FOUNDATION EARTH SCIENCES

HYDROGEOLOGICAL ASSESSMENT

Property Address

2 Fishburn Crescent, Castle Hill NSW 2154

Prepared for

ARADA Development Management Pty Ltd

Date

23 April 2026

DOCUMENT CONTROL REGISTER

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Prepared for	ARADA Development Management Pty Ltd

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Reviewer		Ben Buckley	23/04/2026

TABLE OF CONTENTS

LIST OF TABLES

APPENDICES

1.0 INTRODUCTION

1.1 General

ARADA Development Management Pty Ltd (the client) appointed Foundation Earth Sciences Pty Ltd (FES) to conduct a Hydrogeological Assessment (HGA) for the proposed development located at 2 Fishburn Crescent, Castle Hill NSW 2154 (the site). The HGA report aims to estimate potential groundwater inflow to the proposed bulk excavation and ensure compliance with requirements set by the local city council and Water New South Wales (WaterNSW) regarding the basement design and future dewatering activities. This report has been prepared in accordance with the WaterNSW guideline titled *Minimum requirements for building site groundwater investigations and reporting* (PUB20/940, revision V02.2210, October 2022), issued by the Department of Planning and Environment (DPE), addressing groundwater-related risks relevant to the project site.

1.2 Scope of work

The following scope of work was carried out for the HGA:

- Collected the ground conditions including groundwater details from the geotechnical investigation report.
- Assessed and adopted the existing groundwater wells, identified as GW1 (BH2), GW2 (BH12) and GW3 (BH11), which were installed by FES during the geotechnical investigation.
- Conducted raising head permeability test in the groundwater wells.
- Assessed the standing groundwater level in the groundwater wells.
- Conducted groundwater modelling using the Finite Element Analysis (FEA) method to estimate the potential groundwater inflow into the proposed bulk excavation.
- Prepared this HGA report for the proposed development.

A site plan showing approximate locations of the groundwater well and sections of the groundwater modelling are annexed as Appendix A. The borehole log and their explanatory note from the borehole drilling is annexed as Appendix B.

1.3 Provided Information

The following information was made available to FES during the preparation of this report:

- Geotechnical Investigation report titled "Project 16-20 Carrington Road, Castle Hill NSW 2154", prepared by FES, reference to G702-1R, revision 1, and dated 23 April 2026.
- Architectural drawings, project titled "Carrington Road, 2 Fishburn Crescent, Castle Hill NSW 2154", prepared by Turner, reference to project number 23104, and dated 10 and 17 April 2025.
- Survey Plan, titled "6-20 Carrington Rd / 2-12 Middleton Ave / 4-6 Fishburn Cres / 25-31 Sexton Ave, Castle Hill", prepared by East Coast Positioning, reference to drawing number ECP2725.D.01, and dated 16 March 2026.

2.0 BACKGROUND

2.1 Site Description

The site is located within Sydney metropolitan area, approximately 25km northwest of Sydney CBD. Details of the site are summarised in Table 1 below.

Table 1: The Site Details

Site	Details	
Location	2 Fishburn Crescent, Castle Hill NSW 2154	
Lot and DP	Lot 1 in DP 1316896	
Local Government Area	The Hills Shire Council	
Shape and Area	Irregular shape of land with approximate size of 14,223.6m^2	
Slope	Sloping from the southeast to the northwest	
Existing Structures	Fifteen 1- to 2-storey residential dwellings with associated structures	
Closest Watercourse	Cattai River is located approximately 320m west to the site	
Special Features	No special feature was observed	
Type of Neighbouring Properties	North	Carrington Road's carriage way and road reserve
	East	Residential properties and Sexton Avenue's carriage way and road reserve
	South	Fishburn Crescent's carriage way and road reserve
	West	Middleton Avenue's carriage way and road reserve

2.2 Proposed Development

The architectural drawings listed above indicate that the proposed development is a multi-storey high-raised buildings with one basement level, lower ground level and ground level. The RL of basement level is at 95.9m AHD. Due to the sloping nature of the natural ground level, it is inferred that approximately 3m to 10m of excavation is required for the proposed development.

2.3 Local Geology

Local geology was assessed using a geological map, **Penrith** 1:100,000 Geological Series Sheet 9030 (Edition 1) 1991, from the Geological Survey of New South Wales. The map indicates that site is part of the **Rwa** geology, Ashfield Shale, Wianamatta Group, Middle Triassic age and is described as *Dark-grey to black claystone-siltstone and fine sandstone-siltstone laminite*. The local geology description does not account any fill or soil that may be present at the site.

Further, site is located eastly to **Rh** geology, Hawkesbury Sandstone, Wianamatta Group, Middle Triassic age and is described as *Medium to very cause-grained quartz sandstone, minor laminated mudstone and siltstone lenses*.

3.0 GROUND CONDITIONS

Summary of encountered ground profiles within the assessed borehole are provided in Table 2 below. However, reference should be made to the borehole log attached as Appendix B of this report for more details.

Table 2: Summary of Ground Profile

Unit	Details	Depth (m)			
		BH2	BH3	BH11	BH12
	Top of the Borehole (Approximate RL m AHD)	100.7	103.0	101.9	105.0
Unit 1	FILL, combination of Clay, Silt, and Gravel, low to medium plasticity, fine to medium grained, moist	0.0 – 0.5	0.0 – 0.2	0.0 – 0.7	0.0 – 0.5
	Residual Soil, Silty CLAY, high plasticity, moist	0.5 – 2.4	0.2 – 1.4	0.7 – 2.0	0.5 – 2.2
Unit 2	Class V SANDSTONE, extremely weathered, interbedded with clay bands, moist	2.4 – 6.0	1.4 – 6.2	2.0 – 5.6	2.2 – 6.0
Unit 3	Class IV SANDSTONE, highly weathered, with shale layers	6.0 – 7.1	6.2 – 8.2	5.6 – 6.0	6.0 – 8.7
Unit 4	Class III SANDSTONE, moderately weathered	–	8.2 – 10.2	6.0 – 11.9	8.7 – 11.7

Groundwater seepage was observed at approximate depth of 7.0m below ground level during the augering of the borehole BH2. Furthermore, standing groundwater level was recorded within the installed groundwater wells.

Standing groundwater levels are also subject to a piezometric head at the drilled locations. Further, it should be noted that the levels may be subject to seasonal fluctuations, rainfall, prevailing weather conditions, and future developments of the areas and landforms. Therefore, levels may not be representative of natural groundwater conditions of the site.

4.0 GROUNDWATER ASSESSMENT

The groundwater wells GW1(BH2), GW2 (BH12), and GW3 (BH11) have been adopted for the groundwater assessment.

4.1 Groundwater Wells

The following information was considered for the groundwater well installation, and details of the wells are provided in Table 3 below:

- Ground conditions encountered within the borehole during the drilling.
- Groundwater seepage levels in the existing wells at the site.
- Proposed bulk excavation level of the development.

Table 3: Groundwater Well Construction Details

Well	Total Depth (m)	Screened Length (m)	Surface Level (RL m AHD)	Water Bearing
GW1 (BH2)	7.0	1.0 – 7.0	100.7	Clay and Sandstone
GW2 (BH12)	11.65	1.0 – 11.65	105.0	Clay, Shale, and Sandstone
GW3 (BH11)	11.85	1.0 – 11.85	101.9	Clay, Shale, and Sandstone

The following installation methodology was adopted for groundwater wells:

- 50mm diameter, Class 18PVC threaded and flush joined casing, and 0.45 machine-slotted screens were used.
- Coarse, washed sand and gravel placed in the annulus surrounding the piping to a height of the screen.
- Bentonite pellets were placed in the annulus to form an impermeable plug near the top of the well to prevent surface runoff from entering directly into the well.
- Bentonite pellets placed in the annulus to form an impermeable plug near the top encountered bedrock.
- PVC cap was placed on the casing.

- 100mm diameter stainless steel flushed covers used for all well finishes and concreted onto the ground surface.

4.2 Groundwater Levels

The recorded groundwater levels are summarised in Table 4 below.

Table 4: Standing Groundwater Levels

Date	Depth (m)		
	GW1	GW2	GW3
3/04/2024	5.8	7.6	6.3
10/04/2024	4.1	7.0	6.8
18/04/2024	5.0	7.0	6.8
24/04/2024	5.6	7.7	7.2
1/05/2024	6.3	8.2	7.0
8/05/2024	6.2	8.6	7.0
16/05/2024	6.8	8.8	7.5
23/05/2024	6.3	8.9	7.4
29/05/2024	6.6	9.3	7.3
6/06/2024	6.5	9.5	7.6
13/06/2024	6.8	9.6	7.9
20/06/2024	6.7	9.8	7.8
25/06/2024	6.5	9.7	7.8
3/07/2024	6.8	9.5	7.7
11/07/2024	6.7	9.7	7.6

4.3 Daily Rainfall Survey

A daily rainfall survey was conducted using publicly available data from the Bureau of Mereology (BOM). The rainfall data was collected from the closest station, located at North Rocks (Muirfield Golf Club) (Station ID 67112), during the groundwater assessment period and listed in Table 5 below.

Table 5: Daily Rainfall Survey

Date	Rainfall (mm)	Date	Rainfall (mm)	Date	Rainfall (mm)
3/04/2024	4.5	7/05/2024	2.5	22/06/2024	22.0
5/04/2024	36.5	8/05/2024	2.0	23/06/2024	6.5
6/04/2024	122.5	9/05/2024	4.0	24/06/2024	0.5
10/04/2024	15.0	11/05/2024	8.0	25/06/2024	0.5
17/04/2024	0.5	12/05/2024	18.5	30/06/2024	9.5
18/04/2024	2.5	3/05/2024	1.5	1/07/2024	2.0
24/04/2024	0.5	18/05/2024	0.5	2/07/2024	4.5
1/05/2024	4.5	19/05/2024	0.5	3/07/2024	2.0
2/05/2024	3.0	2/06/2024	80.5	4/07/2024	8.0
3/05/2024	3.0	6/06/2024	6.0	5/07/2024	8.0
4/05/2024	7.5	7/06/2024	36.0	6/07/2024	2.5
5/05/2024	5.0	8/06/2024	2.0	8/07/2024	0.5
6/05/2024	48.5	15/06/2024	15.5	9/07/2024	3.0

A plot of the daily rainfall and groundwater levels recorded is presented in Appendix C of this report.

4.4 Hydraulic Conductivity

A raising head hydraulic conductivity test was carried out within the wells on 9 May 2024 to evaluate the hydraulic conductivity (k) of the site's subsurface condition. The hydraulic conductivity at each well was calculated from the field test results using the Hvorslev Slug Test method and is summarised in Table 6 below.

Table 6: Results of Hydraulic Conductivity Test

Groundwater Well	Hydraulic Conductivity, k (m/s)	Water Bearing
GW1	2.41×10^{-7}	Clay and Sandstone
GW2	4.09×10^{-9}	Clay, Shale, and Sandstone
GW3	3.84×10^{-8}	Clay, Shale, and Sandstone

5.0 GROUNDWATER INFLOW ANALYSIS

5.1 Methodology

Based on the provided architectural drawings, FES selected three sections, identified as Section 1 and Section 2, to carry out the groundwater inflow analysis. The analysis consisted of two-dimensional (2D) Finite Element Analysis (FEA) using a commercial application called “Plaxis 2D Ultimate” to estimate potential groundwater inflow into the bulk excavation of the proposed development. A Site Plan, annexed as Appendix A, presents those nominated sections.

The FEA of the designated sections was performed employing a "Plane Strain" 2-dimensional model with "15-Noded" triangular elements. Within this model, the proposed bulk excavation is modelled as a "Trench Excavation" assuming an infinite extension in the third dimension (z-axis). The Mohr-Coulomb Model was used to describe the behaviours of the soils and rocks adopted for the FEA.

The natural ground level of the site and area immediately adjacent to the site has been adopted from the survey plan, which is annexed as Appendix F in this report. Since the local natural ground levels are gently and consistently sloping, areas outside the site are extrapolated to a maximum distance of 15m from each excavation boundary in all sections. Furthermore, the subsurface conditions, including the groundwater levels for the extrapolated areas, are adopted with consistency with the excavation boundary in the FEA. Given that the site has reasonably shallow bedrock geology, the 15m distance is inferred to be adequate, and FEA will assume that no drawdown effect will be found at this 15m distance.

The excavation boundaries will normally be support by shoring wall system to ensure their stability. However, to enhance the groundwater assessment, the FEA is modelled with “Flow Only” option and no displacement of the ground has been considered in this assessment. Furthermore, the bulk excavation area has been adopted as a “Dry Condition” in the FEA to computer the groundwater inflow.

5.2 Subsurface Conditions

The subsurface conditions, as provided in hydrogeological assessment borehole, along with details of the installed groundwater well, have been reviewed to determine the appropriate subsurface conditions for the FEA. Due to size of the site, two sections, identified as Section 1 and Section 2, have been adopted to represent the site conditions for the FEA. The depths and elevations of the subsurface conditions for each section are summarised in Table 7 below.

Table 7: Subsurface Conditions

Units	Depth (m)			
	Section 1A	Section 1B	Section 2A	Section 2B
Existing Ground Level (RL m AHD)	100.7	102.5	105.3	99.5
Unit 1	0.0 – 2.4	0.0 – 2.1	0.0 – 2.0	0.0 – 2.2
Unit 2	2.4 – 6.0	2.1 – 5.8	2.0 – 6.2	2.2 – 5.8
Unit 3	6.0 – 8.2	5.8 – 7.4	6.2 – 8.5	5.8 – 6.7
Unit 4	8.2 – 15.7	7.4 – 17.5	8.5 – 20.3	6.7 – 14.5

5.3 Groundwater

The groundwater assessment revealed that the highest groundwater level was recorded at a depth of 4.1m below the existing ground level. In accordance with WaterNSW guideline, the highest groundwater level was adopted as the groundwater table across the site for the FEA.

The Slug Test results from the fieldwork testing were found to be consistent to the subsurface condition encountered. Therefore, typical recommended hydraulic conductivity values were adopted for the FEA, and they are summarised in Table 8 below.

Table 8: Adopted Hydraulic Conductivity

Units	Hydraulic Conductivity, k (m/s)		k_y/k_x
	k_x	k_y	
Unit 1	1×10^{-8}	1×10^{-8}	1
Unit 2	1×10^{-7}	1×10^{-7}	1
Unit 3	1×10^{-8}	1×10^{-8}	1
Unit 4	1×10^{-9}	1×10^{-9}	1

The groundwater flow in the Hawkesbury Sandstone and Shale in the Sydney region mainly occurs through defects, which are commonly found to be horizontal. Therefore, the horizontal permeable in these bedrocks are significantly higher than the vertical permeability. However, in the FEA analysis, highest k_y value has been adopted for all ground profiles to assess the most possible adverse effect.

5.4 Proposed Basement

No structural drawings or briefs were available during the preparation of this report. However, it is understood that the "Drained Basement" system is the preferred option for the proposed development. Therefore, a soldier pile wall with a shotcrete infill system can be considered for the encountered subsurface condition.

