPE & PLANTING INDICATIVE ONLY. REFER LANDSCAPE ARCHITECT DRAWING FOR MORE INFORMATION	



1 BUILDING ELEVATION - BUILDING 2 - WEST

SCALE 1:250 @ A3



SCALE As indicated @ A3 SIZE

BUILDING ELEVATIONS - BUILDING 2 - SOUTH

LEGEND

CON-01	APPLIED FINISH - SANDSTONE LOOK FINISH
CON-02	APPLIED FINISH - WARM WHITE FINISH
REN-01	APPLIED FINISH - SANDSTONE LOOK FINISH
GLZ-01	GLAZING - CLEAR
BAL-01	VERTICAL METAL BALUSTRADE
SCN-01	ALUMINIUM LOUVRE BATTEN SCREEN
SCN-02	ALUMINIUM VERTICAL BATTEN SCREEN
NOTE: LANDSCAPE & PLANTING INDICATIVE ONLY. REFER LANDSCAPE ARCHITECT DRAWING FOR MORE INFORMATION	

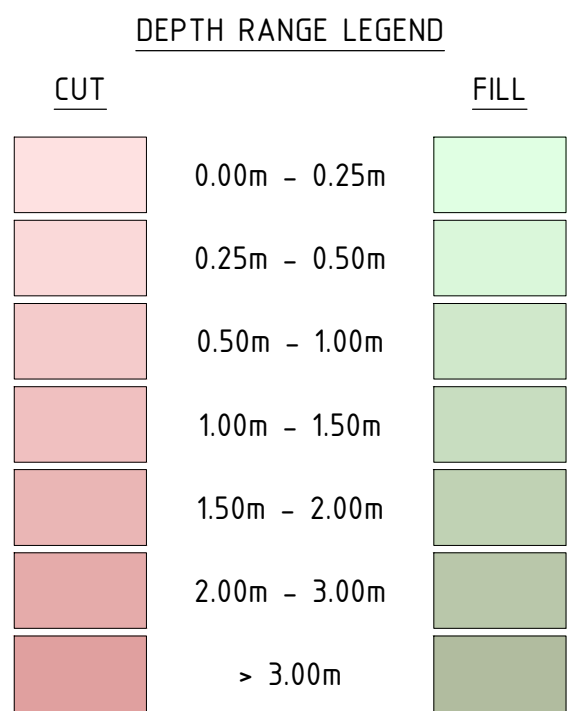
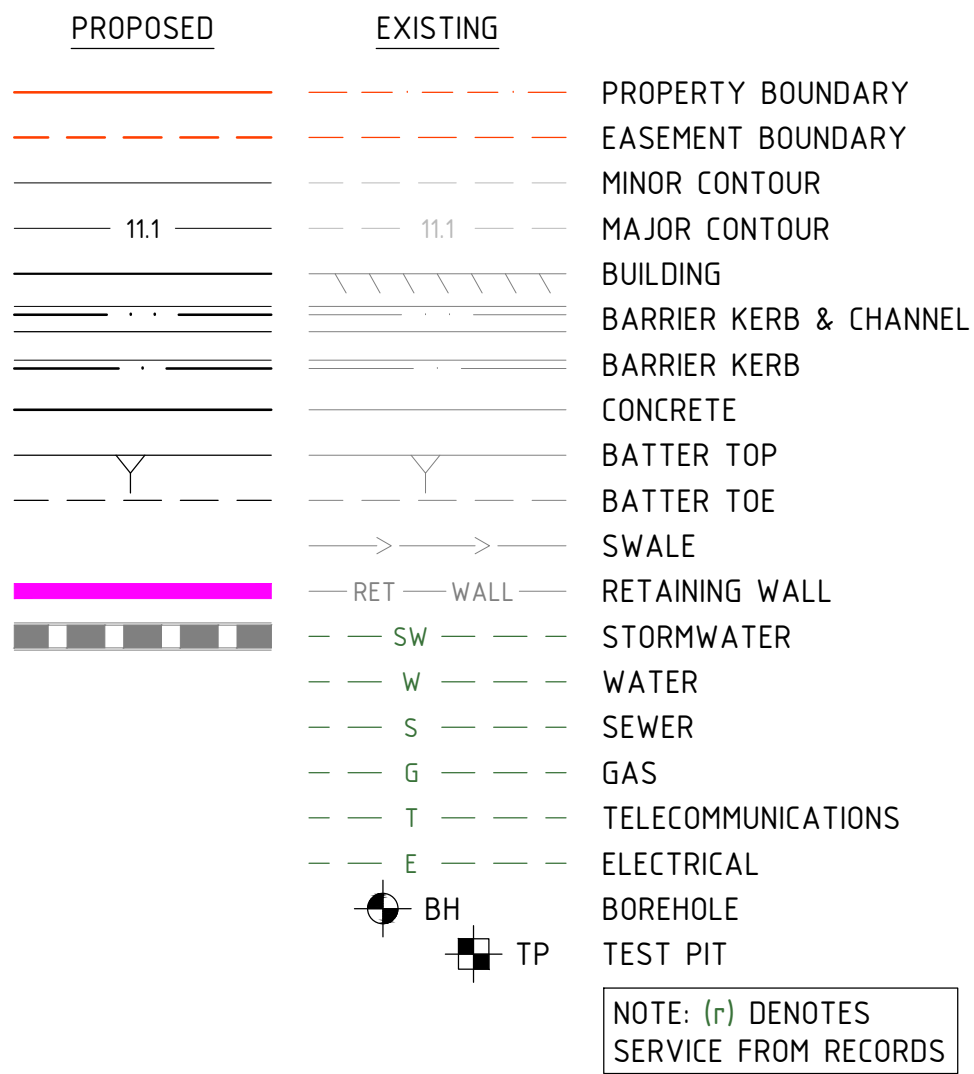


1 BUILDING ELEVATION - BUILDING 2 - SOUTH

SCALE 1:250 @ A3

DA2203 | DEVELOPMENT APPLICATION | ISSUE 3 | 10.07.26

Appendix C – Civil Drawings



BATTER BACKFILL VOLUMES

BACKFILL FROM CUT BATTER = 1,125m³
BACKFILL VOLUME HAS BEEN CALCULATED BETWEEN EARTHWORKS SURFACE AND DESIGN SURFACE.

INDICATIVE EARTHWORKS VOLUMES

100mm STRIP (NOM.) = 665m³
CUT = 14,210m³
FILL = 0m³
NOTE: EXCAVATION FOR FOOTINGS, BEAMS, STORMWATER PITS, SERVICE TRENCHES AND BACKFILL BEHIND RETAINING WALLS IS CONSIDERED TO BE DETAILED EARTHWORKS AND IS NOT INCLUDED AS PART OF THIS DESIGN. CONTRACTOR TO MAKE ALLOWANCE.

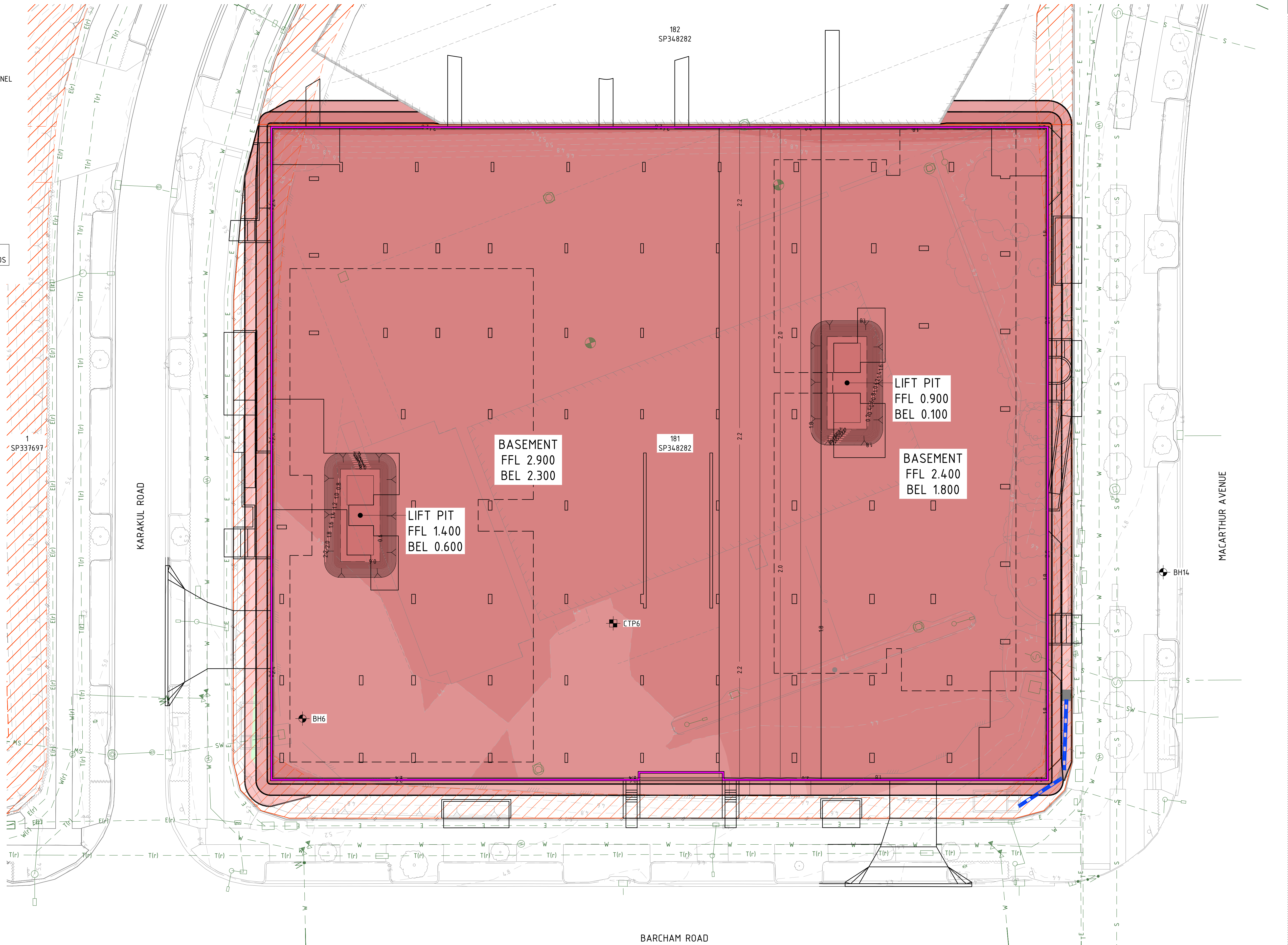
NOTE

A GEOTECHNICAL INVESTIGATION HAS BEEN CARRIED OUT BY CORE CONSULTANTS, REFERENCE No. J002466-001 DATED JULY 2024.

THIS REPORT MUST BE READ IN ITS ENTIRETY PRIOR TO CONSTRUCTION AND ALL WORKS TO COMPLY WITH GEOTECHNICAL REPORT RECOMMENDATIONS.

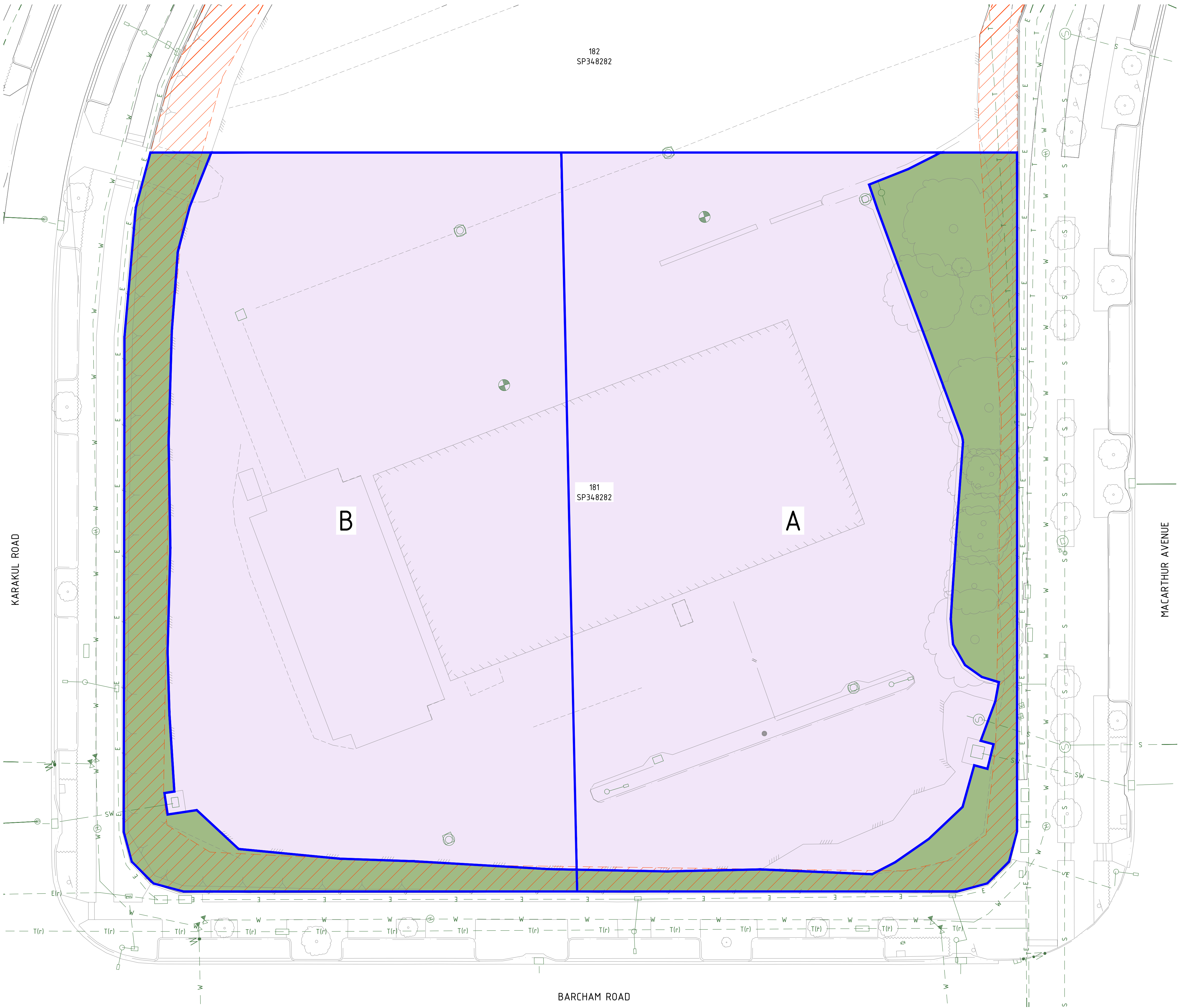
ANY UNSUITABLE MATERIAL AND/OR UNCONTROLLED FILL ENCOUNTERED IS TO BE TREATED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

ALL TEMPORARY BATTERS ARE SHOWN INDICATIVELY AND MUST BE CONSTRUCTED IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S SPECIFICATIONS.