The architectural drawings indicate that the proposed Basement Floor level will be at RL 95.9m AHD. Considering that an additional 0.5m excavation is required for the shallow foundation system, it is inferred that the proposed Bulk Excavation Level (BEL) will be at RL 95.4m AHD. Furthermore, the basement dimensions are inferred to be 120m long and 80m wide.

6.0 RESULTS

The analysis was conducted for three sections, identified as Section 1 and Section 2, to ensure coverage of all excavation boundaries. The results of the analysis are annexed as Appendix D and summarised in Table 9 below.

Table 9: Results of the Analysis

Section	Excavation Boundary	Boundary Length (m)	Inflow ($m^3/s/m$)	Inflow (m^3/day)	Boundary Adopted	Inflow (m^3/day)
Section 1	1A	80	1.07×10^{-8}	0.08	Yes	0.08
	Bottom	80	1.24×10^{-8}	0.09	Yes	0.09
	1B	80	1.20×10^{-8}	0.09	Yes	0.09
Section 2	2A	120	2.33×10^{-8}	0.25	Yes	0.25
	Bottom	120	3.50×10^{-9}	0.04	No	–
	2B	120	0	0	Yes	0
					Total	**0.51**

Since both sections provided the estimated groundwater inflow for the bottom excavation boundary, a larger volume of the inflow is incorporated into the final calculation to adopt a safe approach. Therefore, the inflow from the Section 2 bottom excavation boundary has been excluded in the final inflow.

Based on the results it is found that a total inflow of the 510 Liters/day groundwater can seep into the basement excavation in the worst-case scenario. This is estimated to be 0.19ML/year of the groundwater inflow into the basement excavation. If the construction of the development extends to approximately six months, the estimated groundwater removal during the construction stage is around 0.10ML/180 days.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This report presents the findings of the preliminary hydrogeological assessment at the nominated sections, identified as Section 1 and Section 2, for the proposed development at 2 Fishburn Crescent, Castle Hill NSW 2154. The groundwater inflow analysis indicates that dewatering will be required for this project, with estimated rates of:

- Construction Phase: **0.10ML over 180 days**.
- Operation Phase: **0.19ML per year**, which is below the 3ML per year threshold.

The assessment further concludes that the proposed development, incorporating a **drained-basement** design, is feasible at the site using industry-standard design and construction methodologies. Based on the estimated groundwater inflow, it is inferred that **Sump and Pump** dewatering system can be adopted for the construction phase. A qualified Hydraulic Engineering Consultant should design an appropriate drainage system for the operation phase based on the findings of this report.

The analysis is based on the short-term groundwater assessment and the likely hydraulic conductivity of the encountered subsurface conditions. There will certainly be variations in the adopted parameters and assumptions, and it is found that the results of the analysis can be within one order of the magnitude. Since the parameters are adopted with higher-end value, based on our experience, the actual groundwater inflow into the basement is more likely to be less than what is estimated in this report. However, if large open water-bearing defects are encountered within the basement excavation, they can be controlled by grouting the defects. The analysis indicates that a **Soldier Pile** wall with a shotcrete infill system is feasible for the encountered groundwater.

This report has been prepared based on a short-term groundwater assessment utilising only two groundwater monitoring wells. Accordingly, the installation of a third well and implementation of long-term monitoring are required to comply with WaterNSW requirements. Furthermore, the report does not demonstrate that the proposed shoring wall system is adequate to accommodate potential ground movement. It is recommended that

the anticipated ground movement be assessed and verified for the selected shoring wall system prior to the construction phase.

The above conclusion is valid subject to the adoption of the followings and should constitute a "Hold Point":

- **Water Quality Testing:** Prior to completing the design, it is recommended to conduct laboratory testing on collected groundwater samples to ensure they comply with WaterNSW groundwater quality requirements. Furthermore, this testing procedure is required during the construction stage to confirm the groundwater quality is still within the acceptable limit.
- **Drainage System:** The basement design and construction should incorporate an adequate drainage system to prevent groundwater inflow into the basement and mitigate potential adverse effects.
- **Dewatering Management Plan:** During the construction stage, groundwater inflow into the basement excavation should be monitored. If present, dewatering of groundwater can be conducted using the sump and pump method until the drainage system is completed. The volume of dewatered groundwater should be measured to verify that the designed drainage system is sufficient to manage the groundwater inflow throughout the building's design life. Additionally, the quality of the groundwater before disposal should be tested prior to disposal to ensure compliance with WaterNSW guidelines. A Dewatering Management Plan should be prepared in accordance with WaterNSW guideline and implement during both the construction phase and the building's design life.

For and on behalf of Foundation Earth Sciences

Prepared by	**Reviewed By**
R.C.Mul.Thara	Ben Buckley
Chandrasekaran Muralitharan	**Ben Buckley**
Principal Geotechnical Engineer	Director

8.0 LIMITATIONS

The assessment of the sub-surface profile within the proposed development area and the recommendations presented in this report are based on limited information available to date.

The recommendations and advice presented in this report on soil and rock condition is considered to be indicative only as only very limited areas were assessed on site to date. Site inspection by a consulting Geotechnical Engineer or Engineering Geologist are to be undertake when further investigation works are to be carried out to confirm the condition of founding materials in which this geotechnical assessment recommends.

Anecdotal evidence and Information provided by client is assumed to be relevant and to the best of knowledge be appropriate for its interpretation.

There is a possibility that the actual geotechnical and groundwater conditions across the site could differ from the inferred geotechnical assumptions and derivations on which our recommendations are presented in this report. In that case, Foundation Earth Sciences should be contacted for further advise and review of the information provided in this report. Foundation Earth Sciences does not accept any liabilities for the conditions not provided and/or accessible during the preparation of this report. Any ensuring liability resulting from use of this report by third parties cannot be transferred to Foundation Earth Sciences.

9.0 REFERENCES

1. Water NSW guideline titled “Minimum requirements for building site groundwater investigations and reporting” was issued by Department of Planning and Environment (DPE), with referenced to number PUB20/940, revision V02.2210, and dated October 2022
2. Australian Standard – AS1726-2017 “Geotechnical Site Investigation”.
3. Australian Standard – AS 1170.4-2024 “Structural Design Actions – Part 4: Earthquake actions in Australia”.
4. Australian Standard – AS 2870-2011 “Residential slabs and footings”.
5. Australian Standard – AS 2159-2009 “Piling - Design and installation”.
6. Pells, P.J.N, Mostyn, E and Walker, B F – Foundations on Sandstone and Shale in the Sydney Region, Australian Geomechanics Journal, Dec 1998.
7. Pells, P.J.N, Douglas D.J, Rodway, B, Thorne C, McManon B.K – Design Loadings for Foundations on Shale and Sandstone in the Sydney Region. Australian Geomechanics Journal, 1978.

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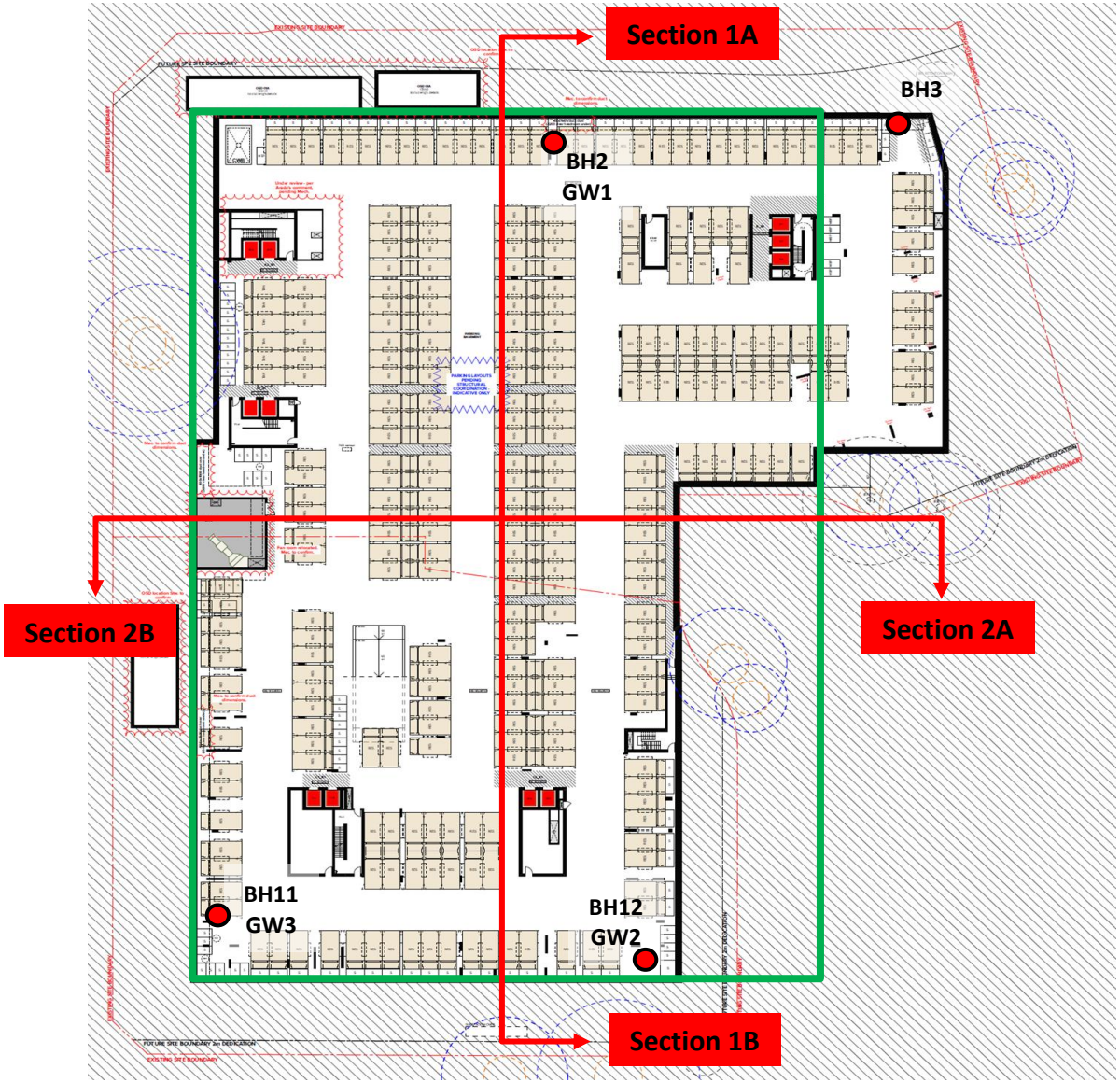
Appendix A

Site Plan



N

Key

Approximate borehole locations

Not to scale

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Ref #	Site Plan
G702-3	ARADA Development Management Pty Ltd
MM	2 Fishburn Crescent, Castle Hill NSW 2154

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Appendix B

Boreholes Logs

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BOREHOLE : BH2

CLIENT NAME: ARADA **JOB NUMBER:** G702

SITE ADDRESS: Carrington Rd [Middleton/Fishburn/Sexton Ave], Castle Hill NSW **PROJECT:** Geotechnical Investigation

Date Started : 6/03/2024 **Completed :** 6/03/2024 **Logged By :** KV/AB **Checked By :** LM

Borehole Location : Refer to Site Plan **Surface RL :** 100.7 **Datum :** m AHD

Equipment : FICO Drilling Rig **Borehole Size :** 100mm **Slope :** -90°

Method	Water	Well Details	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture	Consistence	Samples Tests Remarks	Additional Observations	Depth (m)
ADT	Water observed during augering at 7m						FILL, Silty Clay, medium plasticity, brown/orange	M	[S-F]		Fill	
			100.2	0.50		CL-CH	Silty CLAY, medium plasticity, orange, with some medium gravel	M	[S-F]	Aggressivity + Atterberg Sample	Residual Soil	
			99.9	0.80		CL-CH	Silty CLAY, medium to high plasticity, brown/orange	M	[F-St]			
			99.5	1.20		CL-CH	CLAY, medium plasticity, grey/orange, with some ironstone bands and extremely weathered sandstone layers	M	[St]			2
			98.3	2.40			SANDSTONE, extremely weathered, fine grained, brown/orange, interbedded with clay and trace of ironstone bands				Sandstone	4
			93.6	7.10			Borehole BH2 terminated at 7.10m					6
												8
												10
												12

Comments:

D - Dry, M - Moist, W - Wet

VS - Very Soft, S - Soft, F - Firm, St - Stiff, VSt - Very Stiff, H - Hard

VL - Very Loose, L - Loose, MD - Medium Dense, D - Dense, VD - Very Dense

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BOREHOLE : BH3

CLIENT NAME: ARADA **JOB NUMBER:** G702

SITE ADDRESS: Carrington Rd [Middleton/Fishburn/Sexton Ave], Castle Hill NSW **PROJECT:** Geotechnical Investigation

Date Started : 6/03/2024 **Completed :** 6/03/2024 **Logged By :** KV/AB **Checked By :** LM

Borehole Location : Refer to Site Plan **Surface RL :** 103 **Datum :** m AHD

Equipment : FICO Drilling Rig **Borehole Size :** 100mm **Slope :** -90°

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture	Consistence	Samples Tests Remarks	Additional Observations	Depth (m)
ADT	Not Encountered	102.8	0.20			FILL, Silty Clay, medium plasticity, brown	M	[S]		Fill	
					CL-CH	CLAY, medium-high plasticity, light brown/grey, trace of medium gravel	M	[F-St]	Aggressivity + Atterberg Sample	Residual Soil	
		101.6	1.40			SANDSTONE, extremely weathered, fine grained, brown, interbedded with clay and trace of ironstone bands			SPT 6, 21, 10/50mm	Sandstone	
			2								2
			4								4
			6								6
		96.8	6.20			Borehole BH3 continued as cored hole from 6.20m					
			8								8
			10								10
			12								12

Comments:

D - Dry, M - Moist, W - Wet

VS - Very Soft, S - Soft, F - Firm, St - Stiff, VSt - Very Stiff, H - Hard

VL - Very Loose, L - Loose, MD - Medium Dense, D - Dense, VD - Very Dense

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BOREHOLE : BH3

CLIENT NAME: ARADA **JOB NUMBER:** G702

SITE ADDRESS: Carrington Rd [Middleton/Fishburn/Sexton Ave], Castle Hill NSW **PROJECT:** Geotechnical Investigation

Date Started : 6/03/2024 **Completed :** 6/03/2024 **Logged By :** KV/AB **Checked By :** LM

Borehole Location : Refer to Site Plan **Surface RL :** 103 **Datum :** m AHD

Equipment : FICO Drilling Rig **Borehole Size :** 100mm **Slope :** -90°

Method	Water	RL (m)	Depth (m)	Graphic Log	Material Description	Weathering	Estimated Strength (EL VL L M H VH EH)	$Is_{(50)}$ (MPa)	RQD %	Defect Spacing (mm) (20 60 180 540 1620)	Defect Description	Depth (m)
			2									2
			4									4
			6		Continued from non-cored borehole							6
NMLC	Not Encountered	96.8	6.20		SHALE, highly weathered, brown/dark grey with light grey laminations, trace of ironstone staining	HW		D 0.21 A 0.39 D 0.24 A 0.49 D 0.12 A 0.63 D 2.12 A 1.97 D 1.58 A 2.41 D 1.43 A 1.28	37 83		6.26m J,P,S, 0-5° 6.35m J,P,S, 10-20° 6.40m J,P,S, 0-5° 6.41m J,P,S, 0-5° 6.43m J,P,S, 0-5° 6.46m J,P,S, 0-5° 6.51m J,P,S, 0-5° 6.57m, Clay Seam 6.66m J,P,S, 0-5° 6.68m, Clay Seam 6.73m J,P,S, 0-5° 6.78m J,P,S, 10-20° 6.81m J,Ir,S, 0-5° 6.84m J,Ir,S, 40-50° 6.90m J,P,S, 0-5° 6.93m, Fragment Zone, 100mm 7.05m, Fragment Zone, 50mm 7.13m J,Ir,S, 5-10° 7.14m J,Ir,S, 5-10° 7.17m J,Cu,S, 40-50° 7.25m, Barrell Lift 7.33m J,P,S, 0-5° 7.37m J,P,S, 0-5° 7.45m J,Ir,S, 0-5° 7.57m J,P,S, 0-5° 7.62m J,P,S, 0-5° 7.68m J,P,S, 5-10° 7.75m J,P,S, 0-5° 7.81m, Clay Seam 7.82m J,Ir,S, 40-50° 7.95m J,P,S, 0-5° 8.00m J,P,S, 0-5° 8.08m J,P,S, 5-10° 8.14m J,P,S, 0-5° 8.25m, Extremely Weathered Seam 8.36m J,P,S, 0-5° 8.45m J,P,S, 0-5° 8.58m, Fractured Zone, 30mm 8.78m, Barrell Lift 8.83m J,P,S, 0-5° 8.94m, Hand Break 8.96m, Fracture Zone, 40mm 9.00m J,Cu,S, 40-50° 9.10m J,P,S, 0-5° 9.32m J,P,S, 10-20° 9.44m, Extremely Weathered Seam 9.56m J,P,S, 10-20° 9.81m J,P,R, 40-50°	8
		94.8	8.24		SANDSTONE, highly to moderately weathered, fine grained, grey, with some ironstone staining	HW-MW						10
		92.8	10.17		BH3 terminated at 10.17m							12

EL VL L M H VH EH — 20 60 180 540 1620 4860

Comments:

Weathering: EW - Extremely; HW - Highly; MW - Moderately; SW - Slightly; Fr - Fresh

EL - Extremely Low; VL - Very Low; L - Low; M - Medium; H - High; VH - Very High; EH - Extremely High

D - Diametral; A - Axial

J - Joint; B - Bedding Plan; CS - Clay Seams; FZ - Fractured Zone; IS - Infill Seam; SS - Sheared Seam; CZ - Crushed Zone

MB - Mechanical Break; HB - Handling Break; Pl - Planar; Ir - Irregular; Cu - Curved; St - Stepped

S - Smooth; R - Rough; P - Polished; Qz - Quartz; Fe - Iron Stain

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FOUNDATION EARTH SCIENCES

BOREHOLE : BH11

CLIENT NAME: ARADA **JOB NUMBER:** G702

SITE ADDRESS: Carrington Rd [Middleton/Fishburn/Sexton Ave], Castle Hill NSW **PROJECT:** Geotechnical Investigation

Date Started : 7/03/2024 **Completed :** 7/03/2024 **Logged By :** KV/AB **Checked By :** LM

Borehole Location : Refer to Site Plan **Surface RL :** 101.9 **Datum :** m AHD

Equipment : Commachio 305 **Borehole Size :** 100mm **Slope :** -90°

Method	Water	Well Details	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture	Consistence	Samples Tests Remarks	Additional Observations	Depth (m)
ADT			101.2	0.70			FILL, Clayey Silt, low to medium plasticity, brown	M	[S]		Fill	
						CL-CH	Silty CLAY, medium plasticity, brown/orange	M	[St]	Aggressivity + Atterberg Sample SPT 3, 8, 16 N=24	Residual Soil	2
			99.9	2.00			SANDSTONE, extremely weathered, fine grained, brown/grey, with some clay and trace of ironstone bands				Sandstone	4
	Not Encountered		97.7	4.20			Borehole BH11 continued as cored hole from 4.20m					6
												8
												10
												12

Comments:

D - Dry, M - Moist, W - Wet

VS - Very Soft, S - Soft, F - Firm, St - Stiff, VSt - Very Stiff, H - Hard

VL - Very Loose, L - Loose, MD - Medium Dense, D - Dense, VD - Very Dense

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FOUNDATION EARTH SCIENCES

BOREHOLE : BH11

CLIENT NAME: ARADA **JOB NUMBER:** G702

SITE ADDRESS: Carrington Rd [Middleton/Fishburn/Sexton Ave], Castle Hill NSW **PROJECT:** Geotechnical Investigation

Date Started : 7/03/2024 **Completed :** 7/03/2024 **Logged By :** KV/AB **Checked By :** LM

Borehole Location : Refer to Site Plan **Surface RL :** 101.9 **Datum :** m AHD

Equipment : Commachio 305 **Borehole Size :** 100mm **Slope :** -90°

Method	Water	Well Details	RL (m)	Depth (m)	Graphic Log	Material Description	Weathering	Estimated Strength (EL VL L M H VH EH)	$Is_{(50)}$ (MPa)	RQD %	Defect Spacing (mm) (20 60 180 540 1620)	Defect Description	Depth (m)
				2									2
				4		Continued from non-cored borehole							4
NMLC	Not Encountered		97.7	4.20		SHALE, highly weathered, brown/dark grey	HW		D A 0.14 0.07	32		4.20m, Clay Band, 40mm 4.29m J,P,S, 0-5° 4.34m J,P,S, 0-5° 4.38m, Fragmented Zone, 30mm 4.47m J,P,S, 0-5° 4.50m J,P,S, 0-5° 4.58m J,P,S, 0-5° 4.63m, Clay Band, 40mm 4.75m J,P,S, 0-5° 4.92m, Clay Seam 5.00m, J,P,S, 5-10° 5.09m, Clay Band, 30mm 5.13m, Barrell Lift 5.16m J,P,S, 0-5° 5.21m J,P,S, 0-5° 5.26m J,P,S, 0-5° 5.27m J,P,S, 0-5° 5.30m J,P,S, 0-5° 5.37m, Extremely Weathered Seam 5.47m, J,St,S, 10-20° 5.51m, Clay Band, 50mm 5.58m J,P,S, 0-5° 5.70m J,P,S, 0-5° 6.00m, Hand Break 6.72m J,P,S, 0-5° 6.80m, Hand Break 7.00m, Hand Break 7.23m, Barrell Lift 7.42m J,P,S, 0-5° 7.54m J,P,S, 0-5° 7.77m J,P,S, 30-40°	
			97.0	4.90		SANDSTONE, highly weathered, fine grained, brown/red, interbedded with shale and ironstone bands			D A 2.06 2.12				
			96.3	5.59		SANDSTONE, highly to moderately weathered, fine grained, grey/light brown	HW-MW		D A 0.87 0.85				6
				6					D A 0.41 0.73				
									D A 1.27 1.67				
				8								8.00m, Hand Break	8
									D A 1.16 1.25	95		8.79m, Barrell Lift 9.00m, Hand Break	
									D A 1.39 1.34			9.41m J,P,S, 30-40° 9.67m J,P,S, 30-40° 10.00m, Hand Break	
				10					D A 1.54 1.43			10.86m J,P,S, 0-5° 11.00m, Hand Break	10
									D A 1.34 1.59			11.24m J,P,S, 0-5° 11.35m J,P,S, 20-30° 11.39m J,P,S, 20-30°	
			90.1	11.85 12									12
						BH11 terminated at 11.85m							

Comments:

Weathering: EW - Extremely; HW - Highly; MW - Moderately; SW - Slightly; Fr - Fresh

EL - Extremely Low; VL - Very Low; L - Low; M - Medium; H - High; VH - Very High; EH - Extremely High

D - Diametral; A Axial

J - Joint; B - Bedding Plan; CS - Clay Seams; FZ - Fractured Zone; IS - Infill Seam; SS - Sheared Seam; CZ - Crushed Zone

MB - Mechanical Break; HB - Handling Break; Pl - Planar; Ir - Irregular; Cu - Curved; St - Stepped

S - Smooth; R - Rough; P - Polished; Qz - Quartz; Fe - Iron Stain

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FOUNDATION EARTH SCIENCES

BOREHOLE : BH12

CLIENT NAME: ARADA **JOB NUMBER:** G702

SITE ADDRESS: Carrington Rd [Middleton/Fishburn/Sexton Ave], Castle Hill NSW **PROJECT:** Geotechnical Investigation

Date Started : 7/03/2024 **Completed :** 7/03/2024 **Logged By :** KV/AB **Checked By :** LM

Borehole Location : Refer to Site Plan **Surface RL :** 105 **Datum :** m AHD

Equipment : Commachio 305 **Borehole Size :** 100mm **Slope :** -90°

Method	Water	Well Details	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture	Consistence	Samples Tests Remarks	Additional Observations	Depth (m)
ADT	Not Encountered		105.0	0.05			DGB Road Base, 50mm FILL, Clayey Silt, low to medium plasticity, brown	M	[S-F]		Road Base Fill	
			104.5	0.50		CL-CH	Silty CLAY, medium plasticity, brown	M	[F-St]	SPT 7, 8, 11 N=19	Residual Soil	
			104.2	0.80		CL-CH	Silty CLAY, medium plasticity, grey, interbedded with extremely weathered sandstone	M	[VSt-H]	Aggressivity + Atterberg Sample		2
			102.8	2.20			SANDSTONE, extremely weathered, fine grained, grey, with some clay and trace of ironstone bands				Sandstone	4
			99.0	6.00			SHALE, extremely to highly weathered, dark grey, with some clay				Shale	6
			98.0	7.00			Borehole BH12 continued as cored hole from 7.00m					8
												10
												12

Comments:

D - Dry, M - Moist, W - Wet

VS - Very Soft, S - Soft, F - Firm, St - Stiff, VSt - Very Stiff, H - Hard

VL - Very Loose, L - Loose, MD - Medium Dense, D - Dense, VD - Very Dense

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FOUNDATION EARTH SCIENCES

BOREHOLE : BH12

CLIENT NAME: ARADA **JOB NUMBER:** G702

SITE ADDRESS: Carrington Rd [Middleton/Fishburn/Sexton Ave], Castle Hill NSW **PROJECT:** Geotechnical Investigation

Date Started : 7/03/2024 **Completed :** 7/03/2024 **Logged By :** KV/AB **Checked By :** LM

Borehole Location : Refer to Site Plan **Surface RL :** 105 **Datum :** m AHD

Equipment : Commachio 305 **Borehole Size :** 100mm **Slope :** -90°

Method	Water	Well Details	RL (m)	Depth (m)	Graphic Log	Material Description	Weathering	Estimated Strength (EL VL L M H VH EH)	$Is_{(50)}$ (MPa)	RQD %	Defect Spacing (mm) (20 60 180 540 1620)	Defect Description	Depth (m)
				2									2
				4									4
				6		Continued from non-cored borehole							6
NMLC	Not Encountered		98.0	7.00		SHALE, highly weathered, grey/brown/dark grey with light grey laminations	HW		D 0.08 A 0.62 D 0.22 A 0.24 D 0.69 A 0.61	67		7.09m J,P,S, 0-5° 7.15m J,Ir,S, 10-20° 7.21m, Clay Seam 7.34m, Fracture Zone, 80mm 7.42m J,P,S, 0-5° 7.44m J,P,S, 0-5° 7.48m J,Ir,S, 5-10° 7.59m J,Ir,S, 20-30° 7.65m J,P,S, 0-5° 7.80m J,P,S, 5-10° 7.96m, Clay Seam 8.00m J,P,S, 0-5° 8.15m J,P,S, 0-5° 8.33m J,P,S, 0-5° 8.34m J,P,S, 0-5° 8.49m J,P,S, 0-5° 8.52m J,P,S, 0-5° 8.59m J,P,S, 0-5°	8
			96.3	8.72		SANDSTONE, moderately weathered, grey/light brown with ironstone staining	MW		D 0.4 A 0.45 D 1.19 A 0.93	92		8.65m, Clay Band 20mm 8.67m, Barrell Lift 8.68m, Clay Band, 30mm 8.72m J,P,S, 40-50° 9.00m J,P,S, 0-5° 9.17m, Fragmented Zone, 20mm 9.43m, Extremely Weathered Seam 9.58m J,P,S, 30-40° 9.93m J,P,S, 0-5° 10.00m J,P,S, 0-5° 10.08m J,P,S, 5-10° 10.56m J,Cu,S, 20-30° 10.67m J,P,S, 30-40°	10
			93.4	11.65		BH12 terminated at 11.65m			D 1.54 A 1.2			10.89m, Hand Break 11.00m, Hand Break 11.03m, Hand Break 11.13m J,P,S, 10-20° 11.38m J,Cu,S, 5-10°	12

EL VL L M H VH EH

20 60 180 540 1620 4860

Comments:

Weathering
EW - Extremely
HW - Highly
MW - Moderately
SW - Slightly
Fr - Fresh

EL - Extremely Low
VL - Very Low
L - Low
M - Medium
H - High
VH - Very High
EH - Extremely High

D - Diametral
A Axial

J - Joint
B - Bedding Plan
CS - Clay Seams
FZ - Fractured Zone
IS - Infill Seam
SS - Sheared Seam
CZ - Crushed Zone

MB - Mechanical Break
HB - Handling Break

S - Smooth
R - Rough
P - Polished

Pl - Planar
Ir - Irregular
Cu - Curved
St - Stepped

Qz - Quartz
Fe - Iron Stain

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FOUNDATION EARTH SCIENCES

METHODS OF SOIL DESCRIPTION USED ON BOREHOLE LOGS

FILL	ORGANIC SOILS (OL, OH, Pt)	CLAY (CL, CI, or CH)
COUBLES or BOULDERS	SILT (ML or MH)	SAND (SP or SW)
GRAVEL (GP or GW)	Combinations of these basic symbols may be sued to indicate mixed materials	

CLASSIFICATION AND INFERRED STRATIGRAPHY

Soil is broadly classified and described in borehole logs using the preferred method given in AS 1726:2017, section 6.1 soil descriptions and classification.