RPEQ NAME RPEQ No. DATE SIGNATURE		WARNING THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING SERVICES ON AND EXTERIOR TO THE SITE INCLUDING WATER MAINS, SEWER MAINS, GAS MAINS, TELECOMMUNICATIONS CABLES, ELECTRICAL CABLES, AND STORMWATER PIPES PRIOR TO WORKS COMMENCING. SHOULD ANY CONFLICTS OCCUR, EDGE CONSULTING ENGINEERS ARE TO BE NOTIFIED IMMEDIATELY. ANY DAMAGE TO EXISTING SERVICES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.		SCALE 1:200 @A1		EDGE CONSULTING ENGINEERS www.edgece.com The concepts + information contained in this document are the copyright of EDGE Consulting Engineers. Use or copying of this document in whole or in part without the written permission of EDGE Consulting Engineers constitutes an infringement of copyright. DO NOT SCALE DRAWINGS. IF IN DOUBT, ASK!		Brisbane, Australia 2 Maynard Street, Woolloongabba, Queensland, 4102 Australia T: +61 7 3392 3471 E: brisbane@edgece.com		Project Name LOT 18B NORTHSHORE HAMILTON 260 MACARTHUR AVENUE HAMILTON QLD 4007		Drawing Title BULK EARTHWORKS PLAN	
Client SILVERSTONE DEVELOPMENTS		Designed ST		Drawn ST		Checked		Project No. AU250166		Drawing No. CA201		Revision P02	
												PRELIMINARY NOT FOR CONSTRUCTION	

CATCHMENT	DESCRIPTION	AREA (m ²)	TOTAL AREA (m ²)	% IMPERVIOUS	TOTAL % IMPERVIOUS
A	IMPERVIOUS	2707	3331	100%	81%
	PERVIOUS	624		0%	
B	IMPERVIOUS	2800	3292	100%	85%
	PERVIOUS	492		0%	

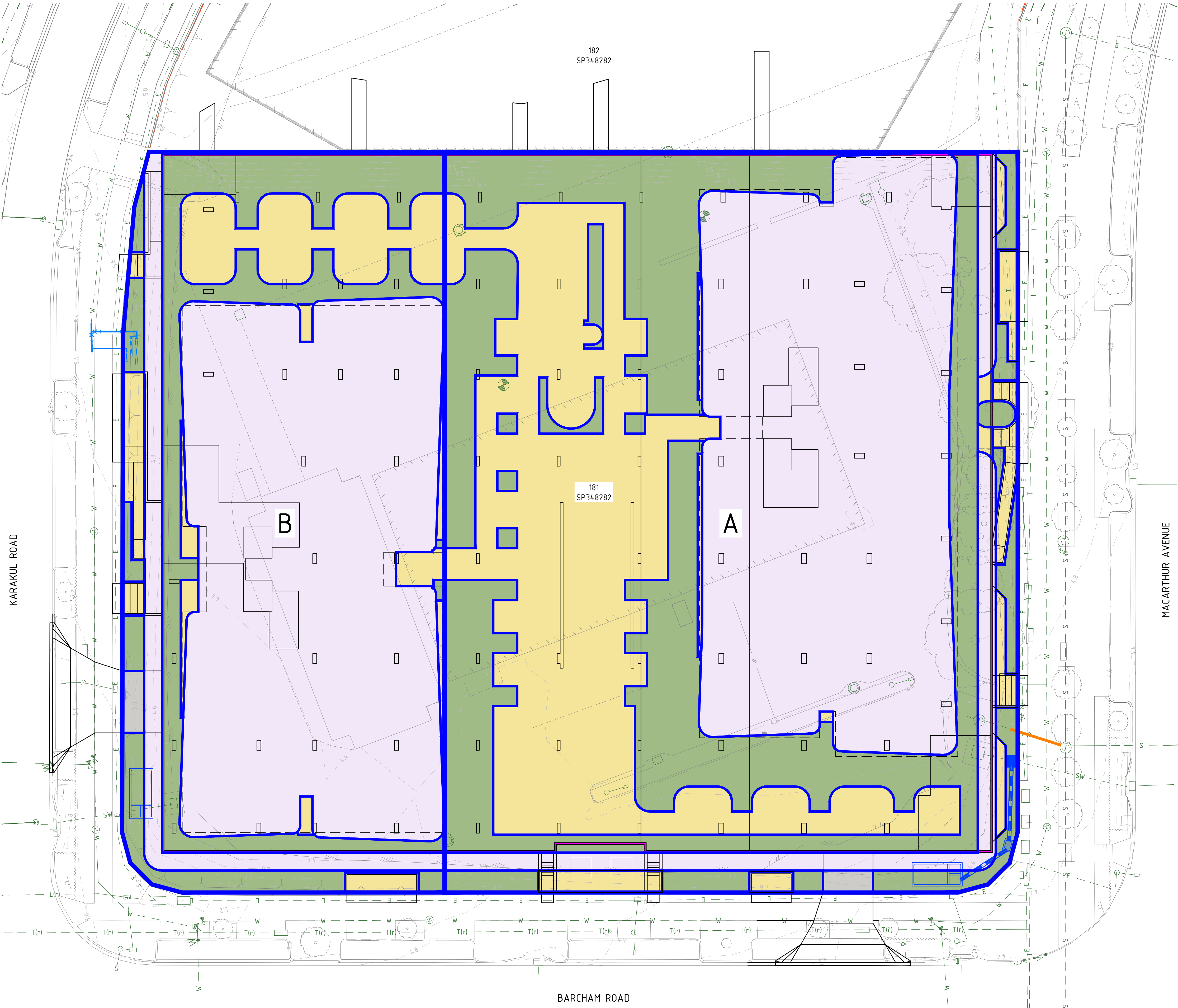


RPEO NAME RPEO No. _____ DATE _____ SIGNATURE _____	WARNING THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING SERVICES ON AND EXTERIOR TO THE SITE INCLUDING WATER MAINS, SEWER MAINS, GAS MAINS, TELECOMMUNICATIONS CABLES, ELECTRICAL CABLES, AND STORMWATER PIPES PRIOR TO WORKS COMMENCING. SHOULD ANY CONFLICTS OCCUR, EDGE CONSULTING ENGINEERS ARE TO BE NOTIFIED IMMEDIATELY. ANY DAMAGE TO EXISTING SERVICES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.	  SCALE 1:200 @A1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">P01</td> <td style="width: 10%;">17.07.26</td> <td style="width: 55%;">PRELIMINARY ISSUE</td> <td style="width: 10%;">ST</td> <td style="width: 10%;">MS</td> </tr> <tr> <td>Rev</td> <td>Date</td> <td>Description</td> <td>By</td> <td>Ctk</td> </tr> </table>	P01	17.07.26	PRELIMINARY ISSUE	ST	MS	Rev	Date	Description	By	Ctk	 www.edgece.com The concepts + information contained in this document are the copyright of EDGE Consulting Engineers. Use or copying of this document in whole or in part without the written permission of EDGE Consulting Engineers constitutes an infringement of copyright. DO NOT SCALE DRAWINGS. IF IN DOUBT, ASK!	Brisbane, Australia 2 Maynard Street, Woolloongabba, Queensland, 4102 Australia T: +61 7 3392 3671 E: brisbane@edgece.com	Project Name LOT 18B NORTHSHORE HAMILTON 260 MACARTHUR AVENUE HAMILTON QLD 4007 Client SILVERSTONE DEVELOPMENTS <table style="width: 100%;"> <tr> <td>Designed</td> <td>Drawn</td> <td>Checked</td> </tr> <tr> <td>ST</td> <td>ST</td> <td></td> </tr> </table>	Designed	Drawn	Checked	ST	ST		Drawing Title PRE DEVELOPMENT CATCHMENT PLAN Project No. AU250166 Drawing No. CA391 Revision P01 PRELIMINARY NOT FOR CONSTRUCTION
P01	17.07.26	PRELIMINARY ISSUE	ST	MS																			
Rev	Date	Description	By	Ctk																			
Designed	Drawn	Checked																					
ST	ST																						

POST DEVELOPMENT CATCHMENT TABLE

CATCHMENT		DESCRIPTION	AREA (m ²)	TOTAL AREA (m ²)	% IMPERVIOUS	TOTAL % IMPERVIOUS
A	CAPTURED	ROOF	1646	4254	100%	67%
		ROAD	11		100%	
		LANDSCAPE (IMPERVIOUS)	1214		100%	
		LANDSCAPE (PERVIOUS)	1383		0%	
B	CAPTURED	ROOF	1530	2369	100%	78%
		ROAD	15		100%	
		LANDSCAPE (IMPERVIOUS)	313		100%	
		LANDSCAPE (PERVIOUS)	511		0%	

- PROPOSED ROOF CATCHMENT
- PROPOSED ROAD CATCHMENT
- PROPOSED LANDSCAPE (IMPERVIOUS) CATCHMENT
- PROPOSED LANDSCAPE (PERVIOUS) CATCHMENT



RPEQ NAME

RPEQ No. DATE

SIGNATURE

WARNING

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SHOULD ANY CONFLICTS OCCUR, EDGE CONSULTING ENGINEERS ARE TO BE NOTIFIED IMMEDIATELY.

ANY DAMAGE TO EXISTING SERVICES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

04

SCALE 1:200 @A1

Rev

Date

Description

By

Chk

IM

MS

ST

MS

29/07/26

PRELIMINARY ISSUE

17/07/26

PRELIMINARY ISSUE

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100% 100% 100% 100%

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2 Maynard Street,
Woolloongabba,
Queensland, 4102
Australia

T: +61 7 3392 3471
E: brisbane@edgece.com

Project Name

LOT 18B NORTHSHORE HAMILTON
260 MACARTHUR AVENUE
HAMILTON QLD 4007

Client

SILVERSTONE DEVELOPMENTS

Designed

Drawn

Checked

ST

ST

Drawing Title

POST DEVELOPMENT CATCHMENT PLAN

Project No.

AU250166

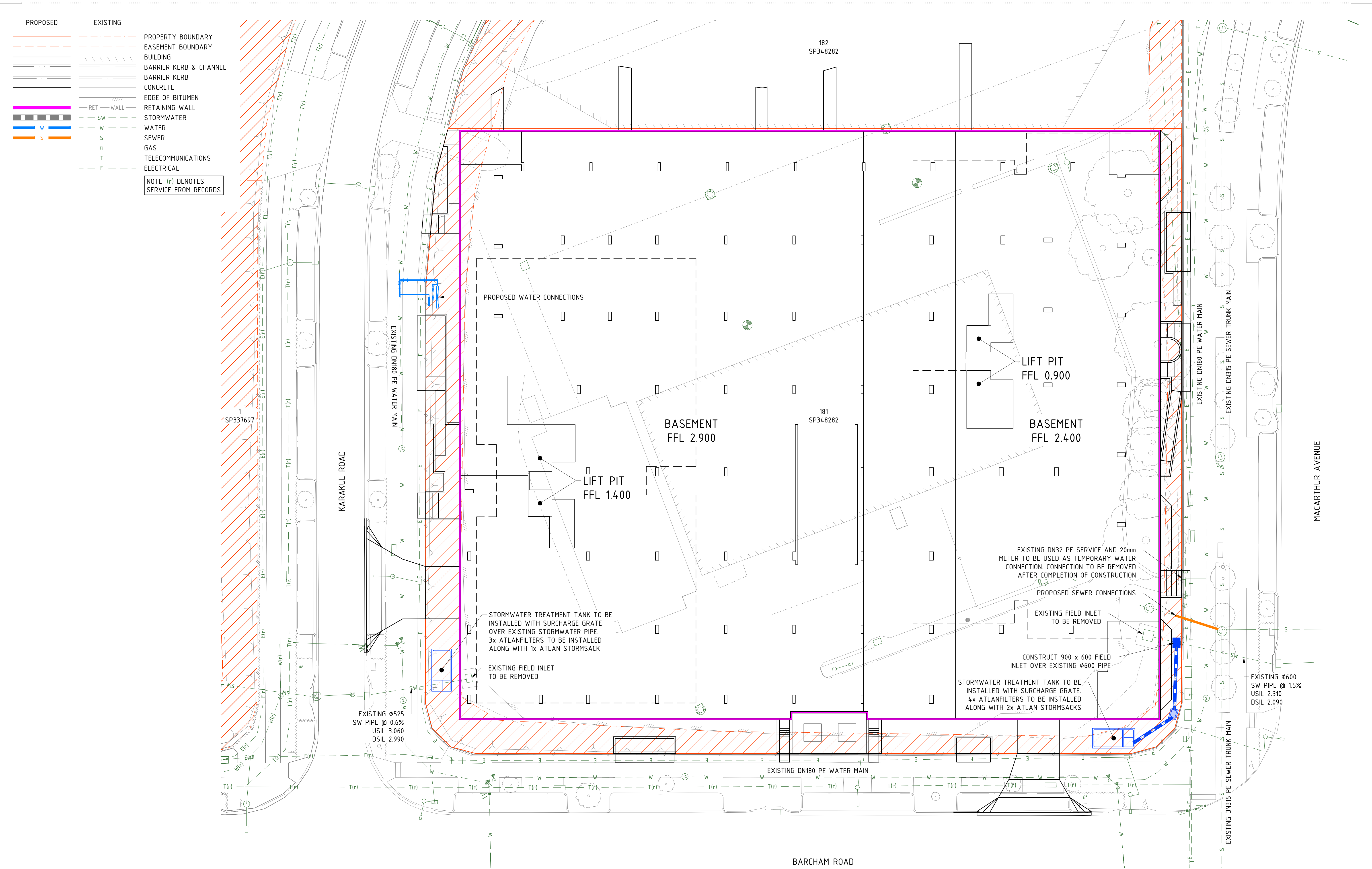
Drawing No.

CA392

Revision

P02

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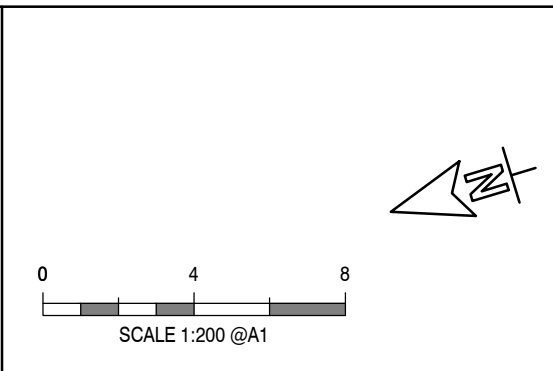
RPEQ NAME	
RPEQ No.	DATE
SIGNATURE	

WARNING

THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING SERVICES ON AND EXTERIOR TO THE SITE INCLUDING WATER MAINS, SEWER MAINS, GAS MAINS, TELECOMMUNICATIONS CABLES, ELECTRICAL CABLES, AND STORMWATER PIPES PRIOR TO WORKS COMMENCING.

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ANY DAMAGE TO EXISTING SERVICES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.