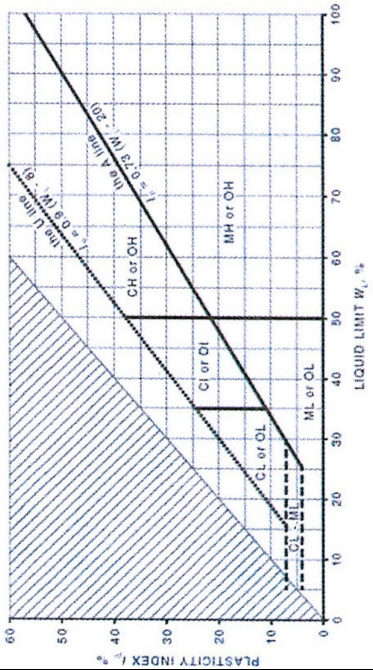
GROUP SYMBOLS

MAJOR DIVISIONS		SYMBOL	DESCRIPTION
COARSE GRAINED SOILS More than 65% of the soil excluding oversize fraction is greater than 0.075mm	**GRAVEL** More than 50% of the coarse fraction is >2.36mm	GW	Well graded gravel and gravel-sand mixtures, little or no fines.
		GP	Poorly graded gravel and gravel-sand mixtures, little or no fines.
		GM	Silty gravel, gravel-sand-clay mixtures.
		GC	Clayey gravel, gravel-sand-clay mixtures.
	SAND More than 50% of the coarse fraction is <2.36mm	SW	Well graded sand and gravelly sand, little or no fines.
		SP	Poorly graded sand and gravelly sand, little or no fines.
		SM	Silty sand, sand- silt mixtures.
		SC	Clayey sand, sandy -clay mixtures.
FINE GRAINED SOILS More than 35% of the soil excluding oversize fraction is less than 0.075mm	**Liquid limit less <50%**	ML	Inorganic silts of low plasticity, very fine sands, rock flour, silty or clayey fine sands.
		CL, CI	Inorganic slays of low to medium plasticity, gravely clays, sandy clays, silty clays
		OL	Organic silts and organic silty clays of low plasticity.
	Liquid limit > than 50%	MH	Inorganic silts of high plasticity.
		CH	Inorganic clays of high plasticity.
		OH	Organic clays of medium to high plasticity.
	Highly organic Soil	PT	Peat muck and other highly organic soils.

PARTICLE SIZE CHARACTERISTICS

Fraction	Components	Subdivision	Size mm
Oversize	BOULDERS		>200
	COBBLES		63-200
	GRAVEL	Coarse	19-63
		Medium	6.7-19
		Fine	2.36-6.7
	SAND	Coarse	0.6-2.36
		Medium	0.21-0.6
		Fine	0.075-0.21
	SILT		0.002-0.075
	CLAY		<0.002

PLASTICITY PREOPERTIES



FOUNDATION EARTH SCIENCES

ABBREVIATIONS AND DESCRIPTIONS FOR ROCK MATERIAL AND DEFECTS

MOISTURE CONDITION

Symbol	Term	Description
D	Dry	Non-cohesive and free running
M	Moist	Soils feel cool, darkened in colour. Soil tends to stick together.
W	Wet	Soils feel cool, darkened in colour. Soil tends to stick together, free water forms when handling.

Moisture content of cohesive soils shall be described in relation to plastic limit (PL) or liquid limit (LL) for soils with higher moisture content as follows: Moist, dry of plastic limit (w <PL); Moist, near plastic limit (w = PL); Moist, wet of plastic limit (w<PL); Wet, near liquid limit (w=LL), Wet, wet of liquid limit (w>LL),

CONSISTENCY

Symbol	Term	Undrained Shear Strength (kPa)	SPT "N" #
VS	Very Soft	< 12	<2
S	Soft	>12 to <25	>2 to <4
F	Firm	>25 to <50	>4 to < 8
St	Stiff	>50 to <100	>8 to 15
H	Hard	>200	>30
Fr	Friable	-	

DENSITY

Symbol	Term	Density Index %	SPT "N" #
VL	Very Loose	<15	0 to 4
L	Loose	>15 to <35	4 to 10
MD	Medium Density	>65 to < 85	10 to 30
D	Dense	>65 to <85	30 to 50

In the absence of test results, consistency and density may be assessed from correlations with the observed behaviour of the material. #SPT correlations are not stated in AS1726:2017 and may be subject to corrections for overburden pressure and equipment type.

MINOR COMPONENTS

TERM	ASSESSMENT GUIDE	PROPORTION BY MASS
Trace	Presence just detectable by feel or eye but soil properties little or no difference to general properties of primary component	Coarse grained soils: <%5 Fine grained soils: <15%
With	Presence easily detectable by feel or eye but soil properties little or no difference to general properties of primary component	Coarse grained soils: 5-12% Fine grained soils: 15-30%
Prefix	Presence easily detectable by feel or eye in conjunction with the general properties of primary component	Coarse grained soils: >12% Fine grained soils: >30%

CLASSIFICATION AND INFERRED STRATIGRAPHY

Rock is broadly classified and described in borehole logs using the preferred method given in AS 1726:2017, section 6.2 Rock identification, descriptions, and classification.

ROCK MATERIAL DESCRIPTION

Layering

Term	Description
Massive	No Layering apparent
Poorly Developed	Layering just visible; little effect on properties
Well Developed	Layering (bedding, foliation, cleavage) distinct; rock breaks more easily parallel to layering

Structure

Term	Spacing (mm)
Thinly Laminated	<6
Laminated	6-20
Very thinly bedded	20-60
Thinly bedded	60-200
Medium bedded	200-600
Thickly bedded	600-2,000
Very thickly bedded	>2,000

ABBREVIATIONS AND DESCRIPTIONS FOR DEFECT TYPES

Defect Type	Abbr.	Description
Joint	JT	Surface of a fracture or parting, formed without displacement, across which the rock has little or no tensile strength. May be closed or filled by ait, water, soil, or rock substance, which acts as cement.
Bedded Parting	BP	Surface of facture or parting, across which the rock has little or no tensile strength, parallel of sub-parallel to layering/bedding. Bedding refers to the layering or stratification of a rock, indicating orientation during deposition, resulting in planar anisotropy in the rock material.
Foliation	FL	Repetitive planar structure parallel to the shear direction or perpendicular to the direction of higher pressure, especially in the metamorphic rock, e.g., schistosity (SH)) and Gneissosity.
Contact	CO	The surface between two types or ages of rock.
Cleavage	CL	Cleavage planes appear as parallel, closely spaced, and planar surfaces resulting from mechanical fracturing of rock through deformation or metamorphism, independent of bedding.
Sheared Seam/ Zone (Fault)	SS/SZ	Seam or zone with roughly parallel almost planar boundaries of rock substance cut by closely space (often <50mm) parallel and usually smooth or slickensided joints or cleavage planes.
Crushed seam/ Zone (Fault)	CS/CZ	Seam or zone composed of disoriented usually angular fragments of the host rock substance, with rough parallel near-planar boundaries. The brecciated fragments may be of clay, silt, sand or gravel sizes or mixtures of these.
Decomposed seam/Zone	DS/DZ	Seam of soil substance, often with gradational boundaries, formed by weathering of the rock material in places.
Infilled Seam	IS	Seam of soil substance, usually clay or clayey, with very distinct roughly parallel boundaries, formed by soil migrating into joint or open cavity.
Schistocity	SH	The foliation in schist or other coarse grained crystalline rock due to the parallel arrangement of platy or prismatic mineral grains, such as mica.
Vein	VN	Distinct sheet-like body of minerals crystallised within rock through typically open-space filling or crack-seal growth.

ABBREVIATIONS AND DESCRIPTIONS FOR DEFECT SHAPE AND ROUGHNESS

Shape	Abbr.	Description	Roughness	Abbr.	Description
Planar	Pl	Consistent Orientation	Polished	Pol	Shiny smooth surface
Curved	Cu	Gradual change in orientation	Slickensided	SL	Grooved or stained surface, usually polished
Undulating	Un	Wavy surface	Smooth	S	Smooth to touch. Few or no surface irregularities
Stepped	St	One or more well defined steps	Rough	RF	Many small surface irregularities, amplitude generally <1mm. Feels like fine to coarse sandpaper
Irregular	Ir	Many sharp changes in orientation	Very Rough	VR	Many large surface irregularities, amplitude generally >1mm. Feels like very coarse sandpaper.

Orientation: **Vertical Boreholes-** The dip (inclination from horizontal) of the defect.
Inclined Boreholes- The inclination is measured as the acute angle to the core axis.

ABBREVIATIONS AND DESCRIPTIONS FOR DEFECT COATING

Coating	Abbr.	Description
Clean	CN	No Visible coating or infilling
Stain	SN	No visible coating but surfaces are discoloured by staining, often limonite (orange-brown)
Veneer	VNR	A visible coating of soil or mineral substances, usually too thin to measure (<1mm); may be patchy

DEFECT APERTURE

Aperture	Abbr.	Description
Closed	CL	Closed.
Open	O	Without any infill material
Infilled	-	Soil or rock i.e., clay, talc, pyrite, quartz, etc.

FOUNDATION EARTH SCIENCES

TERMS FOR ROCK MATERIAL STRENGTH AND WEATHERING

CLASSIFICATION AND INFERRED STRATIGRAPHY

Rock is broadly classified and described in borehole logs using the preferred method given in AS 1726:2017, section 6.2 Rock identification, descriptions, and classification.

ROCK MATERIAL STRENGTH CLASSIFICATION

Symbol	Term	Point Load Index $I_{s(50)}$ (MPa)#	Field Guide
VL	Very Low	0.03 To 0.01	Material crumbles under firm blows with sharp end of pick; can be peeled with knife; too hard to cut triaxial sample by hand. Pieces up to 30mm can be broken by finger pressure.
L	Low	0.1 to 0.3	Easily scored with knife; indentations 1mm to 3mm show in the specimen with firm blows of pick point; has dull sound under hammer. A piece of core 150mm long by 50mm diameter may be broken by hand. Sharp edges of core may be friable and break during handling.
M	Medium	0.3 – 1	Readily scored with a knife; a piece of core 150mm long by 50mm diameter can be broken by hand with difficulty
H	High	1 to 3	A piece of core 150mm long by 50mm diameter cannot be broken by hand but can be broken with a pick with a single firm blow; rock rings under hammer.
VH	Very High	3 to 10	Hand specimen breaks with pick after more than one blow; rock rings under hammer.
EH	Extremely High	>10	Specimen requires many blows with geological pick to break through intact material; rock rings under hammer.

#Rock Strength Test Results ▼ Point Load Strength Index, I_s (50) Axial Test (MPa)

● Point Load Strength Index, I_s (50), Diametral test (MPa)

Relationship between rock strength test result ($I_{s(50)}$) and unconfined compressive strength (UCS) will vary with rock type and strength and should be determined on a site-specific basis. However, UCS is typically 20 x $I_{s(50)}$

ROCK MATERIAL WEATHERING CLASSIFICATION

Symbol		Term	Field Guide
RS		Residual Soil	Soil developed on extremely weathered rock; the mass structure and substance fabric no longer evident; there is a large change in volume, but the soil has not been significantly transported.
XW		Extremely Weathered	Rock is weathered to such an extent that it has soil properties- i.e., it either disintegrates or can be remoulded, in water.
DW	HW	Distinctly Weathered	Rock strength usually changed by weathering. The rock may be highly discoloured, usually by iron staining. Porosity may be increased by leaching or may be decreased due to decomposition of weathered product in pores. In some environments it is convenient to subdivide into highly weathered and moderately weathered, with the degree of alteration typically less for MW
	MW		
SW		Slightly Weathered	Rock slightly discoloured but shows little to no change of strength relative to fresh rock.
FR		Fresh	Rock shows no sign of decomposition or staining.

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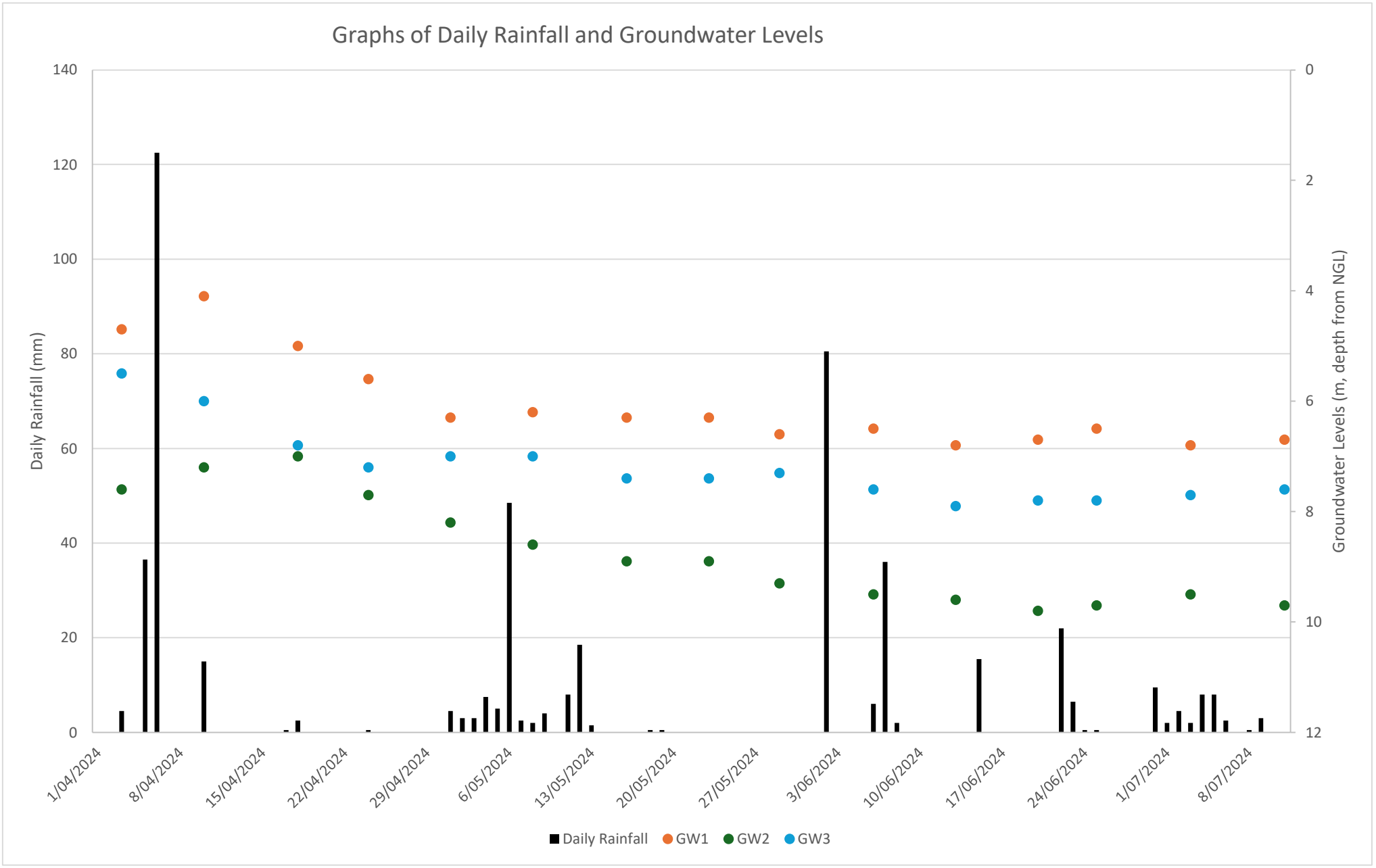
Appendix C

Groundwater Level and Daily Rainfall



Project No: G702-3
Hydrogeological Assessment
2 Fishburn Crescent, Castle Hill NSW 2154

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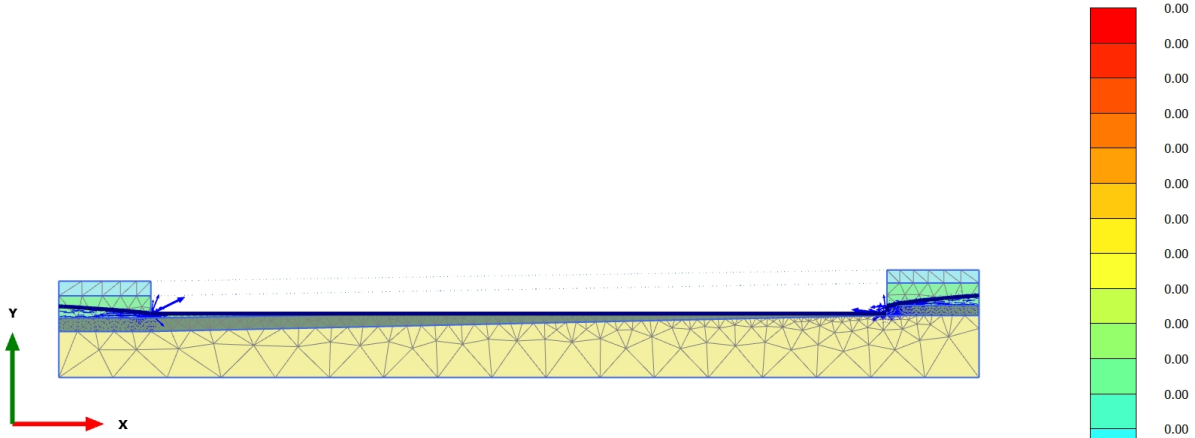
Appendix D

Groundwater Inflow Analysis

4.1.1 Calculation results, Excavation [Phase_1] (1/1), Groundwater flow |q|



Groundwater flow |q| (scaled up 200*10⁶ times) (Time 0.000 s)

Maximum value = 0.03201*10^{-6} m/s (Element 557 at Stress point 6674)

Minimum value = 0.3779*10^{-15} m/s (Element 1100 at Stress point 13198)

4.2.1 Calculation results, cross section A-A*, Excavation [Phase_1] (1/1), Groundwater flow |q|

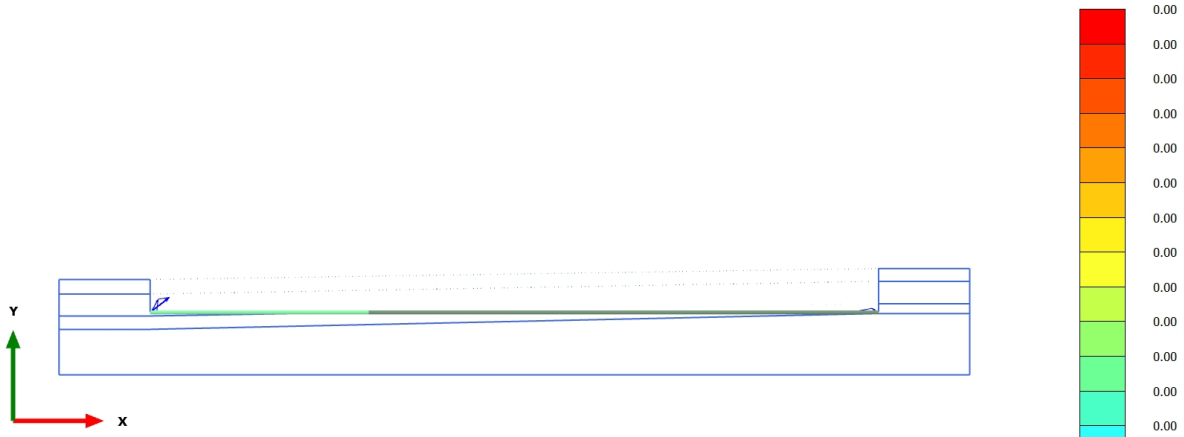
Groundwater flow |q| (scaled up 200*10⁶ times) (Time 0.000 s)

Maximum value = $0.02005*10^{-6}$ m/s

Minimum value = $0.02851*10^{-12}$ m/s

Total discharge is $0.01062*10^{-6}$ m³/s/m

4.1.1 Calculation results, cross section A-A*, Excavation [Phase_1] (1/1), Groundwater flow |q|



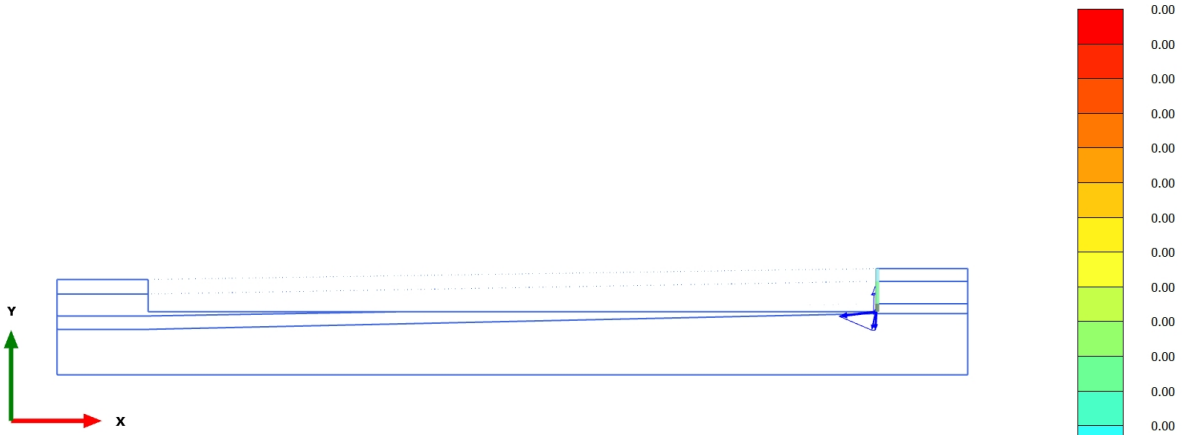
Groundwater flow |q| (scaled up 200*10⁶ times) (Time 0.000 s)

Maximum value = $0.02036*10^{-6}$ m/s

Minimum value = $6.265*10^{-15}$ m/s

Total discharge is $0.01233*10^{-6}$ m³/s/m

4.1.1 Calculation results, cross section A-A*, Excavation [Phase_1] (1/1), Groundwater flow |q|



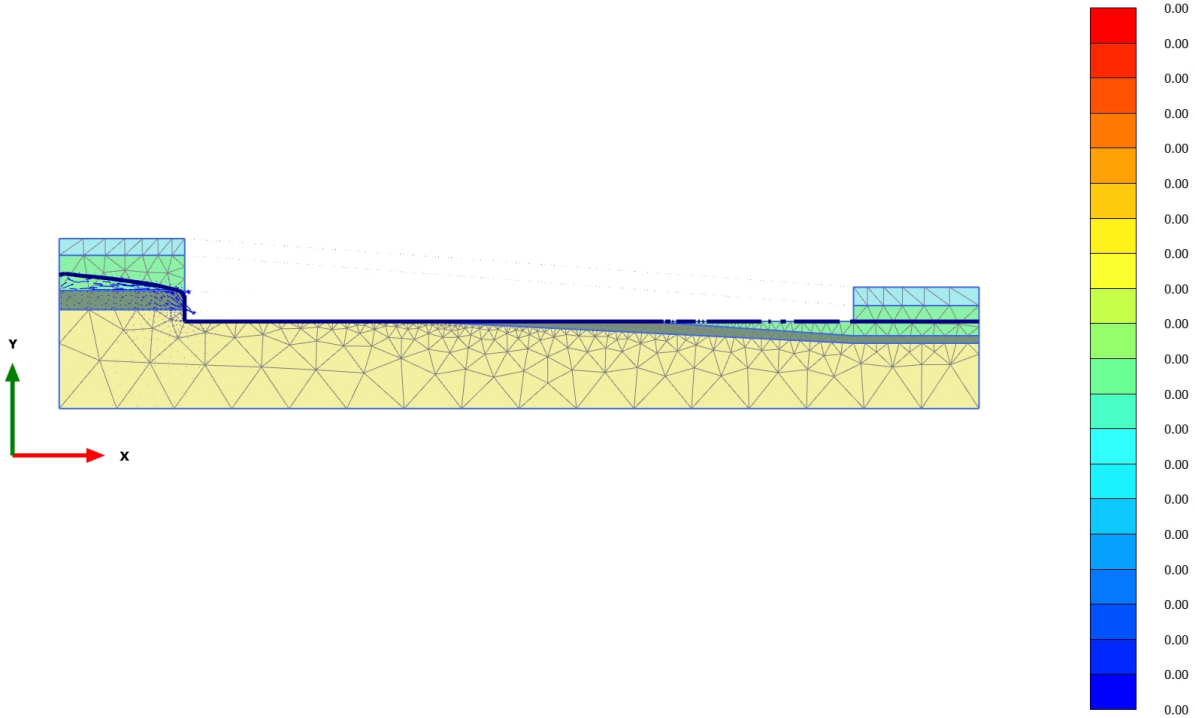
Groundwater flow |q| (scaled up 500*10⁶ times) (Time 0.000 s)

Maximum value = $0.01261*10^{-6}$ m/s

Minimum value = $0.02387*10^{-12}$ m/s

Total discharge is $-0.01196*10^{-6}$ m³/s/m

4.1.1 Calculation results, Excavation [Phase_1] (1/1), Groundwater flow |q|

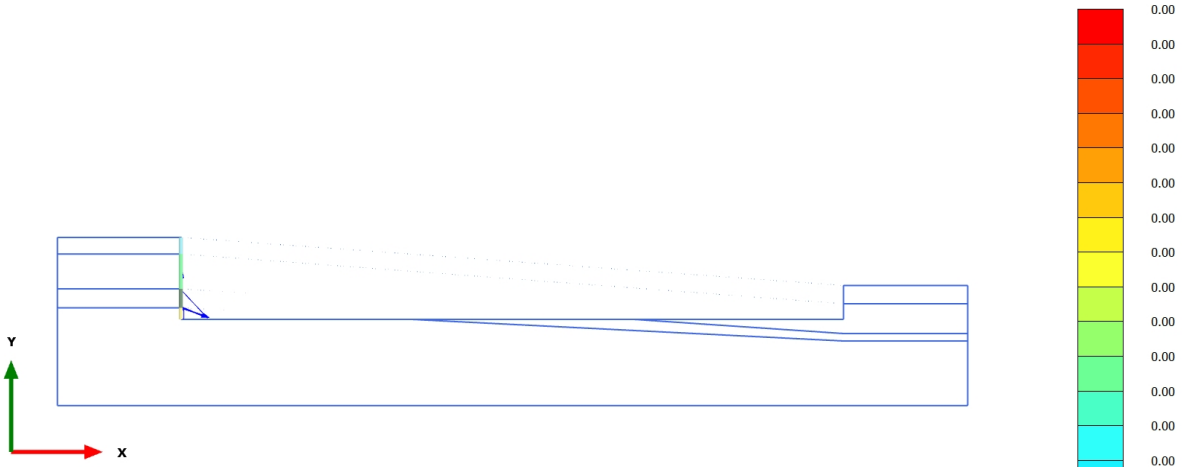


Groundwater flow |q| (scaled up $100*10^6$ times) (Time 0.000 s)

Maximum value = $0.02402*10^{-6}$ m/s (Element 161 at Stress point 1929)

Minimum value = $1.224*10^{-21}$ m/s (Element 661 at Stress point 7931)

4.2.1 Calculation results, cross section A-A*, Excavation [Phase_1] (1/1), Groundwater flow |q|



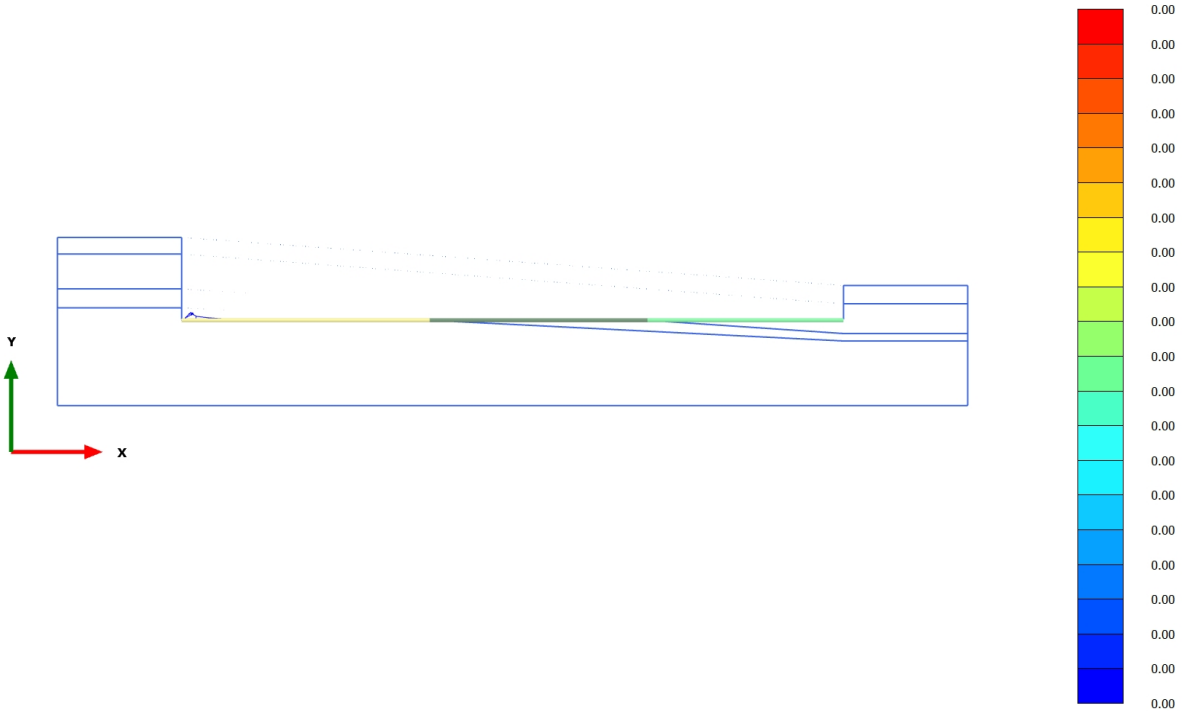
Groundwater flow |q| (scaled up 200*10⁶ times) (Time 0.000 s)