Rev	Date	Description	By	Chk
P02	29.07.26	PRELIMINARY ISSUE	IM	MS
P01	17.07.26	PRELIMINARY ISSUE	ST	MS

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Project Name LOT 18B NORTHSHORE HAMILTON 260 MACARTHUR AVENUE HAMILTON QLD 4007		
Client SILVERSTONE DEVELOPMENTS		
Designed ST	Drawn ST	Checked

Drawing Title SERVICE CONNECTIONS PLAN	
Project No. AU250166	
Drawing No. CA601	Revision P02

**PRELIMINARY
NOT FOR CONSTRUCTION**

Appendix D – BYDA

[Review responses online](#) ↗


Received 6 of 6 responses

All responses received

280 Macarthur Avenue, Hamilton QLD 4007

Job dates

17/07/2026 → 17/07/2026

These plans expire on

14 Aug 2026

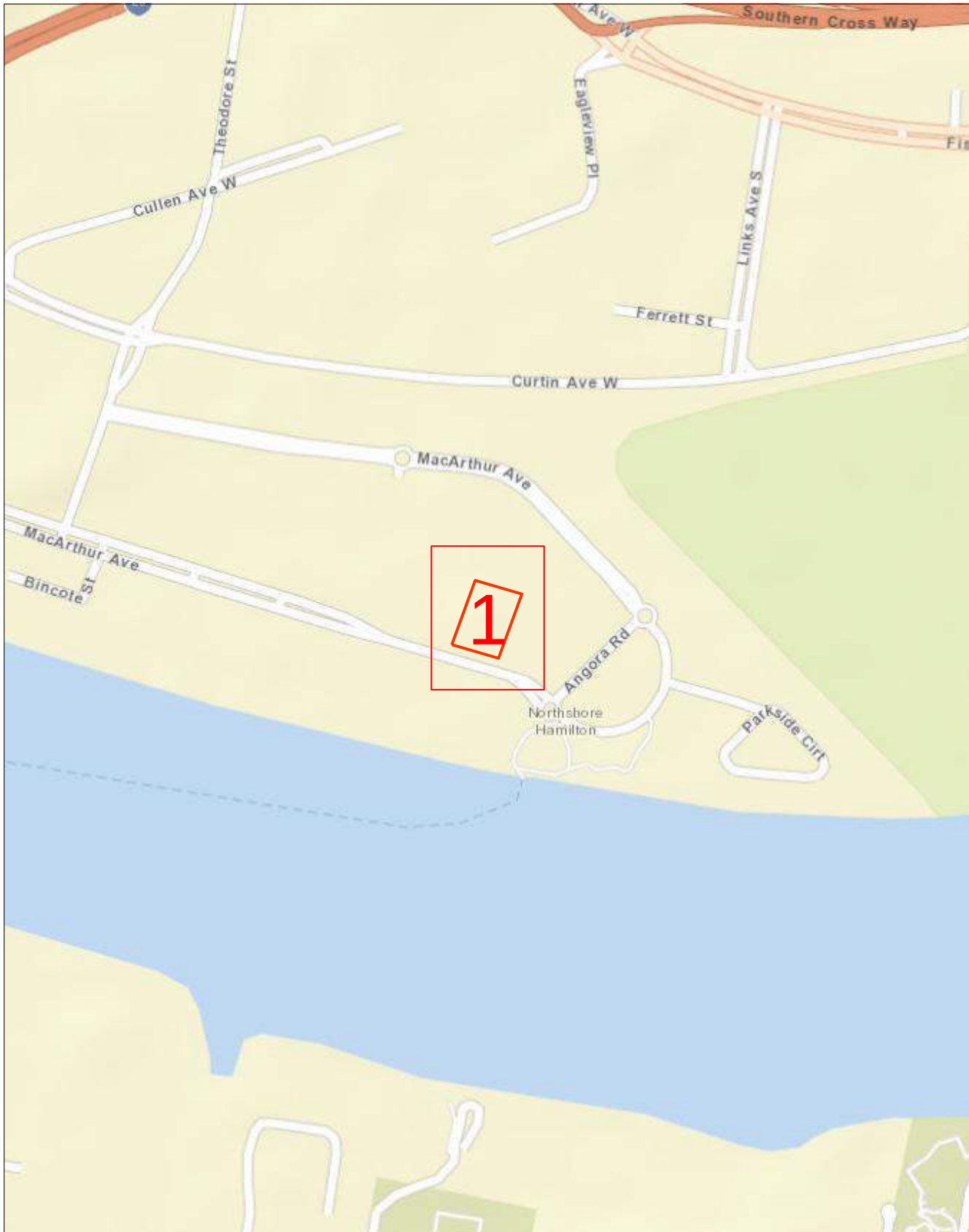
Lodged by

Matthew Sauer

Authority	Status	Page
✉ BYDA Confirmation		2
🏠 APA Group Gas Networks (70710)	Received	4
🏠 Brisbane City Council	Received	15
🏠 Energex QLD	Received	18
🏠 NBN Co Qld	Received	63
🏠 Queensland Urban Utilities	Received	74
🏠 Telstra QLD South East	Received	79

Site 280 Macarthur Avenue
Address: Hamilton
QLD 4007

Sequence 276297453
Number:



Scale 1: 6000

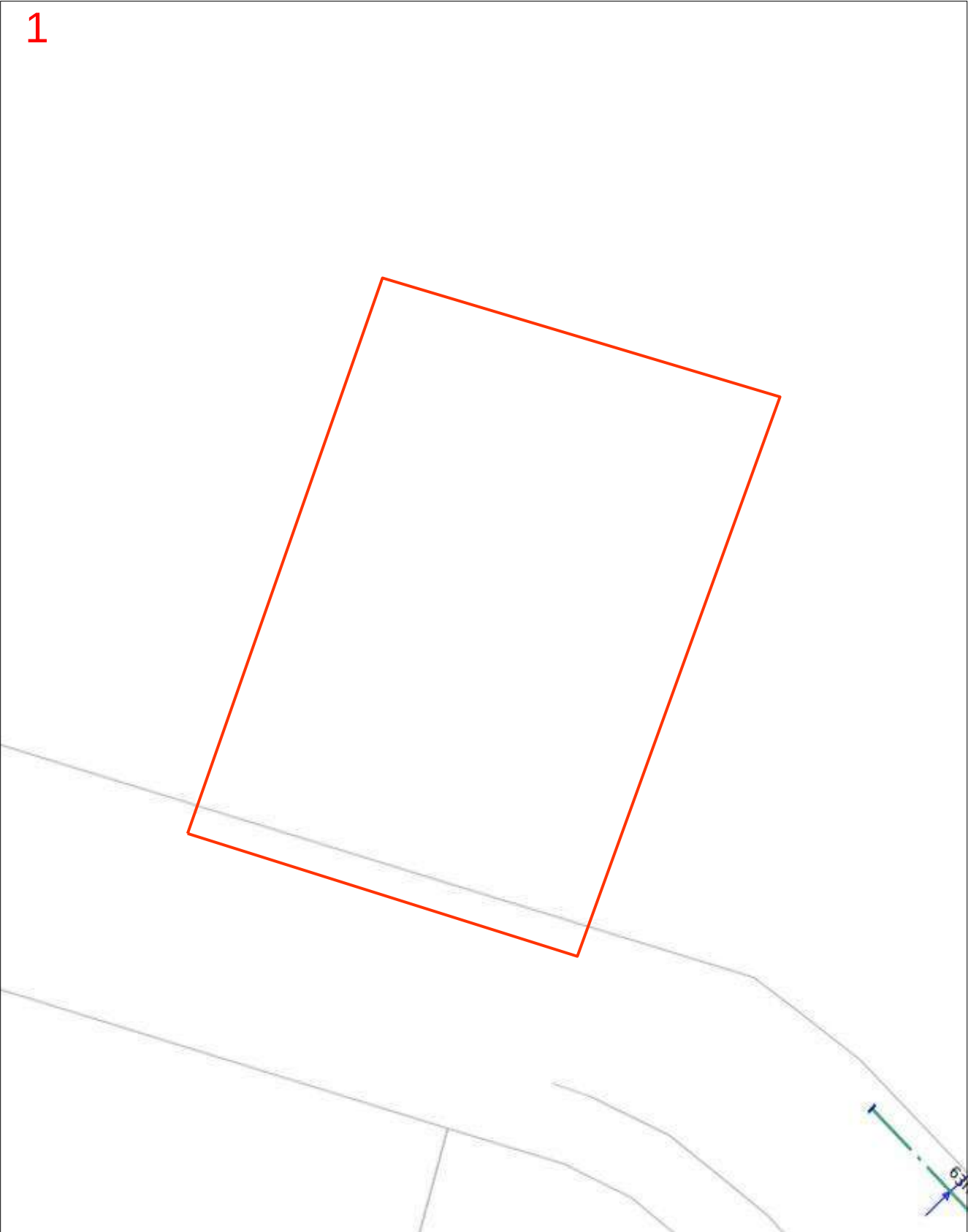
Map Sources: Esri, Garmin, HERE, FAO, NOAA, USGS,
© OpenStreetMap contributors, and the GIS User Community



Enquiry Area

Map Key Area







-RE
6HT
3URYLGHU, %ULVEDQH &LW\ &RXQFLO
7HOHSKRQH,



/HJHQG
%<'\$(QTXLU\

'LVFODLPHU,
% %ULVEDQH &LW\ &RXQFLO > @
,Q FRQVLGHUDWLRO RI &RXQFLO D
RZQHUV OLVWHG EHORZ SHUPLWWLO
\RX DFNQRZOHGJH DQG DJUHH WKDW
FRS\ULJKW RZQHUV JLYH QR ZDUUDQ
GDWD LQFOXGLQJ DFFXUD\ UHOLD
FXUUHQ\ RU VXLWDELOLW\ DQG
LQFOXGLQJ ZLWKRXW OLPLDWLRO
IRU DQ\ ORVV GDPDJH RU FRV
FRQVHTXHQLDO GDPDJH UHODWLQ
GDWD
'DWD PXVW QRW EH XVHG IRU GLUH
XVHG LQ EUHDFK RI WKH SULYDF\ OD
&RS\ULJKW RI GDWD LV DV IROORZV,
&DGDVWUH DQG 6WUHHW 1DPHV %
4XHHQVODQG 'HSDUWPHQW RI 1DW
OLQHV DQG (QHUJ\
&DXWLRO, 7KLW PDS PD\ FRQWDLQ
DEDQGROHG XQGHUJURXQG DVEHVW
JLYHV QR ZDUUDQW\ WR WKH FRPSOH
RI WKHVH UHFRUGV \$\$\$SRSULDWH
WDNHQ LQ DOO FDVHV



OVERVIEW

CAUTION - HIGH
VOLTAGE

Substation

Cable Marker

Pit

Pole

Pillar

LV Cable (up to 1kV)

HV Cable (1kV - <33kV)

HV Cable (33kV and over)

Pit Boundary

Planned Work Area

\$6 &DWHJRUI 3' 30'

PH
W
WK
Q
O
LV
KH
R
IR
FH

\$OO XQGHUJURXQG FDEOHV VKDOO EH WUHDWHG DV EHLQJ HQHUJLVHG :KHUH D FDEOH LV ORFDWHG WKDW LV
QRW UHSUHVHQWHG RQ WKH (1(5*(; %<\$ PDS WKHQ (1(5*(; VKDOO EH FRQWDFWHG LPPHGLDWHO\

)RU (PHUJHQF\ 6LWXDWLRQV
3OHDVH &DOO

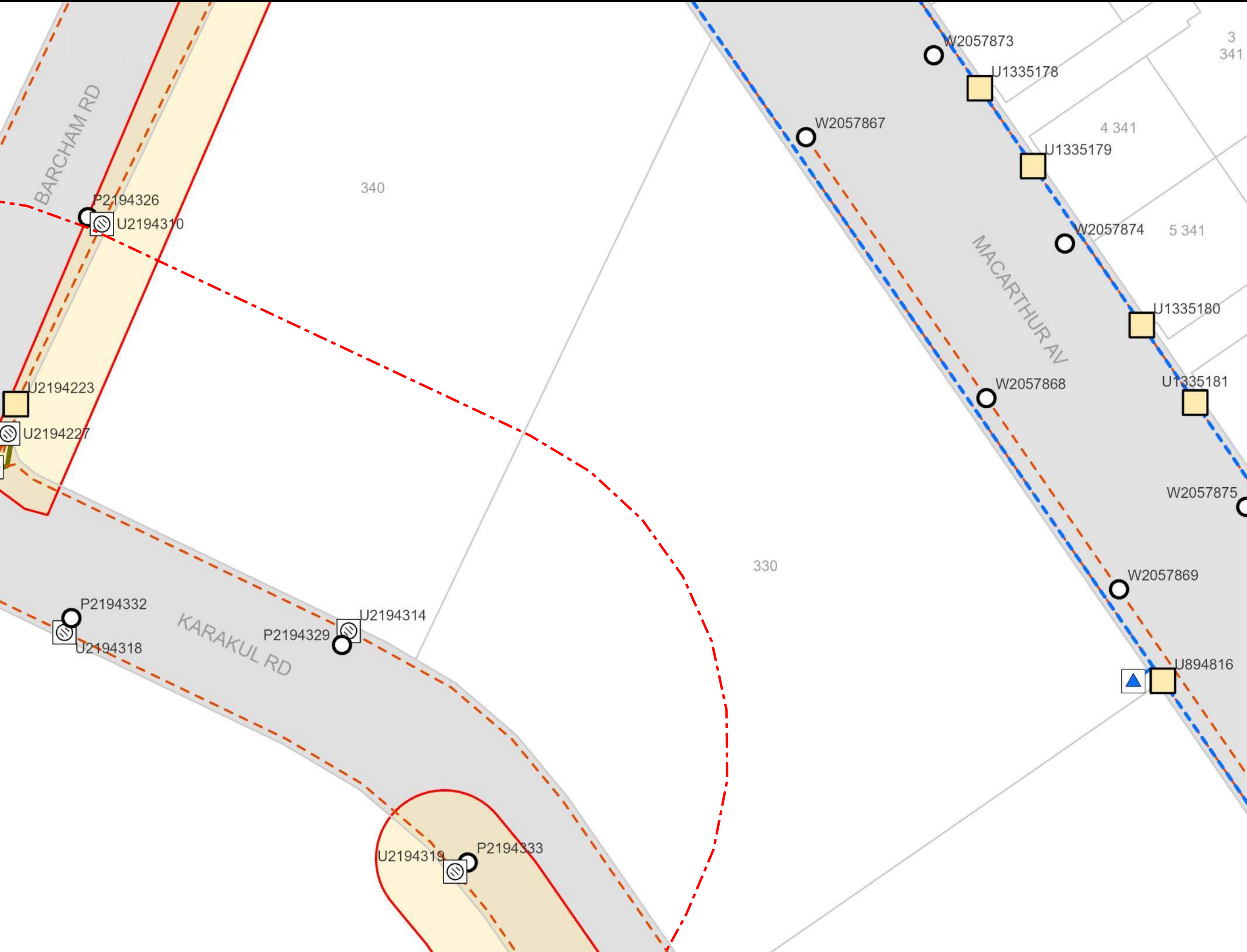


CAUTION - HIGH
VOLTAGE

- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Work Area

\$6" & DWHJRUL 3" 3"

PH
W
WK
Q
O
LV
KH
R
IR
FH



CAUTION - HIGH
VOLTAGE

Legend:

- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Work Area

\$6 & DWHJRUI 3' 30'

PH
W
WK
Q
Q
LV
KH
R
IR
FH



CAUTION - HIGH
VOLTAGE

- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Work Area

\$6 &DWHJRUI 3' 30'

PH
W
WK
Q
Q
LV
KH
R
IR
FH



CAUTION - HIGH
VOLTAGE

- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Work Area

\$ 6 & D W H J R U \ 3 ' ' 3 O

P H
W
W K
Q
O
L V
K H
R
I R
F H

To: Matthew Sauer
Phone: Not Supplied
Fax: Not Supplied
Email: msauer@edgece.com

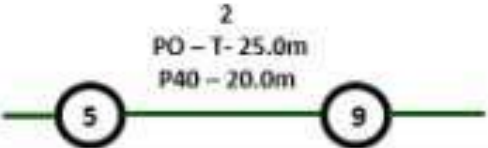
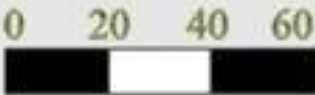
Dial before you dig Job #:	53720575	 BEFORE YOU DIG www.byda.com.au Zero Damage - Zero Harm
Sequence #	276297448	
Issue Date:	17/07/2026	
Location:	280 Macarthur Avenue , Hamilton , QLD , 4007	