Maximum value = 0.01816*10^{-6} m/s

Minimum value = 0.000 m/s

Total discharge is 0.02328*10^{-6} m³/s/m

4.1.1 Calculation results, cross section A-A*, Excavation [Phase_1] (1/1), Groundwater flow |q|



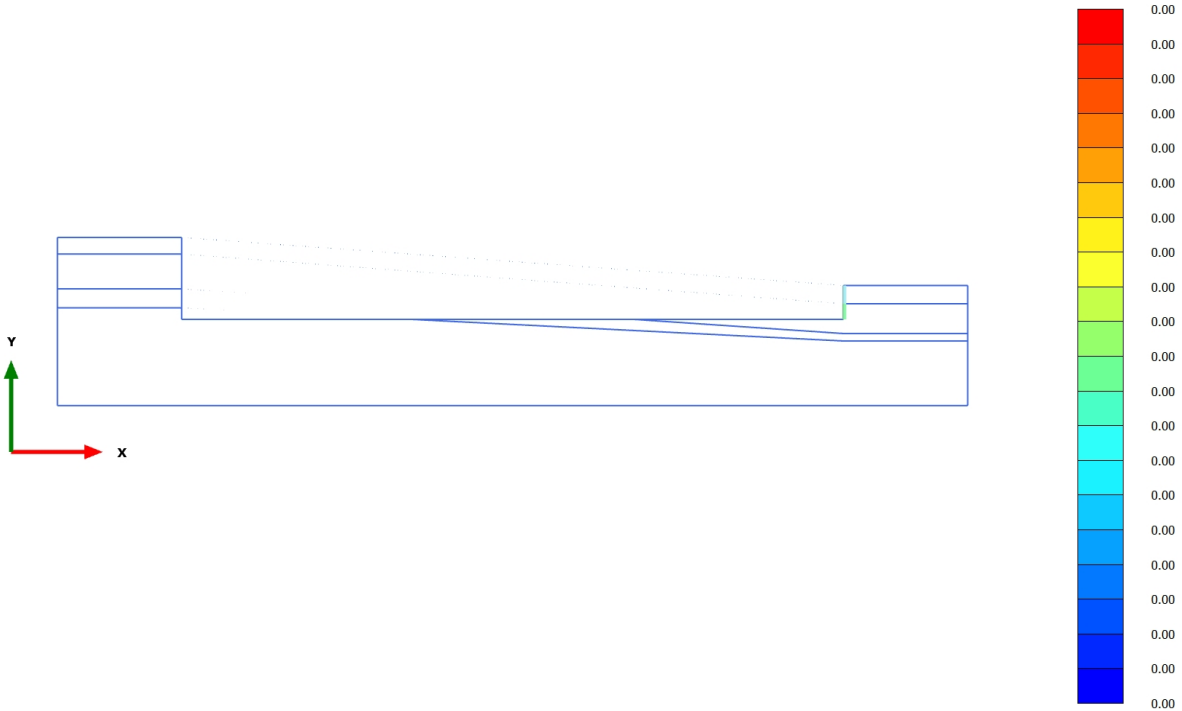
Groundwater flow |q| (scaled up 1.00*10⁹ times) (Time 0.000 s)

Maximum value = $1.710*10^{-9}$ m/s

Minimum value = $2.046*10^{-15}$ m/s

Total discharge is $3.497*10^{-9}$ m³/s/m

4.1.1 Calculation results, cross section A-A*, Excavation [Phase_1] (1/1), Groundwater flow |q|



Groundwater flow |q| (scaled up 1.00*10⁹ times) (Time 0.000 s)

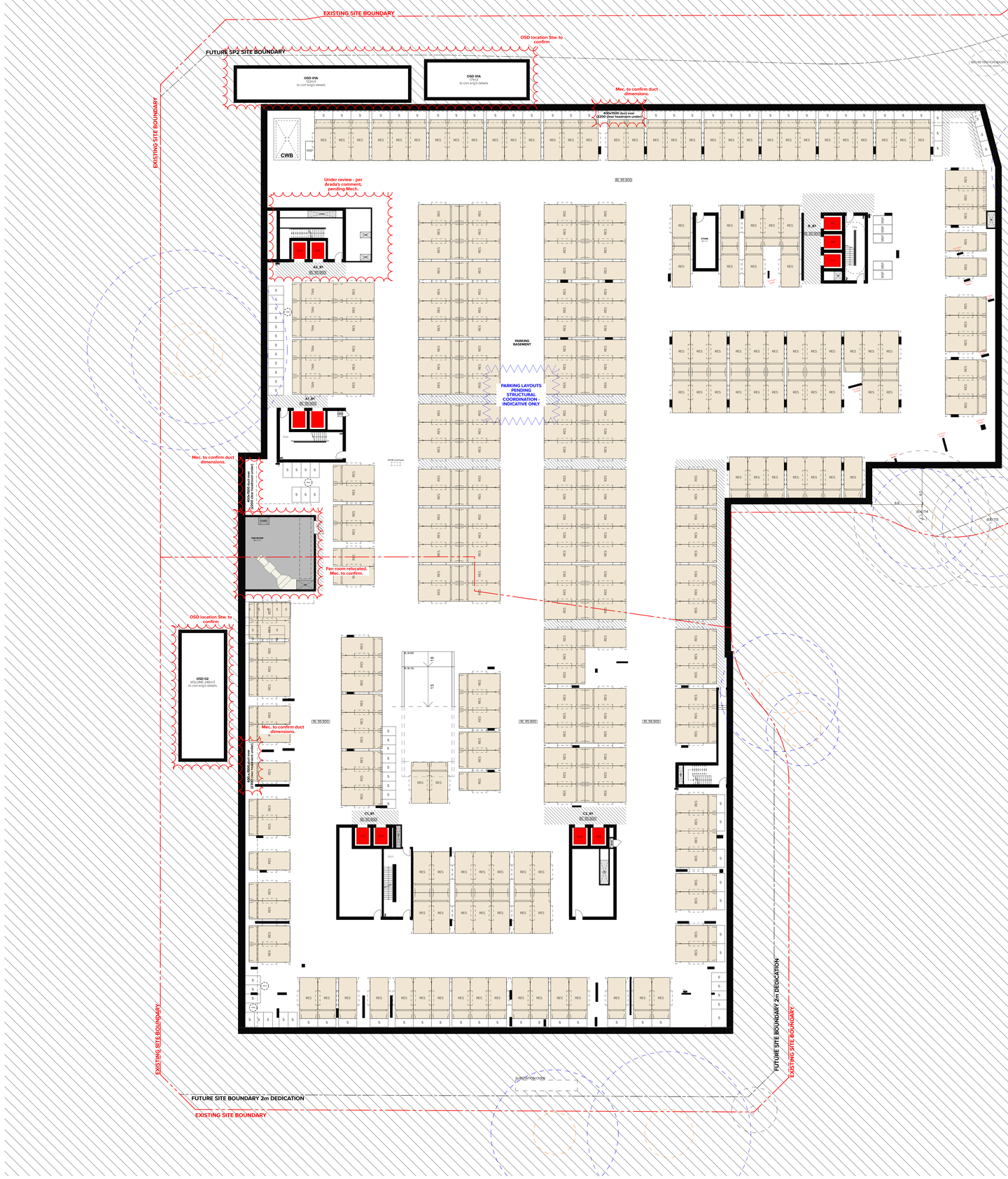
Maximum value = $3.204*10^{-15}$ m/s

Minimum value = $4.457*10^{-21}$ m/s

FOUNDATION EARTH SCIENCES

Appendix E

Architectural Drawings



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2. Refer to the BASIX Certificate for further information and performance requirements.

DLCS Quality Endorsed Company. ISO 9001:2015. Registration Number 20475
Nominated Architect: Nicholas Turner 9495, ABN 68 084 299 911

KEY PLAN

LEGEND

AC	Air Conditioning
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Rev	Date	Approved by	Revision Notes
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E	10/04/2026	CM	For Coordination

CLIENT
12 Harvey Street Pyrmont Sydney NSW 2000

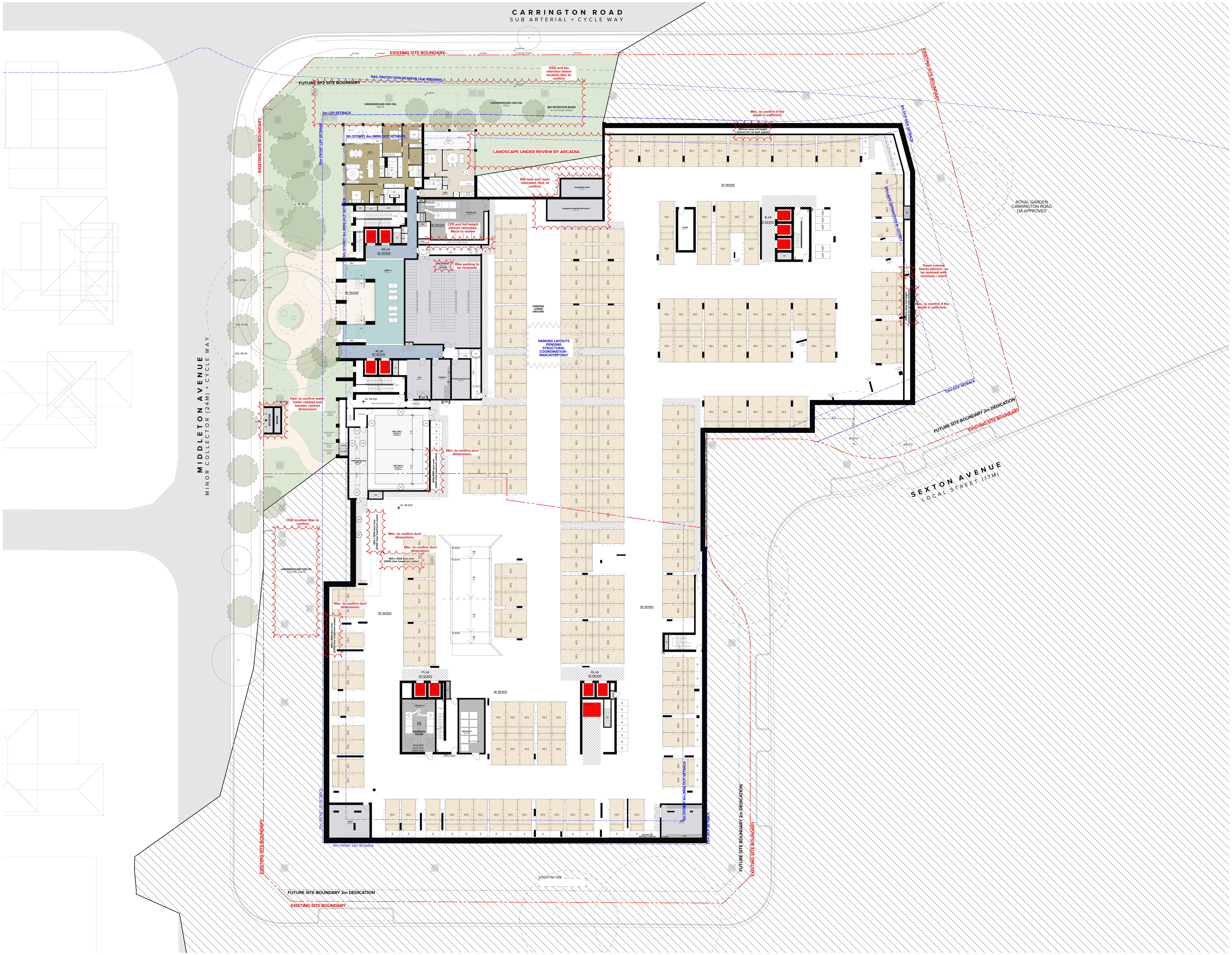
ARADA

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

Drawing Title
CA Plans
Basement 01

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	CR,BE	
Status	Dwg No.	Rev	
For Coordination	DA-110-006	E	

TURNER
Level 1 **ONE** Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 9358 0000
F +61 2 9358 0068
turnerstudio.com.au



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Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

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CLIENT
12 Harvey Street Pyrmont Sydney NSW 2000
ARADA

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

Drawing Title
GA Plans
Lower Ground

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	CR,BE	
Status	**Dwg No.**	**Rev**	
For Coordination	DA-110-007	E	

TURNER

Level 7 ONE Oxford Street
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AUSTRALIA

T +61 2 8668 0000
F +61 2 8668 0088
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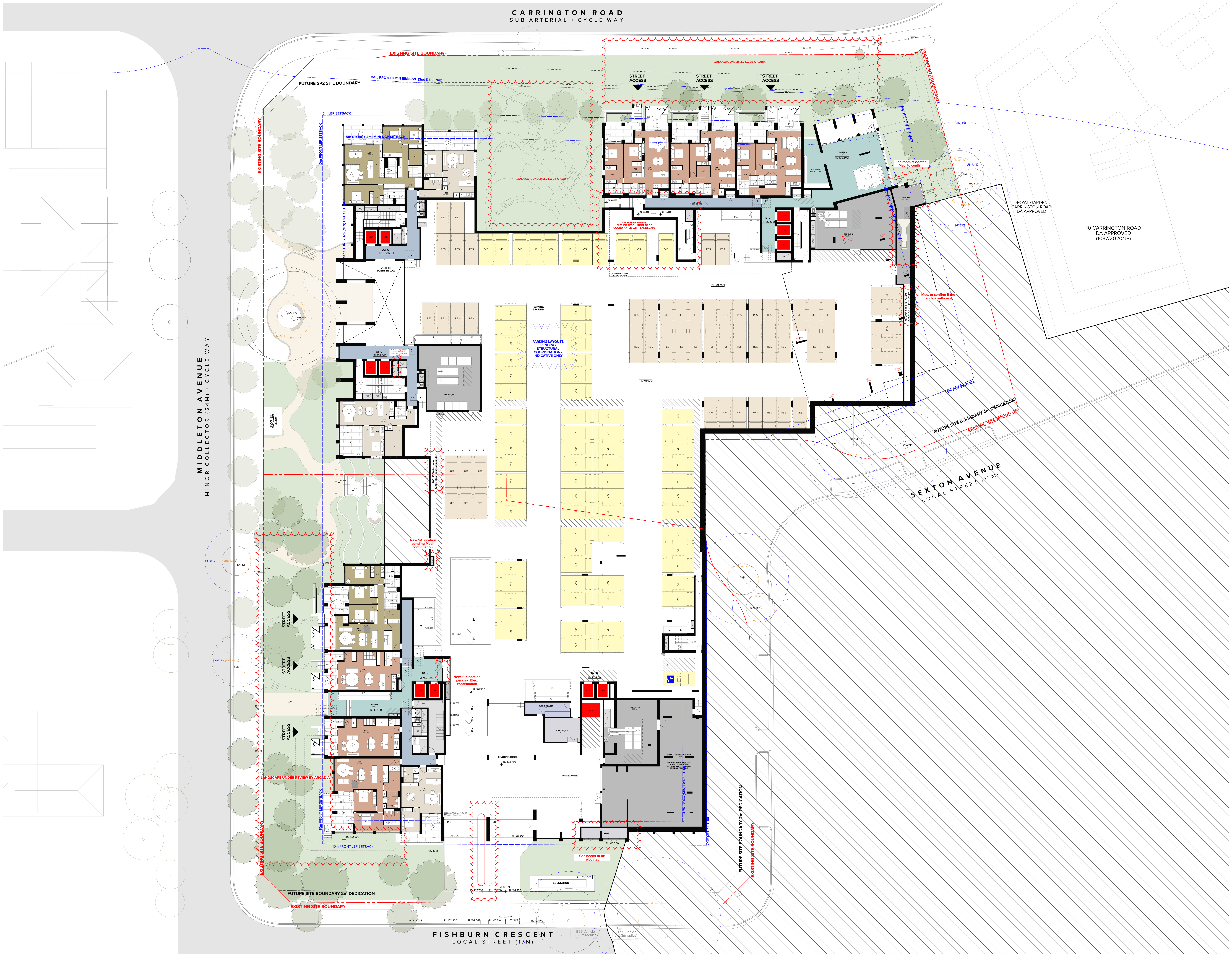

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CLIENT **ARADA**
12 Harvey Street Pyrmont Sydney NSW 2000

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

Drawing Title
GA Plans
Ground Level

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	CR,BE	
Status	Dwg No.	Rev	
For Coordination	DA-110-008	E	

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Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
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CARRINGTON ROAD
SUB ARTERIAL + CYCLE WAY

MIDDLETON AVENUE
MINOR COLLECTOR (24M) + CYCLE WAY

EXISTING SITE BOUNDARY
RAIL PROTECTION RESERVE (2nd RESERVE)
FUTURE SP2 SITE BOUNDARY
5m LEP SETBACK
5th STOREY 4m MIN DCP SETBACK
10m FRONT LEP SETBACK
Landscape to review terrace buffer to apt
LANDSCAPE UNDER REVIEW BY ARCADIA
COMMUNAL OPEN SPACE
SSL 105.800
FFL 105.800
POOL
Landscape to review terrace buffer to apt
Communal space layout in progress
Pool plant relocated TBA, to confirm
ROUNDABOUT
LANDSCAPE AREA UNDER REVIEW BY ARCADIA
SUBSTATION BELOW
FUTURE SITE BOUNDARY 2m DEDICATION
EXISTING SITE BOUNDARY
LANDSCAPE UNDER REVIEW BY ARCADIA
9m DCP SETBACK
7.5m DCP SETBACK
6m DCP SETBACK
STREET ACCESS
VOID TO MAIN BOOM BELOW
VOID TO LOADING DOCK BELOW
VOID 50° UPPER BALCONY
Storage relocated due to insufficient space for MC.
PUBLIC THROUGH SITE LINK DA APPROVED LANDSCAPE UNDER REVIEW BY ARCADIA
ROYAL GARDEN CARRINGTON ROAD DA APPROVED
10 CARRINGTON ROAD DA APPROVED (1037/2020/JP)
24 FISHBURN CRESCENT DA APPROVED (58/2020/JP/A)
SEXTON AVENUE
LOCAL STREET (17M)
FISHBURN CRESCENT
LOCAL STREET (17M)

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DLCS Quality Endorsed Company. ISO 9001:2015. Registration Number 20479.
Nominated Architect: Nicholas Turner 8668, ABN 68 094 099 911

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L_01, 02...	Lift No.1, 2, etc.
L	Living
LA	Landscape
LDE	Loading Dock Exhaust
LG	Lower Ground
LY	Laundry
M	Mechanical Services
MBP	Motor Bike Parking
MBX	Mail Box Assembly
MGB	Mobile Garbage Bin
MRV	Medium Rigid Vehicle
MSB	Main Switch Board Services incl. Main Distribution Board & Frame.
MTR	Meter
MV	Mechanical Vent
NGL	Natural Ground Level
(NRZ)	Notional Root Zone
OSD	On Site Detention Tank
OSR	On Site Retention Tank
P	Pantry
PDR	Powder Room
PENO	Penetration
R	Robe
RES	Residential
RF	Refrigerator
RL	Relative Level to AHD
RTL	Retail
S	Storage
SA	Supply Air
SCN	Screen
SHR	Shower
SKL	Skylight
SP	Stair Pressurisation
SRV	Small Ridged Vehicle
SSL	Structural Slab Level
ST_01,02...	Stair No.1, 2, etc.
ST	Study
SWD	Stormwater Drain
SWP	Stormwater Pit
(SRZ)	Structural Root Zone
Tx	Tree
TCE	Terrace
TD	Timber Deck
TOW	Top of Wall
TRA	Tenant Return Air
TSA	Tenant Supply Air
TS	Traffic Signal
TYP	Typical
UG	Upper Ground
UNO	Unless Noted Otherwise
UT	Utility Space
VIS	Visitor
WC	WC
WC_A	WC - Accessible
WC_F	WC - Female
WC_M	WC - Male
WC_P	WC - Parents
WC_U	WC - Unisex
WIR	Walk in Robe
WM	Washing Machine
WS	Wheel Stop
End.	

- Setback Line
- Site Boundary
- Livable Apartment (Silver Level)
- Livable Apartment (Gold Level)
- Livable Apartment (Platinum Level)
- Accessible Parking Space
- Affordable Housing Unit
- Existing Tree to be Retained
- Existing Tree to be Demolished
- Proposed Tree (Refer to Landscape Architect's Documentation)
- 1 Bed Apartment
- 2 Bed Apartment
- 2 Bed+ Apartment
- 3 Bed Apartment
- 3 Bed+ Apartment
- 4 Bed Apartment

Rev	Date	Approved by	Revision Notes
A	02/03/2026	CM	For Coordination
B	17/03/2026	CM	For Coordination
C	27/03/2026	CM	For Coordination
D	01/04/2026	CM	For Coordination
E	10/04/2026	CM	For Coordination

CLIENT
12 Harvey Street Pyrmont Sydney NSW 2000

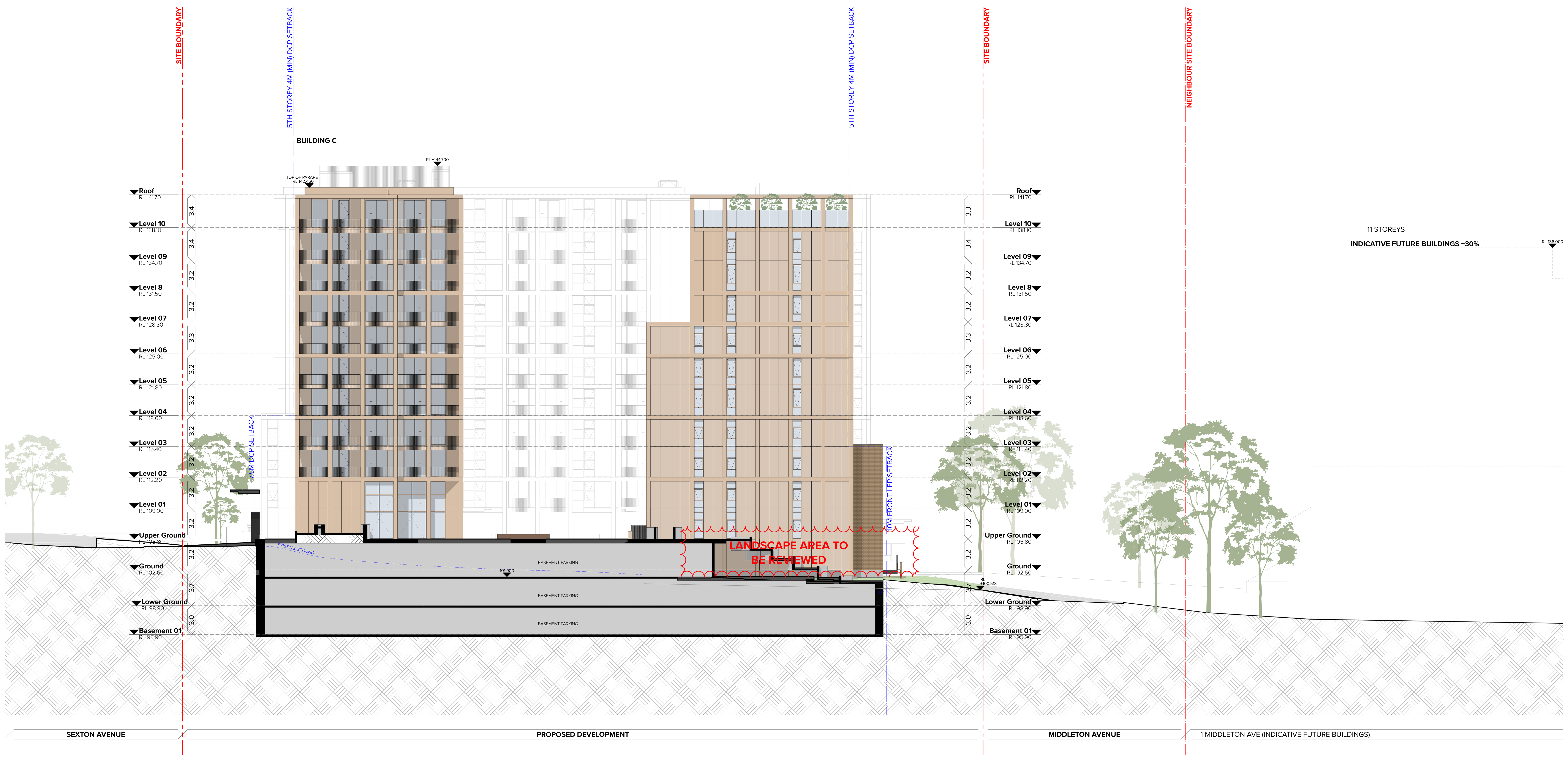
ARADA

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

Drawing Title
GA Plans
Upper Ground Level

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	CR,BE	
Status	Dwg No.	Rev	
For Coordination	DA-110-009	E	

TURNER
Level 1 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 9368 0300
F +61 2 9368 0368
turnerstudio.com.au



NOTES

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2. Refer to the BASIX Certificate for further information and performance requirements.

DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

LEGEND

MATERIAL AND FINISHES LEGEND

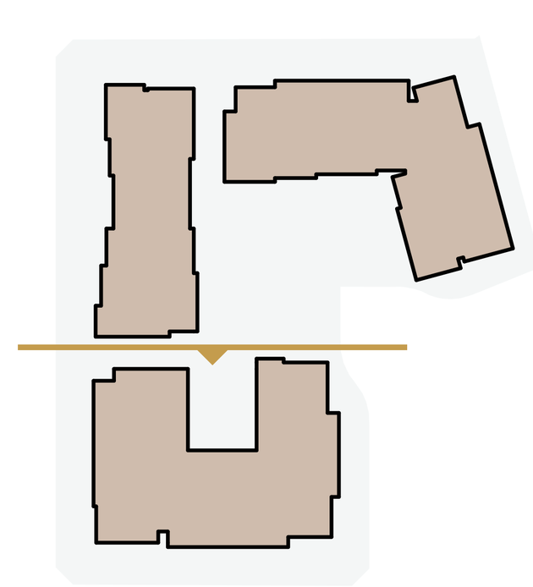
(Refer to sample board and drawings for further information)

ART1	Future decorative artwork to entry lobby. Artist and artwork subject to future selection.
AWN1	Entry lobby awning, stepped profile leading edge. Colour equal to PCF5 / PF5
AWN2	Steel framed awning structure to street terraces, with inset adjustable aluminium shade/ privacy screens SCN1. Colour and finish to match PCF5/PF5
AWN3	Pergola to communal roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN4	Pergola to private roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN5	Fixed louvres in sofft to private balconies, steel structure with fixed aluminum shading system. Colour to match PCF1 / PCF3
AWN6	Horizontal sunshade fixed to facade transom, maximum 250mm projection to ensure contained within grid depth . Colour to match PCF2 / PCF4
BAL1	Vertical flat bar balusters 75mm deep with matching continuous top rail. Cover plate to where balustrade is face fixed to slab edge, balusters to continue over. PCF, colour and finish to match adjacent primary PCF colour UNO
BAL2	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BAL3	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BWK1	Brickwork Type 1: (Building A Podium) Brickwork, dry pressed, dark colour range. Colour and texture similar to Everyday Life 'Leisure' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO.
BWK2	Brickwork Type 2: (Building B & C Podium) Brickwork, dry pressed, light colour range. Colour and texture similar to Everyday Life 'Unwind' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO
CLD1	Cladding Type 1: (Building A tower grid vertical and horizontal grid elements, Building B & C podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF1
CLD2	Cladding Type 2: (Building A tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF2
CLD3	Cladding Type 3: (Building B & C tower grid vertical and horizontal grid elements, Building A podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF3
CLD4	Cladding Type 4: (Building B & C tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF4
CLD5	Cladding Type 5: (Podium Base Infill) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF5
COF1	Concrete, Off Form Finish, Type 1: Natural, smooth finish. Colour natural grey concrete mix. Penetrating clear matte sealer over.
COF2	Concrete, Off Form Finish, Type 2: Decorative off form concrete. Ribbed textured finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3.. Penetrating clear matte sealer over
COF3	Concrete, Off Form Finish, Type 3: Natural, smooth finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3. Penetrating clear matte sealer over
FEN1	Gate & Fence Type 1: Decorative fence, Gate and portal structure to street level apartments and entries. Vertical 75mm x 10mm steel baluster equally spaced with mid height horizontal plate for support, no top rail. Integrated portal and gate to direct street access interfaces. Powdercoat finish to match PCF5
FEN2	Gate & Fence Type 2: Prefabricated fence & Gate system to street level apartments. Vertical 75mm x 10mm steel fence equally spaced with mid height horizontal plate for support, no top rail. Powdercoat finish to match PCF5.
FEN3	Fence Type 3 Aluminium fence integrated with landscape. Refer to landscape Architects documentation
FT1	Facade Type 1: Residential glazing & lobbies on residential floors Aluminium framed front faced glazing system. Clear glass UNO. Awning windows and sliding door systems. - 'Shadow Box' detail to conceal wall / columns / slab elements / AC's and / or ceiling space behind where design intent for glazing is to be continuous. Colour of backpan to match glazing. - Fixed aluminium infill panel (CLD2/CLD4/CLD5) integrated into glazing suite - Clear glass wind screen & operable glazed louvres to corner balconies integral to overall system in accordance with wind mitigation report. Aluminium frame to be powdercoat finish, colour varies PCF1/PCF3/PCF6, equal to adjacent facade. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%
FT2	Façade Type 2: Glazing system to clerestory windows Aluminium framed glazing system, commercial grade, flush glazed system to clerestory window skylights. Operable via electric controls where required. PCF, colour and finish varies. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT3	Façade Type 3: Entry doors and lobbies Commercial grade aluminium framed glazing system with integrated glazed doors . Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour varies PCF1 /PCF3/ PCF5, equal to adjacent facade. Doors Stainless steel finish. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT4	Façade Type 4: Gym & Wellness Commercial grade aluminium glazed vertical bifold façade system. Motorised upward folding glass façade. Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour equal to PCF4.
FT5	Façade Type 5: Solid aluminium ventilation hatch integrated with glazing system. Solid panel and frame to be powdercoat finish, colour varies PCF1/PCF3
GD1	Garage Door Type 1: Panel Lift door Panel to achieve minimum perforation in accordance with Mechanical Engineers requirements. Colour and finish to match PCF5
G1	Glass type 1, clear. Glazing integral to façade system i.e FT1,2, etc.
G2	Glass type 2, clear, horizontal operable louvres. Glazing integral to façade system FT1
GVL1	Decorative stone for roof ballast. Material and finish to match 30-40mm large format tumbled quartz. Natural off white tones
LA	Landscaped planting area. Refer to Landscape Architects documentation for details.
LV1	Fixed horizontal weatherproof aluminium louvre system for mechanical services, 100mm profile with concealed frame and subframe support / allow for continuous louvre and express joints between. Where integral to a cladding or façade system the colour and finish to match the overall system including backpan elements.
PCF1	Powdercoat Finish 1: (Building A tower grid, Building B & C infill cladding to podium base) Colour and finish to match Dulux 'Terrain Matt', or similar to match BWK2
PCF2	Powdercoat Finish 2: (Building A tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Terrain 15-25% lighter reduced red oxide', or similar
PCF3	Powdercoat Finish 3: (Building B&C tower grid, Building A infill cladding to podium base) Colour and finish to match Dulux 'Dune', or similar to match BWK1
PCF4	Powdercoat Finish 4: (Building B & C tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Grey Nurse', or similar
PCF5	Powdercoat Finish 5: (Podium base, window frames, balustrades, street elements) Colour and finish to match Interpon 2525 'Monument Matt' or similar
PCF6	Powdercoat Finish 5: (Streetscape screens - SCN1) Colour and finish to match Interpon Structura 'Golden Touch', or similar
PF1	Paint finish. Colour and finish similar to PCF1. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF2	Paint finish. Colour and finish similar to PCF2. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF3	Paint finish. Colour and finish similar to PCF3. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF4	Paint finish. Colour and finish similar to PCF4. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF5	Paint finish. Colour and finish similar to PCF5. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PV1	Paving Ground Level public domain and foyer areas. Refer to landscape Architect's documentation
PV2	Paving Ground Level driveway and service access areas. Refer to landscape Architect's documentation.
PV3	Paving Street Level terraces. Refer to landscape Architect's documentation.
PV4	Paving Roof terrace. Refer to landscape Architect's documentation.
SCN1	Screen Type 1: Operable aluminium screening system. Folding screen with vertical battens. Subframe concealed behind screen. Powder coat finish, colour equal to PCF6.
SCN2	Screen Type 3: Aluminium screening system to roof plant. Fixed full height vertical elements, 200 x 50mm, concealed base plate and fixings. Fully capped ends to battens. Aluminium powdercoat finish, colour equal to PCF4
SGN1	Building identification signage zone for surface fixed signage. Subject to separate DA submission
TD1	Composite timber decking system. Refer to landscape Architect's documentation