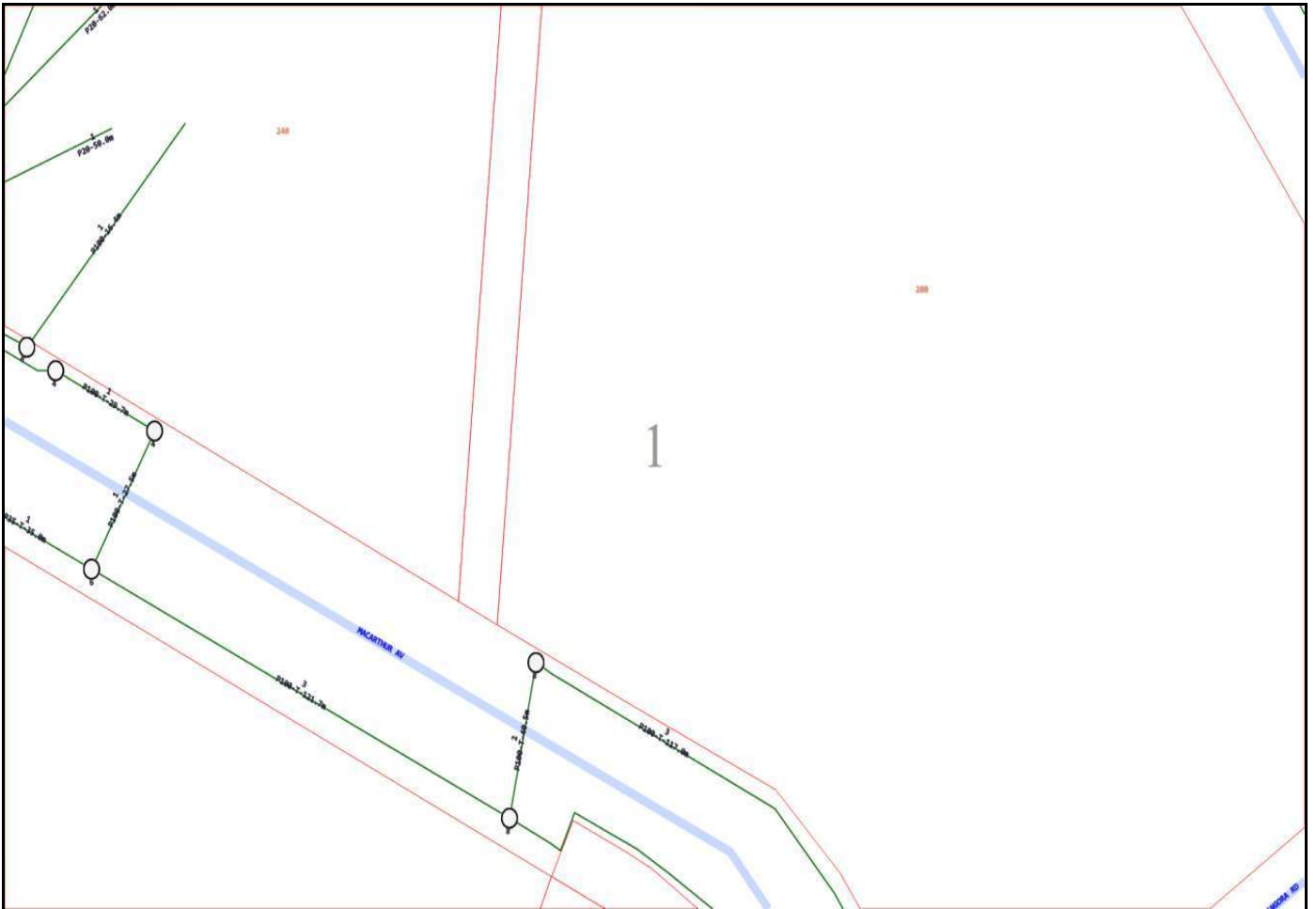
Indicative Plans are tiled below to demonstrate how to layout and read nbn asset plans



LEGEND



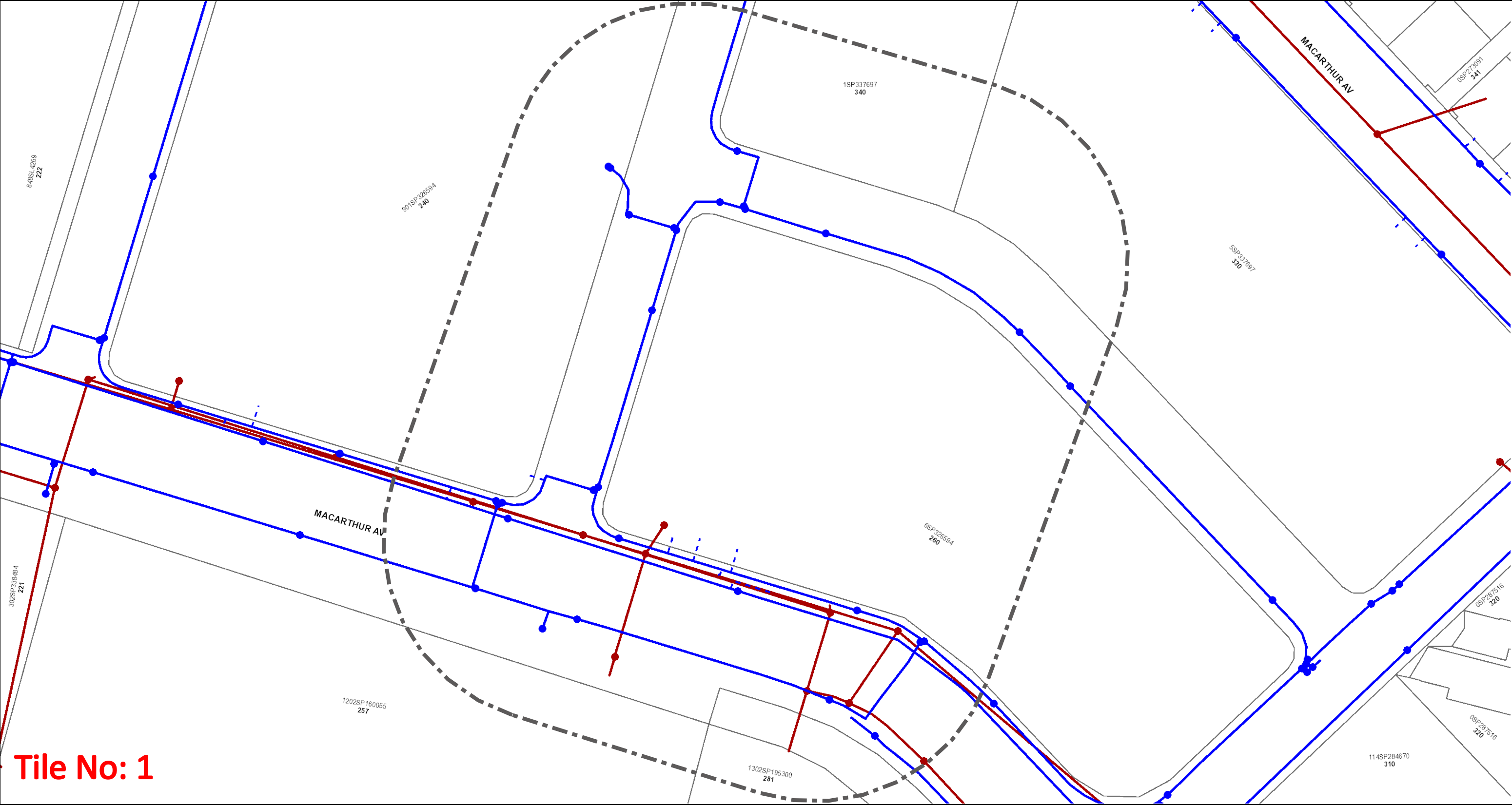
	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
	2 Direct buried cables between pits of sizes, "5" and "9" are 10.0m apart.
	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
	Road and the street name "Broadway ST"
Scale	 Meters 1:2000 1 cm equals 20 m



Emergency Contacts

You must immediately report any damage to the **nbn**[™] network that you are/become aware of. Notification may be by telephone - 1800 626 329.

Urban Utilities - Water, Recycled Water and Sewer Infrastructure





N



Map Scale
1:1000

Before You Dig Australia- Urban Utilities Water, Recycled Water and Sewer Infrastructure

BYDA Reference No: 276297450

Date BYDA Ref Received: 17/07/2026

Date BYDA Job to Commence: 17/07/2026

Date BYDA Map Produced: 17/07/2026

This Map is valid for 30 days Produced By: Urban Utilities

Sewer	Water	Recycled Water
• Infrastructure	• Infrastructure	• Infrastructure
◆ Major Infrastructure	◆ Major Infrastructure	◆ Major Infrastructure
— Network Pipelines	— Network Pipelines	— Network Pipelines
▨ Network Structures	▨ Network Structures	▨ Network Structures
	--- Water Service (Indicative only)	

While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Urban Utilities nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

The plans are indicative and approximate only and provided without warranties of any kind, express or implied including in relation to accuracy, completeness, correctness, currency or fitness for purpose.

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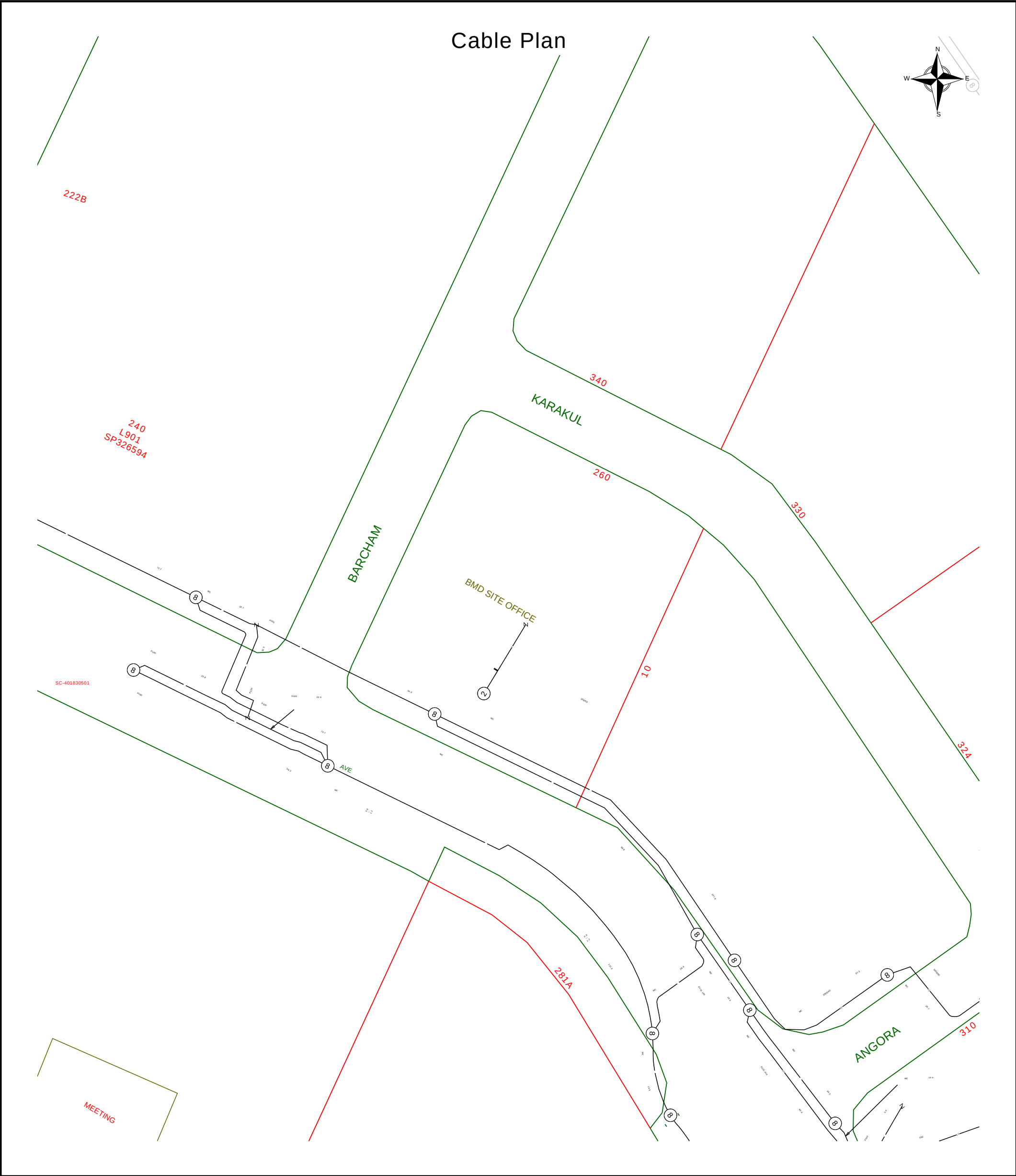
This plan should be used as guide only. Any dimensions should be confirmed on site by the relevant authority.

Based on or contains data provided by the State of Queensland (Department of Natural Resources and Mines) [2020]. In consideration of the State permitting the use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws. © State of Queensland Department of Natural Resources and Mines [2020]

For further information, please call Urban Utilities on 13 26 57 (8am-6pm weekdays). Faults and emergencies 13 23 64 (24/7).

www.urbanutilities.com.au

ABN 86 673 835 011



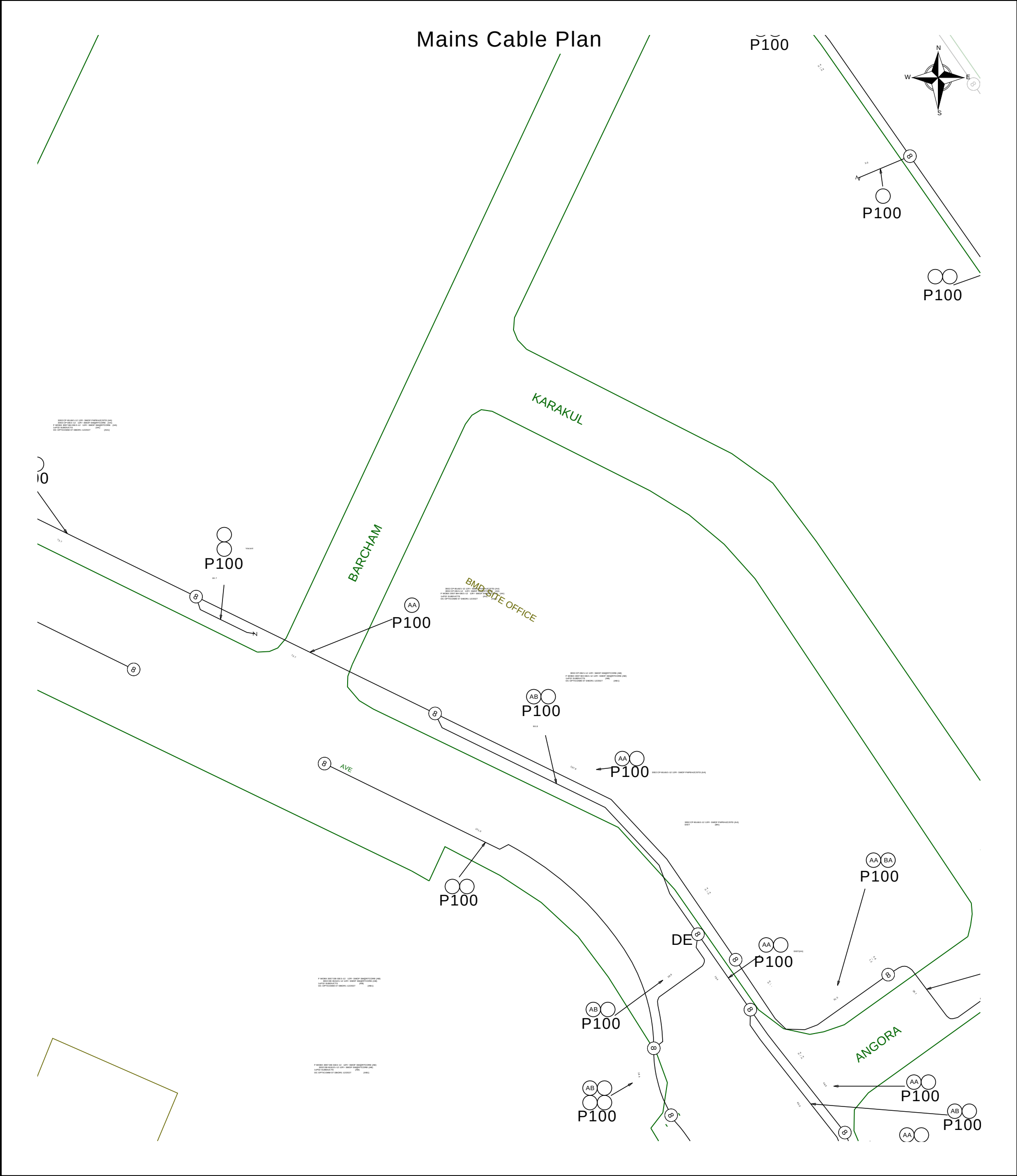
	Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra- Ph - 13 22 03 Email - Telstra.Plans@team.telstra.com Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries	Sequence Number: 276297452
	TELSTRA LIMITED A.C.N. 086 174 781	CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact InfraCo Plan Services should you require any assistance.
	Generated On 17/07/2026 12:46:17	

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING
Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy. Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work. A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

Page 1 of 2



	Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra- Ph - 13 22 03 Email - Telstra.Plans@team.telstra.com Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries	Sequence Number: 276297452
TELSTRA LIMITED A.C.N. 086 174 781 Generated On 17/07/2026 12:46:21		CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact InfraCo Plan Services should you require any assistance.

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING

Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy. Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work. A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

Appendix E – BCC Code Response

8.2.15 Potential and actual acid sulfate soils overlay code

8.2.15.1 Application

1. This code applies to assessing development in the Potential and actual acid sulfate soils overlay, if:
 - a. assessable development where this code is an applicable code identified in the assessment benchmarks column of a table of assessment for an overlay (section 5.10); or
 - b. impact assessable development.

Note—Where the natural ground level is greater than 20m AHD, the Potential and actual acid sulfate soils overlay code does not apply.

Editor's note—Where the Potential and actual acid sulfate soils overlay code does not apply, it is recommended that acid sulfate soil be appropriately managed in other circumstances as well. For example, installing a piped drain may not disturb much soil but could result in a degraded asset.

2. Land in the Potential and actual acid sulfate soils overlay is identified on the Potential and actual acid sulfate soils overlay map and is included in the following sub-categories:
 - a. Potential and actual acid sulfate soils sub-category;
 - b. Land at or below 5m AHD sub-category;
 - c. Land above 5m AHD and below 20m AHD sub-category.
3. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—Where this code includes performance outcomes or acceptable outcomes that relate to acid sulfate soils, an acid sulfate soil investigation report, or an acid sulfate soil management plan, guidance is provided in the Potential and actual acid sulfate soils planning scheme policy.

8.2.15.2 Purpose

1. The purpose of the Potential and actual acid sulfate soils overlay code is to:
 - a. Implement the policy direction in the Strategic framework, in particular Theme 2: Brisbane's outstanding lifestyle and Element 2.3 — Brisbane's healthy and safe communities.
 - b. Provide for the assessment of the suitability of development in the Potential and actual acid sulfate soils overlay.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development ensures that the release of an acid and associated metal contaminant is avoided by not disturbing acid sulfate soils when excavating, removing soil or extracting groundwater or filling land.
 - b. Development ensures that disturbed acid sulfate soils or drainage waters are treated and, if required, ongoing management practices are adopted that minimise the potential for environmental harm from acid sulfate soil and protect corrodible assets from acid sulfate soil.
 - c. Development is located, designed and constructed to avoid the mobilisation and release of iron compounds for coastal algal blooms.

8.2.15.3 Performance outcomes and acceptable outcomes

Table 8.2.15.3—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
PO1 Development protects the environmental values and ecological health of receiving waters and does not subject assets to accelerated corrosion.	AO1 Development ensures that: a. no potential or actual acid sulfate soils are disturbed; or Note—This can be demonstrated through the submission of an acid sulfate soil investigation report with reference to the Potential and actual acid sulfate soils planning scheme policy. b. the disturbance impacts in an area that hosts potential acid sulfate soils are appropriately managed, if less than 500m³ of soil is disturbed and the watertable is not affected; or Note—This can be demonstrated through the submission of an acid sulfate soil investigation report and a preliminary acid sulfate soil management plan, with reference to the Potential and actual acid sulfate soils planning scheme policy. c. impacts are appropriately managed if 500m³ or more of soil is disturbed or the watertable in an area that hosts potential or actual acid sulfate soils is affected. Note—This can be demonstrated through the submission of an acid sulfate soil investigation report and a full acid sulfate soil management plan, with reference to the Potential and actual acid sulfate soils planning scheme policy using levels of testing commensurate with the level of risk. If the investigation demonstrates that an acid sulfate soil management plan is not required, only an investigation report is required.	A detailed acid sulfate soils management plan will be prepared by the geotechnical engineer.

9.4.3 Filling and excavation code

9.4.3.1 Application

1. This code applies to assessing:
 - a. accepted development subject to compliance with identified requirements, where acceptable outcomes of this code are identified requirements in a table of assessment for an overlay (section 5.10); or
 - b. operational work for filling or excavation which is assessable development if this code is an applicable code identified in the assessment benchmarks column of a table of assessment for operational work (section 5.8) or an overlay (section 5.10); or
 - c. a material change of use or reconfiguring a lot if:
 - i. assessable development where this code is identified as a prescribed secondary code in the assessment benchmarks column of a table of assessment for material change of use (section 5.5) or reconfiguring a lot (section 5.6); or
 - ii. impact assessable development, to the extent relevant.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—This code does not apply to building work as defined in the Act.

Note—A development application involving a rock anchor within an adjoining site is submitted with proof of consent from an adjoining land and building owner.

Editor's note—Guidance on managing the spread of invasive species in filling or excavation activities is provided in Minimising Pest Spread Advisory Guidelines prepared for the Petroleum industry.

Editor's note—Where filling or excavation is conducted on land previously occupied by a notifiable activity or on land listed on the Environmental Management Register or the Contaminated Land Register, the relevant Queensland Government department should be contacted for advice and guidelines.

2. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—Where this code includes performance outcomes or acceptable outcomes that relate to:

- air quality assessment, guidance is provided in the Air quality planning scheme policy;
- ecological assessment, koala habitat or development design, guidance is provided in the Biodiversity areas planning scheme policy;
- retaining wall construction, guidance is provided in the Infrastructure design planning scheme policy;
- landscape design, guidance is provided in the Landscape design guidelines for water conservation planning scheme policy;
- noise and dust impacts during construction and/or demolition, guidance is provided in the Management plans planning scheme policy;
- noise impact assessment, guidance is provided in the Noise impact assessment planning scheme policy;
- the selection of planting species, guidance is provided in the Planting species planning scheme policy;
- significant vegetation, guidance is provided in the Vegetation planning scheme policy.

Editor's note—For a proposal to be accepted development, subject to compliance with identified requirements, it must meet all the identified acceptable outcomes of this code and any other applicable code. Where it does not meet all identified acceptable outcomes, the proposal becomes assessable development and a development application is required. Where a development application is triggered, only the specific acceptable outcome that the proposal fails to meet needs to be assessed against the corresponding acceptable outcome or performance outcome and relevant overall outcomes. Other identified acceptable outcomes that are met are not assessed as part of the development application.

9.4.3.2 Purpose

1. The purpose of the Filling and excavation code is to assess the suitability of development for filling or excavation.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. filling or excavation does not adversely affect the visual character and amenity of the site or the surrounding area and provides access for maintenance to any structure as a result of filling or excavation.
 - b. filling or excavation does not adversely impact significant vegetation, water quality or drainage of upstream, downstream and adjoining land.
 - c. filling or excavation effectively manages the impacts associated with the activity.
 - d. filling or excavation and any retaining structure is designed and constructed to be fit for purpose and to protect services and utilities.

9.4.3.3 Performance outcomes and acceptable outcomes

Table 9.4.3.3.A—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
PO1 Development for filling or excavation minimises visual impacts from retaining walls and earthworks.	AO1 Development ensures that the total height of any cut and fill, whether or not retained, does not exceed: a. 2.5m in a zone in the Industry zones category; b. 1m in all other zones, or if adjoining a sensitive zone.	Will comply
PO2 Development of a retaining wall proposed as a result of filling or excavation: a. is designed and constructed to be fit for purpose; b. does not impact adversely on significant vegetation; c. is capable of easy maintenance. Editor's note—A retaining wall also needs to comply with the Building Regulation and embankment gradients will need to comply with the Building Regulation. Note—Guidance on the protection of native vegetation is included in the Biodiversity areas planning scheme policy.	AO2.1 Development of a retaining structure, including footings, surface drainage and subsoil drainage: a. is wholly contained within the site; b. if the total height to be retained is greater than 1m, then: i. the retaining wall at the property boundary is no greater than 1m above the ground level; ii. all further terracing from the 1m high boundary retaining wall is 1 vertical unit:1 horizontal unit; iii. the distance between each successive retaining wall (back of lower wall to face of	Will comply

	higher wall) is no less than 1m horizontally to incorporate planting areas. AO2.2 Development of a retaining wall over 1m in height protects significant vegetation on the site and on adjoining land and is designed and constructed in accordance with the structures standards in the Infrastructure design planning scheme policy and certified by a Registered Professional Engineer Queensland. AO2.3 Development provides a retaining wall finish that presents to adjoining land that is maintenance free if the setback is less than 750mm from the boundary. AO2.4 Development for filling only uses clean fill that does not include any construction rubble, debris, weed seed or viable parts of plant species listed as an undesirable plant species in the Planting species planning scheme policy.	
PO3 Development ensures that a rock anchor is designed and constructed to be fit for purpose.	AO3 Development ensures that a rock anchor: - is constructed in accordance with the standards in the Infrastructure design planning scheme policy; - where it extends beyond the property boundary, is supported by a letter of consent from the adjoining land and building owners.	N/A
PO4 Development protects all services and public utilities.	AO4 Development protects services and public utilities and ensures that any alteration or relocation of services or	Will comply

	public utilities meets the standard design specifications of the responsible service authorities.	
PO5 Development provides surface and sub-surface drainage to prevent water seepage, concentration of run-off or ponding of stormwater on adjacent land.	AO5 Development ensures all flows and subsoil drainage are directed to a lawful point of discharge of a surface water diversion drain, including to the top or toe of a retaining wall in accordance with the stormwater drainage section of the Infrastructure design planning scheme policy.	Will comply
PO6 Development ensures that the design and construction of all open drainage works is undertaken in accordance with natural channel design principles, being the development of a stormwater conveyance system for major flows, by using a vegetated open channel or drain that approximates the features and functions of a natural waterway to enhance or improve riparian values of those stormwater conveyance systems. Editor's note—Guidance on natural channel design principles can be found in the Council's publication Natural channel design guidelines.	AO6 Filling or excavation does not involve the construction of open drainage.	N/A. Development does not propose open drainage.
PO7 Development for filling or excavation: a. does not degrade water quality or adversely affect environmental values in receiving waters; b. ensures site sediment and erosion control standards are best practice.	AO7.1 Development for filling or excavation provides water quality treatment that complies with the stormwater drainage section of the Infrastructure design planning scheme policy. AO7.2 Development provides erosion and sediment control standards that are in accordance with the stormwater drainage section of the Infrastructure design planning scheme policy.	Will comply

PO8 Development for filling or excavation is conducted such that adverse impacts at a sensitive use due to noise and dust are prevented or minimised. Note—A noise and dust impact management plan prepared in accordance with the Management plans planning scheme policy can assist in demonstrating achievement of this performance outcome.	AO8.1 Development ensures that no dust emissions extend beyond the boundary of the site, including dust from construction vehicles entering and leaving the site. AO8.2 Development for filling or excavation activity only occurs between the hours of 6:30am and 6:30pm Monday to Saturday, excluding public holidays.	Will comply
PO9 Development ensures that vibration generated by the filling or excavation operation does not exceed the vibration criteria in Table 9.4.3.3.B, Table 9.4.3.3.C, Table 9.4.3.3.D and Table 9.4.3.3.E. Note—A noise management report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome.	AO9 Development involving filling or excavation does not cause a ground-borne vibration beyond the boundary of the site.	Will comply
PO10 Development ensures that heavy trucks hauling material to and from the site do not affect the amenity of established areas and limits environmental nuisance impact on adjacent land.	AO10 Development ensures that heavy trucks hauling material to and from the site: a. occur for a maximum of 3 weeks; b. use a major road to access the site; c. only use a minor road for the shortest-most-direct route that has the least amount of environmental nuisance if there is no major road alternative.	Will comply
PO11 Development for filling or excavation protects the environment and community health and wellbeing from exposure to contaminated land and contaminated material.	AO11 Development does not involve: a. excavation on land previously occupied by a notifiable activity or on land listed on the Environmental Management Register or the Contaminated Land Register; b. filling with material containing a contaminant.	Will comply

PO12 Development provides for: a. landscaping for water conservation purposes; b. water sensitive urban design measures which are employed within the landscape design to maximise stormwater use and to reduce any adverse impacts on the landscape; c. stormwater harvesting to be maximised and any adverse impacts of stormwater minimised.	AO12.1 Development provides landscaping which is designed using the standards in the Landscape design guidelines for water conservation planning scheme policy.	Will comply
	AO12.2 Development ensures that the design and requirements for irrigation are in compliance with the standards in the Landscape design guidelines for water conservation planning scheme policy.	
	AO12.3 Development provides areas of pavement, turf and mulched garden beds which are drained. Note—This may be achieved through the provision and/or treatment of swales, spoon drains, field gullies, sub-surface drainage and stormwater connections.	
PO13 Development ensures cutting and filling for the development of canals or artificial waterways avoids adverse impacts on coastal resources and processes.	AO13 Development does not involve the creation of canals or artificial waterways.	N/A. Development does not propose canals or artificial waterways.

Table 9.4.3.3.B— Recommended intermittent vibration levels for cosmetic damage

Type of building	Peak particle velocity (mm/s)		
Reinforced or framed structures; industrial and heavy commercial buildings	50mm/s at 4Hz and above		
Unreinforced or light-framed structures; residential or light-commercial type buildings	Below 4Hz	4Hz to 15Hz	15Hz and above
	0.6mm/s	15mm/s at 4Hz increasing to 20mm/s at 15Hz	20mm/s at 15Hz increasing to

				50mm/s at 40Hz and above
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Table 9.4.3.3.C— Recommended blasting vibration levels for human comfort

Type of building	Type of blasting operations	Peak component particle velocity (mm/s)
Residences, educational establishments and places of worship	Operation blasting longer than 12 months or more than 20 blasts	5mm/s for 95% blasts per year 10mm/s maximum unless agreement is reached with the occupier that a higher limit may apply
Residences, educational establishments and places of worship	Operations lasting for less than 12 months or less than 20 blasts	10mm/s maximum unless agreement is reached with the occupier that a higher limit may apply
Industry or commercial premises	All blasting	25 mm/s maximum unless agreement is reached with the occupier that a higher limit may apply. For sites containing equipment sensitive to vibration, the vibration should be kept below manufacturer's specifications or levels that do not adversely affect the equipment operation.

Table 9.4.3.3.D— Recommended levels for continuous and impulsive vibration acceleration (m/s²) 1–80Hz for human comfort

Location	Assessment period ⁽¹⁾	Preferred values ⁽³⁾		Maximum values ⁽³⁾	
Continuous vibration		z-axis	x and y axes	z-axis	x and y axes
Critical areas ⁽²⁾	Day or night	0.005 m/s ²	0.0036 m/s ²	0.01 m/s ²	0.0072 m/s ²
Residences	Day	0.01 m/s ²	0.0071 m/s ²	0.02 m/s ²	0.014 m/s ²
-	Night	0.007 m/s ²	0.005 m/s ²	0.014 m/s ²	0.01 m/s ²

Offices, educational establishments and places of worship	Day or night	0.02 m/s ²	0.014 m/s ²	0.04 m/s ²	0.028 m/s ²
Workshops	Day or night	0.04 m/s ²	0.029 m/s ²	0.08 m/s ²	0.058 m/s ²
Impulsive vibration					
Critical areas	Day or night	0.005 m/s ²	0.0036 m/s ²	0.01 m/s ²	0.0072 m/s ²
Residences	Day	0.3 m/s ²	0.21 m/s ²	0.6 m/s ²	0.42 m/s ²
-	Night	0.1 m/s ²	0.071 m/s ²	0.2 m/s ²	0.14 m/s ²
Offices, educational establishments and places of worship	Day or night	0.64 m/s ²	0.46 m/s ²	1.28 m/s ²	0.92 m/s ²
Workshops	Day or night	0.64 m/s ²	0.46 m/s ²	1.28 m/s ²	0.92 m/s ²

Note—

(1) Day is 7am to 10pm and night is 10pm to 7am.

(2) Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring.

(3) Situations exist where vibration above the preferred values can be acceptable, particularly for temporary or short-term events. Further guidance is given in the Noise impact assessment planning scheme policy.

Table 9.4.3.3.E— Recommended vibration dose values for intermittent vibration (m/s^{1.75}) for human comfort

Location	Daytime ⁽¹⁾		Night time ⁽¹⁾	
	Preferred value	Maximum value	Preferred value ⁽³⁾	Maximum value ⁽³⁾
Critical areas ⁽²⁾	0.1 m/s ^{1.75}	0.2 m/s ^{1.75}	0.1 m/s ^{1.75}	0.2 m/s ^{1.75}
Residences	0.2 m/s ^{1.75}	0.4 m/s ^{1.75}	0.13 m/s ^{1.75}	0.26 m/s ^{1.75}
Offices, educational establishments and places of worship	0.4 m/s ^{1.75}	0.8 m/s ^{1.75}	0.4 m/s ^{1.75}	0.8 m/s ^{1.75}

Workshops	0.8 m/s ^{1.75}	1.6 m/s ^{1.75}	0.8 m/s ^{1.75}	1.6 m/s ^{1.75}
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Note—

⁽¹⁾ Day is 7am to 10pm and night is 10pm to 7am.

⁽²⁾ Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring.

⁽³⁾ Situations exist where vibration above the preferred values can be acceptable, particularly for temporary or short-term events. Further guidance is given in the Noise impact assessment planning scheme policy.

9.4.4 Infrastructure design code

9.4.4.1 Application

1. This code applies to assessing a material change of use, reconfiguring a lot or building work if:
 - a. assessable development where this code is identified as a prescribed secondary code in the assessment benchmarks column of a table of assessment for a material change of use (section 5.5), reconfiguring a lot (section 5.6), operational work (section 5.8), or an overlay (section 5.10); or
 - b. impact assessable development, to the extent relevant.
2. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—Where this code includes performance outcomes or acceptable outcomes that relate to:

- ecological assessment, koala habitat or development design, guidance is provided in the Biodiversity areas planning scheme policy;
- infrastructure design and construction works, guidance is provided in the Infrastructure design planning scheme policy;
- noise and dust impacts during construction and/or demolition, guidance is provided in the Management plans planning scheme policy;
- noise impact assessment, guidance is provided in the Noise impact assessment planning scheme policy;
- refuse and recycling, guidance is provided in the Refuse planning scheme policy;
- parking or servicing management during construction, guidance is provided in the Transport, access, parking and servicing planning scheme policy.

9.4.4.2 Purpose

1. The purpose of the Infrastructure design code is to assess the suitability of infrastructure for development.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development is provided with a safe, connected and efficient transport network for all modes that has a minimal whole-of-life cost.
 - b. Development provides for public utilities and services to the standards acceptable to the Council and the reasonable expectations of service providers.
 - c. Development involving infrastructure which is intended to become a Council asset is safe, aesthetically pleasing, functional, fit for purpose, durable, minimises environmental impacts and has minimal whole-of-life cost.
 - d. Development provides for a public space to be safe and inviting, allowing high levels of pedestrian activity.
 - e. Development ensures that the community and environment are not unreasonably disrupted or impacted by construction or demolition for the development.
 - f. Development involving infrastructure is designed with consideration of, and to integrate with, other related and interfacing infrastructure components.
 - g. Development accessed by common private title is provided with appropriate fire hydrant infrastructure and has unimpeded access for refuse vehicles and for emergency service vehicles to protect people, property and the environment.
 - h. Development ensures major electricity infrastructure and bulk water supply infrastructure identified on the State Planning Policy Interactive Mapping System is not compromised.
 - i. Development for major electricity infrastructure and bulk water supply infrastructure identified on the State Planning Policy Interactive Mapping System avoids or otherwise minimises adverse impacts on surrounding land uses.

9.4.4.3 Performance outcomes and acceptable outcomes

Table 9.4.4.3.A—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
PO1 Development provides roads, pavement, edging and landscaping which: a. are designed and constructed in accordance with the road hierarchy; b. provide for safe travel for pedestrians, cyclists and vehicles; c. provide access to properties for all modes; d. provide utilities; e. provide high levels of aesthetics and amenity, improved liveability and future growth; f. provide for the amelioration of noise and other pollution; g. provide a high-quality streetscape; h. provide a low-maintenance asset with a minimal whole-of-life cost. Note—This can be demonstrated in an engineering report prepared and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.	AO1 Development provides roads and associated pavement, edging and landscaping which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	N/A. No external roadworks proposed.
PO2 Development provides road pavement surfaces which: a. are well designed and constructed; b. durable enough to carry the wheel loads of the intended types and numbers of travelling and parked vehicles; c. ensures the safe passage of vehicles, pedestrians and cyclists, the discharge of stormwater run-off and the preservation of all-weather access;	AO2 Development provides road pavement surfaces which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	N/A. No external roadworks proposed.

d. allows for reasonable travel comfort.		
PO3 Development provides a pavement edge which is designed and constructed to: a. control vehicle movements by delineating the carriageway for all users; b. provide for people with disabilities by allowing safe passage of wheelchairs and other mobility aids.	A03 Development provides pavement edges which are designed and constructed in compliance with the road corridor design standards in the Infrastructure design planning scheme policy.	N/A. No external roadworks proposed.
PO4 Development provides verges which are designed and constructed to: a. provide safe access for pedestrians clear of obstructions and access areas for vehicles onto properties; b. provide a sufficient area for public utility services; c. be maintainable by the Council.	A04 Development provides verges which are designed and constructed in compliance with the road corridor design and streetscape locality advice standards in the Infrastructure design planning scheme policy.	Will comply
PO5 Development provides a lane or laneway identified on the Streetscape hierarchy overlay map or in a neighbourhood plan which: a. allows equitable access for all modes; b. is safe and secure; c. has 24-hour access; d. is a low-speed shared zone environment; e. has a high-quality streetscape.	A05 Development provides a lane or laneway identified on the Streetscape hierarchy overlay map or in a neighbourhood plan which is embellished in compliance with the streetscape locality advice standards in the Infrastructure design planning scheme policy.	N/A
PO6 Development of an existing premises provides at the frontage to the site, if not already provided, the following infrastructure to an appropriate urban standard: a. an effective, high-quality paved roadway; b. an effective, high-quality roadway kerb and channel;	A06 Development of an existing premises provides at the frontage of the site, if not already existing, the following infrastructure to the standard that would have applied if the development involved new premises as stated in the road corridor design standards in the Infrastructure design planning scheme policy:	N/A. No external roadworks proposed.

c. safe, high-quality vehicle crossings over channels and verges; d. safe, accessible, high-quality verges compatible and integrated with the surrounding environment; e. safe vehicle access to the site that enables ingress and egress in a forward gear; f. provision of and required alterations to public utilities; g. effective drainage; h. appropriate conduits to facilitate the provision of required street-lighting systems and traffic signals.	a. concrete kerb and channel; b. forming and grading to verges; c. crossings over channels and verges; d. a constructed bikeway; e. a constructed verge or reconstruction of any damaged verge; f. construction of the carriageway; g. payment of costs for required alterations to public utility mains, services or installations; h. construction of and required alterations to public utility mains, services or installations; i. drainage works; j. installation of electrical conduits.	
PO7 Development provides both cycle and walking routes which: a. are located, designed and constructed to their network classification (where applicable); b. provide safe and attractive travel routes for pedestrians and cyclists for commuter and recreational purposes; c. provide safe and comfortable access to properties for pedestrians and cyclists; d. incorporate water sensitive urban design into stormwater drainage; e. provide for utilities; f. provide for a high level of aesthetics and amenity, improved liveability and future growth; g. are a low-maintenance asset with a minimal whole-of-life cost; h. minimise the clearing of significant native vegetation. Note—This can be demonstrated in an engineering report prepared and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.	AO7 Development provides cycle and walking routes which are located, designed and constructed in compliance with the road corridor design and off-road pathway design standards in the Infrastructure design planning scheme policy.	N/A. No external roadworks proposed.

PO8 Development provides refuse and recycling collection, separation and storage facilities that are located and managed so that adverse impacts on building occupants, neighbouring properties and the public realm are minimised.	AO8.1 Development provides refuse and recycling collection and storage facilities in accordance with the Refuse planning scheme policy. AO8.2 Development ensures that refuse and recycling collection and storage location and design do not have any adverse impact including odour, noise or visual impacts on the amenity of land uses within or adjoining the development. Note—Refer to the Refuse planning scheme policy for further guidance.	Refer traffic report and architectural drawings
PO9 Development ensures that: a. land used for an urban purpose is serviced adequately with regard to water supply and waste disposal; b. the water supply meets the stated standard of service for the intended use and fire-fighting purposes.	AO9.1 Development ensures that the reticulated water and sewerage distribution system for all services is in place before the first use is commenced. AO9.2 Development provides the lot with reticulated water supply and sewerage to a standard acceptable to the distributor–retailer.	Will comply
PO10 Development provides public utilities and street lighting which are the best current or alternative technology and facilitate accessibility, easy maintenance, minimal whole-of-life costs, and minimal adverse environmental impacts.	AO10.1 Development provides public utilities and street lighting which are located and aligned to: a. avoid significant native vegetation and areas identified within the Biodiversity areas overlay map; b. minimise earthworks; c. avoid crossing waterways, waterway corridors and wetlands or if a crossing is unavoidable, tunnel-boring techniques are used to minimise disturbance, and a disturbed area is reinstated and restored on completion of the work. Note—Guidance on the restoration of habitat is included in the Biodiversity areas planning scheme policy. AO10.2	Will comply

	Development provides compatible public utility services and street-lighting services which are co-located in common trenching for underground services. AO10.3 Development provides public utilities and street lighting which are designed and constructed in compliance with the public utilities standards in the Infrastructure design planning scheme policy.	
PO11 Development ensures that land used for urban purposes is serviced adequately with telecommunications and energy supply.	AO11 Development provides land with the following services to the standards of the approved supplier: a. electricity; b. telecommunications services; c. gas service where practicable.	Will comply
PO12 Development ensures that major public projects promote the provision of affordable, high-bandwidth telecommunications services throughout the city.	AO12 Development provides conduits which are provided in all major Council and government works projects to enable the future provision of fibre optic cabling, if: a. the additional expense is unlikely to be prohibitive; or b. further major work is unlikely or disruption would be a major concern, such as where there is a limited capacity road; or c. there is a clear gap in the telecommunications network; or d. there is a clear gap in the bandwidth available to the area. Editor's note—An accurate, digital 'as built' three-dimensional location plan is to be supplied for all infrastructure provided in a road.	N/A
PO13 Development provides public art identified in a neighbourhood plan or park concept plan which:	AO13 Development provides public art identified in a neighbourhood plan or park concept plan which is sited	N/A

a. is provided commensurate with the status and scale of the proposed development; b. is sited and designed: i. as an integrated part of the project design; ii. as conceptually relevant to the context of the location; iii. to reflect and respond to the cultural values of the community; iv. to promote local character in a planned and informed manner.	and designed in compliance with the public art standards in the Infrastructure design planning scheme policy.	
PO14 Development provides signage of buildings and spaces which promote legibility to help users find their way.	AO14 Development provides public signage: a. at public transport interchanges and stops, key destinations, public spaces, pedestrian linkages and at entries to centre developments; b. which details the location of the key destinations, public spaces and pedestrian linkages in the vicinity, the services available within the development and where they are located. Editor's note—Signage is to be in accordance with Local Law Number 1 (Control of Advertisements Local Law).	N/A
PO15 Development that provides community facilities which form part of the development is functional, safe, low maintenance, and fit for purpose.	AO15 Development that provides community facilities which form part of the development is designed in compliance with the community facilities standards in the Infrastructure design planning scheme policy.	N/A
PO16 Development provides public toilets which: a. are required as part of a community facility or park; b. are located, designed and constructed to be: i. safe; ii. durable; iii. resistant to vandalism;	AO16 Development that provides public toilets is designed and constructed in compliance with the public toilets standards in the Infrastructure design planning scheme policy.	N/A

iv. able to service expected demand; v. fit for purpose.		
PO17 Development provides bridges, tunnels, elevated structures and water access structures that are designed and constructed using proven methods, materials and technology to provide for: a. safe movement of intended users; b. an attractive appearance appropriate to the general surroundings and any adjacent structures; c. functionality and easy maintenance; d. minimal whole-of-life cost; e. longevity; f. current and future services. Note—All bridges and elevated and associated elements must be designed and certified by a Registered Professional Engineer Queensland in accordance with the Infrastructure design planning scheme policy.	AO17 Development that provides bridges, tunnels, elevated structures and water access structures is designed and constructed in compliance with the standards in the Infrastructure design planning scheme policy.	N/A
PO18 Development provides culverts which are designed and constructed using proven methods, materials and technology to provide for: a. safety; b. an attractive appearance appropriate to the general surroundings; c. functionality and easy maintenance; d. minimal whole-of-life cost; e. longevity; f. future widening; g. current and future services; h. minimal adverse impacts, such as increase in water levels or flow velocities, and significant change of flood patterns.	AO18 Development that provides culverts is designed and constructed in compliance with the structures standards in the Infrastructure design planning scheme policy.	N/A

Note—All culverts and associated elements are to be designed and certified by a Registered Professional Engineer Queensland in accordance with the applicable design standards.		
PO19 Development provides batters, retaining walls, and seawalls and river walls which are designed and constructed using proven methods, materials and technology to provide for: a. safety; b. an attractive appearance appropriate to the surrounding area; c. easy maintenance; d. minimal whole-of-life cost; e. longevity; f. minimal water seepage. Note—All retaining walls and associated elements are to be designed and certified by a Registered Professional Engineer Queensland in accordance with the applicable design standards.	AO19 Development that provides batters, retaining walls, seawalls and river walls is designed and constructed in compliance with the structures standards in the Infrastructure design planning scheme policy.	N/A
If for development with a gross floor area greater than 1,000m²		
PO20 Development ensures that construction is managed so that use of public spaces and movement on pedestrian, cyclist and other traffic routes is not unreasonably disrupted and existing landscaping is adequately protected from short- and long-term impacts. Note—The preparation of a construction management plan can assist in demonstrating achievement of this performance outcome. Note—The Transport, access, parking and servicing planning scheme policy provides advice on the management of vehicle parking and deliveries during construction.	AO20 Development ensures that during construction: a. the ongoing use of adjoining and surrounding parks and public spaces, such as malls and outdoor dining, is not compromised; b. adjoining and surrounding landscaping is protected from damage; c. safe, legible, efficient and sufficient pedestrian, cyclist and vehicular accessibility and connectivity to the wider network are maintained.	Will comply
PO21 Development ensures that construction and demolition activities are guided by measures that prevent or minimise adverse impacts including sleep disturbance at	AO21.1 Development ensures that demolition and construction: a. only occur between 6:30am and 6:30pm Monday to Saturday, excluding public holidays;	Will comply

a sensitive use, due to noise and dust, including dust from construction vehicles entering and leaving the site. Note—A noise and dust impact management plan prepared in accordance with the Management plans planning scheme policy can assist in demonstrating achievement of this performance outcome.	b. do not occur over periods greater than 6 months. AO21.2 Development including construction and demolition does not release dust emissions beyond the boundary of the site. AO21.3 Development construction and demolition does not involve asbestos-containing materials.	
PO22 Development ensures that: a. construction and demolition do not result in damage to surrounding property as a result of vibration; b. vibration levels achieve the vibration criteria in Table 9.4.4.3.B, Table 9.4.4.3.C, Table 9.4.4.3.D and Table 9.4.4.3.E. Note—A vibration impact assessment report prepared in accordance with the Noise impact assessment planning scheme policy can assist in demonstrating achievement of this performance outcome.	AO22 Development ensures that the nature and scale of construction and demolition do not generate noticeable levels of vibration.	Will comply
If for a material change of use or reconfiguring a lot in an urban area (as defined in the Regulation) involving premises that is, or will be, accessed by common private title, where involving buildings, either attached or detached, that are not covered by other legislation mandating fire hydrants		
PO23 Development ensures that fire hydrants are: a. installed and located to enable fire services to access water safely, effectively and efficiently; b. suitably identified so that fire services can locate them at all hours.	AO23.1 Above or below ground fire hydrants are provided on residential, commercial and industrial streets and private roads, at not more than 90m intervals, and at each street intersection. Note—On residential streets, above ground fire hydrants may be single outlet. On commercial and industrial streets above ground fire hydrants should have dual valved outlets. AO23.2 Fire hydrants are identified by:	N/A

	a. raised reflectorised pavement markers (RRPM) on sealed roads; b. marker posts at the fence line where on an unsealed road, as road (HR) or path (HP) hydrants.	
PO24 Development ensures road widths and construction within the development, are adequate for refuse vehicles and for fire emergency vehicles to gain access to a safe working area close to buildings and near water supplies whether or not on-street parking spaces are occupied.	AO24 Internal private roads have a minimum roadway clearance between obstructions of 3.5m wide and 4.8m high in addition to any width required for on-street parking.	N/A
Development for major electricity infrastructure and bulk water supply infrastructure identified on the State Planning Policy Interactive Mapping System where not in the Utility services zone precinct of the Special purpose zone		
PO25 Development avoids or otherwise minimises adverse impacts on surrounding land uses through the use of buffers and setbacks and the appropriate design and location of plant and operational areas within the site.	AO25 No acceptable outcome is prescribed.	N/A
Development potentially impacting on major electricity infrastructure and bulk water supply infrastructure identified on the State Planning Policy Interactive Mapping System where the infrastructure is not in the Utility services zone precinct of the Special purpose zone		
PO26 Development is sited and designed to: a. avoid safety risks to people or property; b. minimise noise and visual impacts to people and property; c. ensure the physical integrity and operation, maintenance and expansion of the infrastructure is not compromised.	AO26 No acceptable outcome is prescribed.	N/A

Table 9.4.4.3.B—Recommended intermittent vibration levels for cosmetic damage

Type of building		Peak particle velocity (mm/s)		
Reinforced or framed structures; industrial and heavy commercial buildings		50mm/s at 4Hz and above		
Unreinforced or light-framed structures; residential or light commercial type buildings	Below 4Hz	4Hz to 15Hz	15Hz and above	
	0.6mm/s	15mm/s at 4Hz increasing to 20mm/s at 15Hz	20mm/s at 15Hz increasing to 50mm/s at 40Hz and above	

Table 9.4.4.3.C—Recommended blasting vibration levels for human comfort

Type of building	Type of blasting operations	Peak component particle velocity (mm/s)
Residences, educational establishments and places of worship	Operation blasting longer than 12 months or more than 20 blasts	5mm/s for 95% blasts per year 10mm/s maximum unless agreement is reached with the occupier that a higher limit may apply
Residences, educational establishments and places of worship	Operation blasting longer than 12 months or more than 20 blasts	10mm/s maximum unless agreement is reached with the occupier that a higher limit may apply
Industry or commercial premises	All blasting	25mm/s maximum unless agreement is reached with the occupier that a higher limit may apply. For sites containing

		equipment sensitive to vibration, the vibration should be kept below manufacturer's specifications or levels that do not adversely affect the equipment operation.
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Table 9.4.4.3.D—Recommended levels for continuous and impulsive vibration acceleration (m/s^2) 1–80Hz for human comfort

Location	Assessment period ⁽¹⁾	Preferred values ⁽³⁾		Maximum values ⁽³⁾	
Continuous vibration		z-axis	x and y axes	z-axis	x and y axes
Critical areas ⁽²⁾	Day or night	0.005 m/s^2	0.0036 m/s^2	0.01 m/s^2	0.0072 m/s^2
Residences	Day	0.01 m/s^2	0.0071 m/s^2	0.02 m/s^2	0.014 m/s^2
-	Night	0.007 m/s^2	0.005 m/s^2	0.014 m/s^2	0.01 m/s^2
Offices, educational establishments and places of worship	Day or night	0.02 m/s^2	0.014 m/s^2	0.04 m/s^2	0.028 m/s^2
Workshops	Day or night	0.04 m/s^2	0.029 m/s^2	0.08 m/s^2	0.058 m/s^2
Impulsive vibration					
Critical areas	Day or night	0.005 m/s^2	0.0036 m/s^2	0.01 m/s^2	0.0072 m/s^2
Residences	Day	0.3 m/s^2	0.21 m/s^2	0.6 m/s^2	0.42 m/s^2
-	Night	0.1 m/s^2	0.071 m/s^2	0.2 m/s^2	0.14 m/s^2
Offices, educational establishments and places of worship	Day or night	0.64 m/s^2	0.46 m/s^2	1.28 m/s^2	0.92 m/s^2
Workshops	Day or night	0.64 m/s^2	0.46 m/s^2	1.28 m/s^2	0.92 m/s^2

Note—

⁽¹⁾ Day is 7am to 10pm and night is 10pm to 7am.

⁽²⁾ Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring.

⁽³⁾ Situations exist where vibration above the preferred values can be acceptable, particularly for temporary or short-term events. Further guidance is given in the Noise impact assessment planning scheme policy.

Table 9.4.4.3.E—Recommended vibration dose values for intermittent vibration ($\text{m/s}^{1.75}$) for human comfort

Location	Daytime ⁽¹⁾		Night time ⁽¹⁾	
	Preferred value	Maximum value	Preferred value ⁽³⁾	Maximum value ⁽³⁾
Critical areas ⁽²⁾	0.1 $\text{m/s}^{1.75}$	0.2 $\text{m/s}^{1.75}$	0.1 $\text{m/s}^{1.75}$	0.2 $\text{m/s}^{1.75}$
Residences	0.2 $\text{m/s}^{1.75}$	0.4 $\text{m/s}^{1.75}$	0.13 $\text{m/s}^{1.75}$	0.26 $\text{m/s}^{1.75}$
Offices, educational establishments and places of worship	0.4 $\text{m/s}^{1.75}$	0.8 $\text{m/s}^{1.75}$	0.4 $\text{m/s}^{1.75}$	0.8 $\text{m/s}^{1.75}$
Workshops	0.8 $\text{m/s}^{1.75}$	1.6 $\text{m/s}^{1.75}$	0.8 $\text{m/s}^{1.75}$	1.6 $\text{m/s}^{1.75}$

Note—

⁽¹⁾ Day is 7am to 10pm and night is 10pm to 7am.

⁽²⁾ Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring.

⁽³⁾ Situations exist where vibration above the preferred values can be acceptable, particularly for temporary or short-term events. Further guidance is given in the Noise impact assessment planning scheme policy.

9.4.9 Stormwater code

9.4.9.1 Application

1. This code applies to assessing a material change of use, reconfiguring a lot or operational work if:
 - a. assessable development where this code is identified as a prescribed secondary code in the assessment benchmarks column of a table of assessment for a material change of use (section 5.5), reconfiguring a lot (section 5.6) operational work (section 5.8) or an overlay (section 5.10); or
 - b. impact assessable development, to the extent relevant.
2. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—Where this code includes performance outcomes or acceptable outcomes that relate to infrastructure design and construction works, guidance is provided in the Infrastructure design planning scheme policy.

9.4.9.2 Purpose

1. The purpose of the Stormwater code is to assess the suitability of the stormwater aspects of development.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development achieves acceptable levels of stormwater run-off quality and quantity by applying water sensitive urban design principles as part of an integrated stormwater management framework.
 - b. Development protects public health and safety and protects against damage or nuisance caused by stormwater flows.
 - c. Development has a stormwater management system which maintains, recreates or minimises impact to natural catchment hydrological processes.
 - d. Development ensures that the environmental values of the city's waterways are protected or enhanced.
 - e. Development minimises run-off, including peak flows.
 - f. Development maintains or enhances the efficiency and integrity of the stormwater infrastructure network.
 - g. Development minimises the whole of life cycle cost of stormwater infrastructure.

9.4.9.3 Performance outcomes and acceptable outcomes

Table 9.4.9.3.A—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
Section A—If for a material change of use, reconfiguring a lot, operational work or building work Note—Compliance with the performance outcomes and acceptable outcomes in this section should be demonstrated by the submission of a site-based stormwater management plan for high risk development only.		

PO1 Development provides a stormwater management system which achieves the integrated management of stormwater to: a. minimise flooding; b. protect environmental values of receiving waters; c. maximise the use of water sensitive urban design; d. minimise safety risk to all persons; e. maximise the use of natural waterway corridors and natural channel design principles. Editor's note—The stormwater management system to be developed to address PO1 is not intended to require management of stormwater quality.	AO1 Development provides a stormwater management system designed in compliance with the Infrastructure design planning scheme policy.	Will comply
PO2 Development ensures that the stormwater management system and site work does not adversely impact flooding or drainage characteristics of premises which are up slope, down slope or adjacent to the site.	AO2.1 Development does not result in an increase in flood level or flood hazard on up slope, down slope or adjacent premises. AO2.2 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	Will comply
PO3 Development ensures that the stormwater management system does not direct stormwater run-off through existing or proposed lots and property where it is likely to adversely affect the safety of, or cause nuisance to properties.	AO3.1 Development ensures that the location of the stormwater drainage system is contained within a road reserve, drainage reserve, public pathway, park or waterway corridor. AO3.2 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	Will comply
	AO3.3	

	Development obtains a lawful point of discharge in compliance with the standards in the Infrastructure design planning scheme policy.	
	AO3.4 Where on private land, all underground stormwater infrastructure is secured by a drainage easement.	
PO4 Development provides a stormwater management system which has sufficient capacity to safely convey run-off taking into account increased run-off from impervious surfaces and flooding in local catchments.	AO4.1 Development provides a stormwater conveyance system which is designed to safely convey flows in compliance with the standards in the Infrastructure design planning scheme policy. AO4.2 Development provides sufficient area to convey run-off which will comply with the standards in the Infrastructure design planning scheme policy.	Will comply
PO5 Development designs stormwater channels, creek modification works, bridges, culverts and major drains to protect and enhance the value of the waterway corridor or drainage path for fauna movement.	AO5 Development ensures the design of stormwater channels, creek modifications or other infrastructure, permits terrestrial and aquatic fauna movement.	N/A
PO6 Development ensures that location and design of stormwater detention and water quality treatment: a. minimises risk to people and property; b. provides for safe access and maintenance; c. minimises ecological impacts to creeks and waterways.	AO6.1 Development locates stormwater detention and water quality treatment: a. outside of a waterway corridor; b. offline to any catchment not contained within the development. AO6.2 Development providing for stormwater detention and water quality treatment devices are designed in compliance with the standards in the Infrastructure design planning scheme policy.	Will comply

PO7 Development is designed, including any car parking areas and channel works to: a. reduce property damage; b. provide safe access to the site during the defined flood event.	AO7.1 Development (including any ancillary structures and car parking areas) is located above minimum flood immunity levels in Table 9.4.9.3.B, Table 9.4.9.3.C, Table 9.4.9.3.D, Table 9.4.9.3.E and Table 9.4.9.3.F. Note—Compliance with this acceptable outcome can be demonstrated by the submission of a hydraulic and hydrology report identifying flood levels and development design levels (as part of a site-based stormwater management plan). AO7.2 Development including the road network provides a stormwater management system that provides safe pedestrian and vehicle access in accordance with the standards in the Infrastructure design planning scheme policy.	N/A
PO8 Development designs stormwater channels, creek modification works and the drainage network to protect and enhance the environmental values of the waterway corridor or drainage path.	AO8.1 Development ensures natural waterway corridors and drainage paths are retained. AO8.2 Development provides the required hydraulic conveyance of the drainage channel and floodway, while maximising its potential to maximise environmental benefits and minimise scour. Editor's note—Guidance on natural channel design principles can be found in the Council's publication Natural channel design guidelines. AO8.3 Development provides stormwater outlets into waterways, creeks, wetlands and overland flow paths with energy dissipation to minimise scour in compliance with the standards in the Infrastructure design planning scheme policy. AO8.4 Development ensures that the design of modifications to the existing design of new stormwater channels, creeks	N/A

	and major drains is in compliance with the standards in the Infrastructure design planning scheme policy.	
PO9 Development is designed to manage run-off and peak flows by minimising large areas of impervious material and maximising opportunities for capture and re-use.	AO9 No acceptable outcome is prescribed.	Will comply
PO10 Development ensures that there is sufficient site area to accommodate an effective stormwater management system. Note—Compliance with the performance outcome should be demonstrated by the submission of a site-based stormwater management plan for high-risk development only.	AO10 No acceptable outcome is prescribed.	Will comply
PO11 Development provides for the orderly development of stormwater infrastructure within a catchment, having regard to the: a. existing capacity of stormwater infrastructure within and external to the site, and any planned stormwater infrastructure upgrades; b. safe management of stormwater discharge from existing and future up-slope development; c. implication for adjacent and down-slope development.	AO11.1 Development with up-slope external catchment areas provides a drainage connection sized for ultimate catchment conditions that is directed to a lawful point of discharge. AO11.2 Development ensures that existing stormwater infrastructure that is undersized is upgraded in compliance with the Infrastructure design planning scheme policy.	Will comply
PO12 Development provides stormwater infrastructure which: a. remains fit for purpose for the life of the development and maintains full functionality in the design flood event; b. can be safely accessed and maintained cost effectively; c. ensures no structural damage to existing stormwater infrastructure.	AO12.1 The stormwater management system is designed in compliance with the Infrastructure design planning scheme policy. AO12.2 Development provides a clear area with a minimum of 2m radius from the centre of an existing manhole cover and with a minimum height clearance of 2.5m.	Will comply

PO13 Development ensures that all reasonable and practicable measures are taken to manage the impacts of erosion, turbidity and sedimentation, both within and external to the development site from construction activities, including vegetation clearing, earthworks, civil construction, installation of services, rehabilitation, revegetation and landscaping to protect: a. the environmental values and water quality objectives of waters; b. waterway hydrology; c. the maintenance and serviceability of stormwater infrastructure. Note—The Infrastructure design planning scheme policy outlines the appropriate measures to be taken into account to achieve the performance outcome.	AO13 No acceptable outcome is prescribed.	Will comply
PO14 Development ensures that: a. unnecessary disturbance to soil, waterways or drainage channels is avoided; b. all soil surfaces remain effectively stabilised against erosion in the short and long term.	AO14 No acceptable outcome is prescribed.	Will comply
PO15 Development does not increase: a. the concentration of total suspended solids or other contaminants in stormwater flows during site construction; b. run-off which causes erosion either on site or off site.	AO15 No acceptable outcome is prescribed.	Will comply
Section B—Additional performance outcomes and acceptable outcomes which apply to high-risk development, being one or more of the following: a. a material change of use for an urban purpose which involves greater than 2,500m² of land that: i. will result in an impervious area greater than 25% of the net developable area; or ii. will result in 6 or more dwellings.		

b. reconfiguring a lot for an urban purpose that involves greater than 2,500m² of land and will result in 6 or more lots; c. operational work for an urban purpose which involves disturbing greater than 2,500m² of land.		
PO16 Development ensures that the entry and transport of contaminants into stormwater is avoided or minimised to protect receiving water environmental values. Note—Prescribed water contaminants are defined in the <i>Environmental Protection Act 1994</i>. Note—Compliance with the performance outcome should be demonstrated by the submission of a site-based stormwater management plan for high-risk development only.	AO16 Development provides a stormwater management system which is designed in compliance with the standards in the Infrastructure design planning scheme policy.	Will comply
PO17 Development ensures that: a. the discharge of wastewater to a waterway or external to the site is avoided; or b. if the discharge cannot practicably be avoided, the development minimises wastewater discharge through re-use, recycling, recovery and treatment. Note—The preparation of a wastewater management plan can assist in demonstrating achievement of this performance outcome. Editor's note—This code does not deal with sewerage which is the subject of the Wastewater code.	AO17 No acceptable outcome is prescribed.	Will comply
Section C—Additional performance outcomes and acceptable outcomes for assessable development for a material change of use or reconfiguring a lot		
PO18 Development protects stormwater infrastructure to ensure the following are not compromised: a. the long term infrastructure for the stormwater network in the Long term infrastructure plans; b. the existing and planned infrastructure for the stormwater network in the Local government infrastructure plan;	AO18 Development protects stormwater infrastructure in compliance with the following: a. for long term infrastructure for the stormwater network, the Long term infrastructure plans; b. for existing and planned infrastructure for the stormwater network, the Local government infrastructure plan;	Will comply

c. the provision of long term, existing and planned infrastructure for the stormwater network which: i. is required to service the development or an existing and future urban development in the planning scheme area; or ii. is in the interests of rational development or the efficient and orderly planning of the general area in which the site is situated. Editor's note—A condition which requires a proposed development to keep permanent improvements and structures associated with the approved development clear of the area of long term infrastructure, may be imposed.	c. the standards for stormwater drainage in the Infrastructure design planning scheme policy.	
PO19 Development provides for the payment of extra trunk infrastructure costs for the following: a. for development completely or partly outside the priority infrastructure area in the Local government infrastructure plan; b. for development completely inside the priority infrastructure area in the Local government infrastructure plan involving: i. trunk infrastructure that is to be provided earlier than planned in the Local government infrastructure plan; ii. long term infrastructure for the stormwater network which is made necessary by development that is not assumed future urban development; iii. other infrastructure for the stormwater network associated with development that is not assumed future urban development which is made necessary by the development. Editor's note—The payment of extra trunk infrastructure costs for development completely inside the priority infrastructure area in the Local government infrastructure plan is to be worked out in accordance with the Charges Resolution.	AO19 No acceptable outcome is prescribed.	N/A

Editor's note—See section 130 Imposing Development conditions (Conditions for extra trunk infrastructure costs) of the <i>Planning Act 2016</i> .		
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Table 9.4.9.3.B—Categories of flood planning levels

Flooding type ⁽¹⁾	Minimum design floor or pavement levels (m AHD) ⁽²⁾ (refer to Table 9.4.9.3.C for assignment of these categories)				
	Category A	Category B	Category C	Category D	Category E
Waterway ^(A) or open channel	1% AEP flood level + 500mm	1% AEP flood level + 300mm	1% AEP flood level	1% AEP flood level	5% AEP flood level
Overland flow flooding ^(B)	2% AEP flood level +500mm	2% AEP flood level +300mm	2% AEP flood level	2% AEP flood level	5% AEP flood level

Notes—

⁽¹⁾ Where the site is subject to more than one type of flooding that is overland flow flooding, creek or waterway flooding or river flooding, the minimum flood immunity level is the highest level determined from these sources.

⁽²⁾ Where flood levels are not available from Council's Floodwise Property Report such as overland flow flooding, the applicant will need to engage a suitably qualified Registered Professional Engineer Queensland with expertise in undertaking flood studies to estimate the relevant flood level.

Note ^(A) A waterway, including any indicated on the planning scheme maps, is defined as any element of a river, creek, stream, gully or drainage channel, including the bed and banks, typically with a catchment area greater than 30ha.

Note ^(B) Overland flow flooding usually occurs when the capacity of the underground piped drainage system is exceeded and/or when the overland flow path is blocked. Localised overland flow paths generally traverse along roadways, and in the older established areas, through private properties within existing low points and gullies. A localised overland flow path is not characterised by well-defined bed and banks and the contributing catchment is generally less than 30ha.

Note—A flood event with an AEP of 1% is the equivalent of a 100 year ARI flood event.

Note—A flood event with an AEP of 2% is the equivalent of a 50 year ARI flood event.

Note—A flood event with an AEP of 5% is the equivalent of a 20 year ARI flood event.

Note—The flood immunity level in some older inner-city areas is often controlled by local ponding.

Table 9.4.9.3.C—Flood planning level categories for development types

BCA building classification ⁽¹⁾	Development types and design levels, assigned design floor or pavement levels	Category Refer to Table 8.2.11.3.L
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Class 1–4	Habitable room	Category A
	Non-habitable room including patio and courtyard	Category B
	Non-habitable part of a Class 2 or Class 3 building excluding the essential services ⁽²⁾ control room	Category B
	Parking located in the building undercroft of a multiple dwelling	Category C
	Carport ⁽⁴⁾ , unroofed car park; vehicular manoeuvring area	Category D
	Essential electrical services ⁽²⁾ of a Class 2 or Class 3 building only	Category A ⁽⁶⁾
	Basement parking entry ⁽³⁾	Category C + 300mm
Class 5, Class 6, or Class 8	Building floor level	Category C
	Garage or car park located in the building undercroft ⁽³⁾	Category C
	Carport ⁽⁴⁾ or unroofed car park	Category D
	Vehicular access and manoeuvring areas	Category D
	Basement parking entry ⁽³⁾	Category C
	Essential electrical services ⁽²⁾	Class 8 – Category C ⁽⁶⁾ Class 5 & 6 – Category A ⁽⁶⁾
Class 7a	Refer to the relevant building class specified in this table	
Class 7b	Building floor level	Category C
	Vehicular access and manoeuvring area	Category D
	Essential electrical services ⁽²⁾	Category C

Class 9	Building floor level	Category A
	Building floor level for habitable rooms in Class 9a or 9c where for a residential care facility	0.2% AEP flood
	Garage or car park located in the building undercroft ⁽³⁾	Category C
	Carport ⁽⁴⁾ or unroofed car park	Category D
	Vehicular access and manoeuvring areas	Category D
	Essential electrical services ⁽²⁾	Category A
Class 10a	Car parking facility	Refer to the relevant building class specified in this table
	Shed ⁽⁵⁾ or the like	Category D
Class 10b	Swimming pool	Category E
	Associated mechanical and electrical pool equipment	Category C
	Other structures	Flood immunity standard does not apply

Notes—

⁽¹⁾ Refer to the Building Code of Australia for definitions of building classifications.

⁽²⁾ Essential services include any room used for fire control panel, telephone PABX, sensitive substation equipment including transformers, low voltage switch gear, high-voltage switch gear, battery chargers, protection control and communication equipment, low voltage cables, high-voltage cables and lift controls.

⁽³⁾ Basement car parks must be suitably waterproofed and all air vents, air-conditioning ducts, pedestrian access and entry and exit ramps at the car park entrance have flood immunity in accordance with this table.

⁽⁴⁾ A shelter for a motor vehicle, which has a roof and one or more open sides, and which can be built against the side of a building.

⁽⁵⁾ A slight or rough structure built for shelter and storage; or a large strongly built structure, often open at the sides or end.

⁽⁶⁾ Where essential services are proposed in a basement below the specified flood planning level, the flood immunity of all air vents, air-conditioning ducts, pedestrian access, lift shafts and entry/exit ramps at the basement entrance and any other openings into that basement must conform to Category A for Residential development, and the relevant basement entry level of all other uses. This will require a waterproof basement design to prevent floodwaters entering the basement to ensure flood immunity.

Note—A flood event with an AEP of 2% is the equivalent of a 50 year ARI flood event.

Note—A flood event with an AEP of 0.2% is the equivalent of a 500 year ARI flood event.

Note—Where a building has a combination of uses that includes a component of class 2, 3 or 9, the essential services for that building shall comply with the requirements of the building class with the greatest flood immunity requirement.

Note—Use classes for residential development also include basement storage.

Table 9.4.9.3.D—Flood planning levels for a new road

Flooding type ⁽¹⁾	Minimum design levels at the crown of the road (m AHD) ⁽²⁾	
	Residential development	Industrial or commercial development
Waterway ^(A) or open channel	1% AEP flood level	2% AEP flood level
Overland flow flooding ^(B)	2% AEP flood level	2% AEP flood level

Notes—

⁽¹⁾ Where the site is subject to more than 1 type of flooding, the minimum flood planning level is the highest level determined from these sources. It should be noted that the flooding planning level in some older areas is often controlled by local ponding.

⁽²⁾ Where flood levels are not available from Council's Floodwise Property Report, such as overland flow flooding, the applicant will need to engage a suitably qualified Registered Professional Engineer Queensland with expertise in undertaking flood studies to estimate the relevant flood level.

Note ^(A) A waterway including any indicated on the planning scheme maps is defined as any element of a river, creek, stream, gully or drainage channel, including the bed and banks typically with a catchment area greater than 30ha.

Note ^(B) Overland flow flooding usually occurs when the capacity of the underground piped drainage system is exceeded and/or when the overland flow path is blocked. Localised overland flow paths generally traverse along roadways, and in the older established areas, through private properties within existing low points and gullies. A localised overland flow path is not characterised by well-defined bed and banks and the contributing catchment is generally less than 30ha.

Note—A flood event with an AEP of 1% is the equivalent of a 100 year ARI flood event.

Note—A flood event with an AEP of 2% is the equivalent of a 50 year ARI flood event.

Note—A flood event with an AEP of 5% is the equivalent of a 20 year ARI flood event.

Table 9.4.9.3.E—Flood planning levels for essential community infrastructure

Type of essential community infrastructure	Minimum design levels
Emergency services	0.2% AEP flood
Emergency services, where for an emergency shelter	0.5% AEP flood
Emergency services, where for police facilities	0.5% AEP flood
Hospital and health care service, where associated with a hospital	0.2% AEP flood

Community facility where involving storage of valuable records or items of historic or cultural significance (e.g. galleries and libraries)	0.5% AEP flood
State-controlled roads Major or minor electricity infrastructure not otherwise listed in this table Utility installation where for rail transport services Air service Telecommunications facility	No specific recommended level but development proponents should ensure that the infrastructure is optimally located and designed to achieve suitable levels of service, having regard to the processes and policies of the administering government agency.
Power stations (as defined in the <i>Electricity Act 1994</i>) or renewable energy facility.	0.2% AEP flood
Major electricity infrastructure where a major switch yard	0.2% AEP flood
Substations	0.5% AEP flood
Utility installation where for a sewage treatment plant	DFE
Utility installation where for a water treatment plant	0.5% AEP flood

Note—A flood event with an AEP of 0.2% is the equivalent of a 500 year ARI flood event.

Note—A flood event with an AEP of 0.5% is the equivalent of a 200 year ARI flood event.

Table 9.4.9.3.F—Flood planning levels for reconfiguring a lot

Flooding type ⁽¹⁾	Minimum lot levels (m AHD) ⁽²⁾	
	Residential	Other than residential
Waterway ^(A) or open channel	1% AEP flood level + 300mm	1% AEP flood level
Overland flow flooding ^(B)	1% AEP flood level + 300mm	2% AEP flood level

Notes—

⁽¹⁾ Where the site is subject to more than one type of flooding, the minimum flood immunity level is the highest level determined from these sources.

⁽²⁾ Where flood levels are not available from Council's Floodwise Property Report such as overland flow flooding, the applicant will need to engage a suitably qualified Registered Professional Engineer Queensland with expertise in undertaking flood studies to estimate the relevant flood level.

Note ^(A) A waterway including any indicated on the planning scheme maps is defined as any element of a river, creek, stream, gully or drainage channel, including the bed and banks typically with a catchment area greater than 30ha.

Note ^(B) Overland flow flooding usually occurs when the capacity of the underground piped drainage system is exceeded or when the overland flow path is blocked. Localised overland flow paths generally traverse along roadways, and in the older established areas, through private properties within existing low points and gullies. A localised overland flow path is not characterised by well-defined bed and banks and the contributing catchment is generally less than 30ha.

Note—A flood event with an AEP of 1% is the equivalent of a 100 year ARI flood event.

Note—A flood event with an AEP of 2% is the equivalent of a 50 year ARI flood event.

Appendix F – ESC Hazard Assessment



Erosion Hazard Assessment - June 2014

Brisbane City Council (BCC), *Erosion Hazard Assessment* form must be read in conjunction with the *Erosion Hazard Assessment- Supporting Technical Notes* (June 2014 or later version) for explanatory terms and Certification information.

What is an Erosion Hazard Assessment?

Soil erosion and sediment from urban development, particularly during construction activities, is a significant source of sediment pollution in Brisbane's waterways. The Erosion Hazard Assessment determines whether the risk of soil erosion and sediment pollution to the environment is 'low', 'medium' or 'high'.

When is the EHA required?

An *Erosion Hazard Assessment* form must be completed and lodged with BCC for any Development Application (ie MCU or ROL) that will result in soil disturbance OR Operational Works or Compliance Assessment Application for 'Filling' or Excavation.

Failure to submit this form during lodgement of an application may result in assessment delays or refusal of the application.

Privacy Statement

The personal information collected on this form will be used by Brisbane City Council for the purposes of fulfilling your request and undertaking associated Council functions and services. Your personal information will not be disclosed to any third party without your consent, unless this is required or permitted by law.

Assessment Details

1 Please turn over and complete the erosion hazard assessment.

2 Based on the erosion hazard assessment overleaf, is the site:

☐ A 'low' risk site

Best practice erosion and sediment control (ESC) must be implemented but no erosion and sediment control plans need to be submitted with the development application. Factsheets outlining best practice ESC can be found at <http://www.waterbydesign.com.au/factsheets>

☒ A 'medium' risk site

If the development is approved, the applicant will need to engage a Registered Professional Engineer (RPEQ) or Certified Professional in Erosion and Sediment Control (CPESC) to prepare an ESC Program and Plan and supporting documentation — in accordance with the requirements of the Infrastructure Design Planning Scheme Policy.

☐ A 'high' risk site

If the development is approved, the applicant will need to engage a RPEQ and CPESC to prepare an ESC Program and Plan and supporting documentation — in accordance with the requirements of the Infrastructure Design Planning Scheme Policy. The plans and program will need to be certified by a CPESC.

3 Site Information and Certification

Application number (if known)

Site address

260 MacArthur Ave

Hamilton QLD

Postcode **4007**

I certify that:

- ☒ I have made all relevant enquiries and am satisfied no matters of significance have been withheld from the assessment manager.
- ☒ I am a person with suitable qualifications and/or experience in erosion and sediment control.
- ☒ The Erosion Hazard Assessment was completed in accordance with the Erosion Hazard Assessment Supporting Technical Notes and the BCC Infrastructure Design Planning Scheme Policy.
- ☒ The Erosion Hazard Assessment accurately reflects the site's overall risk of soil erosion and sediment pollution to the environment.
- ☒ I acknowledge and accept that the BCC, as assessment manager, relies, in good faith, on this certification as part of its development assessment process and the provision of false or misleading information to the BCC constitutes an offence for which BCC may take punitive steps/ action against me/ enforcement action against me.

Certified by *Print name*

Matthew Sauer

Certifier's signature

Date

17 / 07 / 2026

Table 1: Low Risk Test

		Yes	No
1.1	is the area of land disturbance > 1000 m ²	☒	☐
1.2	does any land disturbance occur in a BCC mapped waterway corridor	☐	☒
1.3	is there any slope on site (longer than three metres in length) before, during or after construction that is steeper than 5%	☐	☒
1.4	does any land disturbance occur below 5 m AHD	☒	☐
1.5	does development involve endorsement of a staging plan	☐	☒
1.6	is there an upstream catchment passing through the site > 1 hectare	☐	☒

Have you answered 'yes' to any of the questions in Table 1?

Yes	No
☒	☐

If 'No' then site is low risk with respect to erosion and sediment control

If 'Yes' then proceed to Table 2

Table 2: Medium Risk Test

		Yes	No
2.1	is the area of land disturbance > 1 hectare	☐	☒

If 'No' then site is medium risk with respect to erosion and sediment control

If 'Yes' then proceed to Table 3

Table 3: High Risk Test

3.1	is there an upstream catchment passing through the site > 1 hectare	☐	☐
3.2	does any land disturbance occurs in a BCC mapped waterway corridor	☐	☐
3.3	is there any slope on site (longer than three metres in length) before, during or after construction that is steeper than 15%	☐	☐

Have you answered 'yes' to any of the questions in Table 3?

Yes	No
☐	☐

If 'No' then site is medium risk with respect to erosion and sediment control

If 'Yes' then site is high risk with respect to erosion and sediment control