Note: Refer to Landscape documentation for public domain and landscape areas for further information regarding materials and finishes selection.

Rev	Date	Approved by	Revision Notes
A	20/03/2026	CM	For Coordination
B	02/04/2026	CM	For Coordination
C	17/04/2026	CM	For Coordination

KEY PLAN



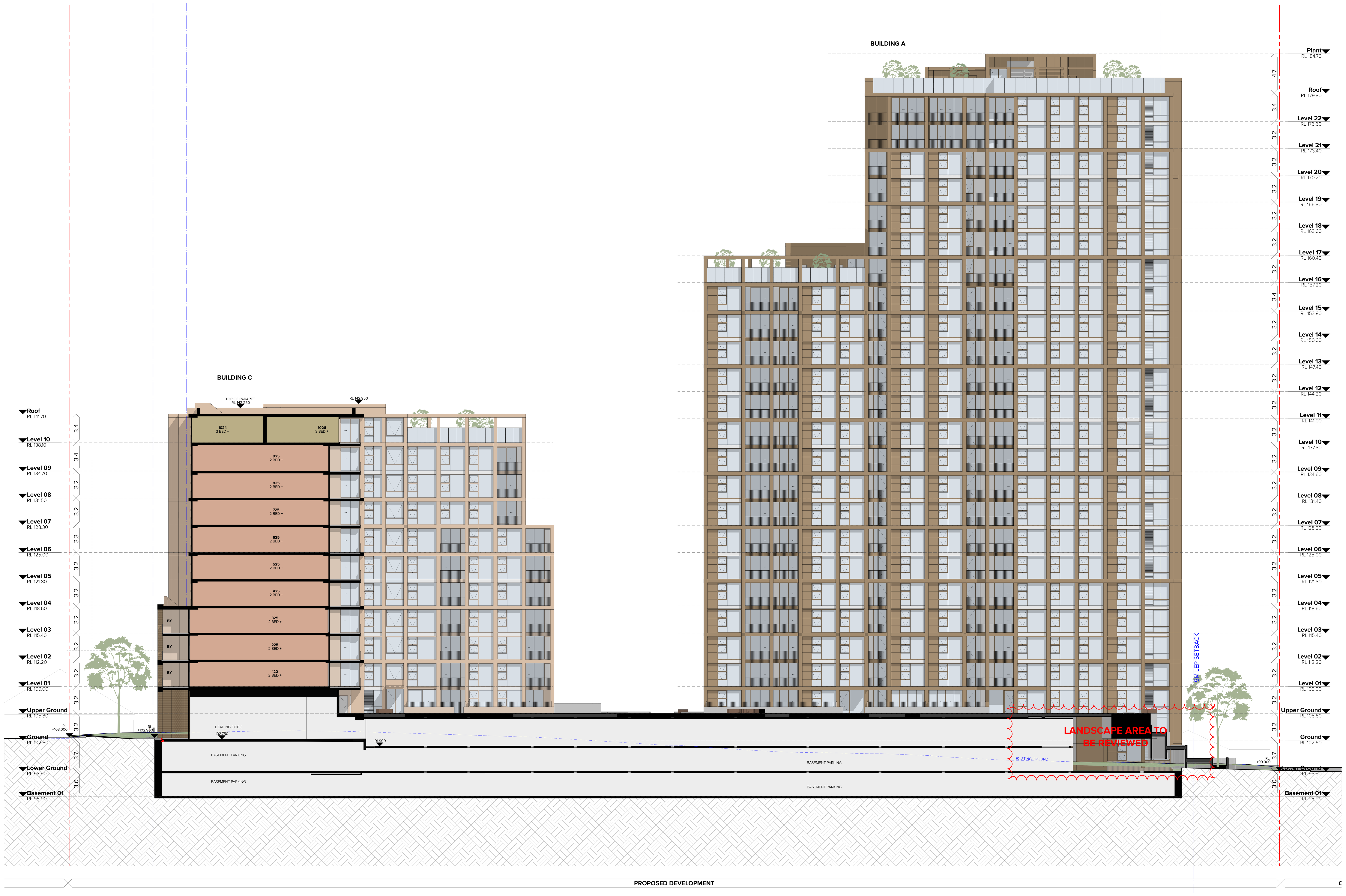
CLIENT **ARADA**
12 Harvey Street Pyrmont Sydney NSW 2000

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

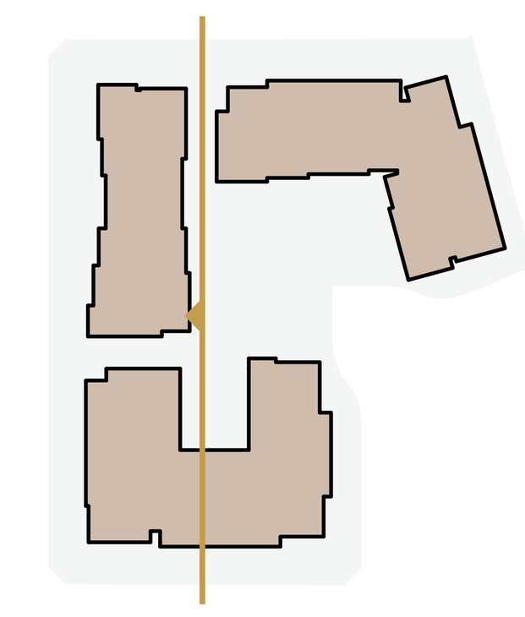
Drawing Title
Internal Elevations
Building C - North Elevation

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	IJ	
Status	Dwg No.	Rev	
For Information	DA-220-101	C	

TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au



KEY PLAN



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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

LEGEND

MATERIAL AND FINISHES LEGEND

(Refer to sample board and drawings for further information)

ART1	Future decorative artwork to entry lobby. Artist and artwork subject to future selection.
AWN1	Entry lobby awning, stepped profile leading edge. Colour equal to PCF5 / PF5
AWN2	Steel framed awning structure to street terraces, with inset adjustable aluminium shade/ privacy screens SCN1. Colour and finish to match PCF5/PF5
AWN3	Pergola to communal roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN4	Pergola to private roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN5	Fixed louvres in sofft to private balconies, steel structure with fixed aluminum shading system. Colour to match PCF1 / PCF3
AWN6	Horizontal sunshade fixed to facade transom, maximum 250mm projection to ensure contained within grid depth . Colour to match PCF2 / PCF4
BAL1	Vertical flat bar balusters 75mm deep with matching continuous top rail. Cover plate to where balustrade is face fixed to slab edge, balusters to continue over. PCF, colour and finish to match adjacent primary PCF colour UNO
BAL2	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BAL3	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BWK1	Brickwork Type 1: (Building A Podium) Brickwork, dry pressed, dark colour range. Colour and texture similar to Everyday Life 'Leisure' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO.
BWK2	Brickwork Type 2: (Building B & C Podium) Brickwork, dry pressed, light colour range. Colour and texture similar to Everyday Life 'Unwind' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO
CLD1	Cladding Type 1: (Building A tower grid vertical and horizontal grid elements, Building B & C podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF1
CLD2	Cladding Type 2: (Building A tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF2
CLD3	Cladding Type 3: (Building B & C tower grid vertical and horizontal grid elements, Building A podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF3
CLD4	Cladding Type 4: (Building B & C tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF4
CLD5	Cladding Type 5: (Podium Base Infill) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF5
COF1	Concrete, Off Form Finish, Type 1: Natural, smooth finish. Colour natural grey concrete mix. Penetrating clear matte sealer over.
COF2	Concrete, Off Form Finish, Type 2: Decorative off form concrete. Ribbed textured finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3.. Penetrating clear matte sealer over
COF3	Concrete, Off Form Finish, Type 3: Natural, smooth finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3. Penetrating clear matte sealer over
FEN1	Gate & Fence Type 1: Decorative fence, Gate and portal structure to street level apartments and entries. Vertical 75mm x 10mm steel baluster equally spaced with mid height horizontal plate for support, no top rail. Integrated portal and gate to direct street access interfaces. Powdercoat finish to match PCF5
FEN2	Gate & Fence Type 2: Prefabricated fence & Gate system to street level apartments. Vertical 75mm x 10mm steel fence equally spaced with mid height horizontal plate for support, no top rail. Powdercoat finish to match PCF5.
FEN3	Fence Type 3 Aluminium fence integrated with landscape. Refer to landscape Architects documentation
FT1	Facade Type 1: Residential glazing & lobbies on residential floors Aluminium framed front faced glazing system. Clear glass UNO. Awning windows and sliding door systems. - 'Shadow Box' detail to conceal wall / columns / slab elements / AC's and / or ceiling space behind where design intent for glazing is to be continuous. Colour of backpan to match glazing. - Fixed aluminium infill panel (CLD2/CLD4/CLD5) integrated into glazing suite - Clear glass wind screen & operable glazed louvres to corner balconies integral to overall system in accordance with wind mitigation report. Aluminium frame to be powdercoat finish, colour varies PCF1/PCF3/PCF6, equal to adjacent facade. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%
FT2	Façade Type 2: Glazing system to clerestory windows Aluminium framed glazing system, commercial grade, flush glazed system to clerestory window skylights. Operable via electric controls where required. PCF, colour and finish varies. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT3	Façade Type 3: Entry doors and lobbies Commercial grade aluminium framed glazing system with integrated glazed doors . Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour varies PCF1 /PCF3/ PCF5, equal to adjacent facade. Doors Stainless steel finish. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT4	Façade Type 4: Gym & Wellness Commercial grade aluminium glazed vertical bifold façade system. Motorised upward folding glass façade. Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour equal to PCF4.
FT5	Façade Type 5: Solid aluminium ventilation hatch integrated with glazing system. Solid panel and frame to be powdercoat finish, colour varies PCF1/PCF3
GD1	Garage Door Type 1: Panel Lift door Panel to achieve minimum perforation in accordance with Mechanical Engineers requirements. Colour and finish to match PCF5
G1	Glass type 1, clear. Glazing integral to façade system i.e FT1,2, etc.
G2	Glass type 2, clear, horizontal operable louvres. Glazing integral to façade system FT1
GVL1	Decorative stone for roof ballast. Material and finish to match 30-40mm large format tumbled quartz. Natural off white tones
LA	Landscaped planting area. Refer to Landscape Architects documentation for details.
LV1	Fixed horizontal weatherproof aluminium louvre system for mechanical services, 100mm profile with concealed frame and subframe support / allow for continuous louvre and express joints between. Where integral to a cladding or façade system the colour and finish to match the overall system including backpan elements.
PCF1	Powdercoat Finish 1: (Building A tower grid, Building B & C infill cladding to podium base) Colour and finish to match Dulux 'Terrain Matt', or similar to match BWK2
PCF2	Powdercoat Finish 2: (Building A tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Terrain 15-25% lighter reduced red oxide', or similar
PCF3	Powdercoat Finish 3: (Building B&C tower grid, Building A infill cladding to podium base) Colour and finish to match Dulux 'Dune', or similar to match BWK1
PCF4	Powdercoat Finish 4: (Building B & C tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Grey Nurse', or similar
PCF5	Powdercoat Finish 5: (Podium base, window frames, balustrades, street elements) Colour and finish to match Interpon 2525 'Monument Matt' or similar
PCF6	Powdercoat Finish 5: (Streetscape screens - SCN1) Colour and finish to match Interpon Structura 'Golden Touch', or similar
PF1	Paint finish. Colour and finish similar to PCF1. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF2	Paint finish. Colour and finish similar to PCF2. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF3	Paint finish. Colour and finish similar to PCF3. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF4	Paint finish. Colour and finish similar to PCF4. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF5	Paint finish. Colour and finish similar to PCF5. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PV1	Paving Ground Level public domain and foyer areas. Refer to landscape Architect's documentation
PV2	Paving Ground Level driveway and service access areas. Refer to landscape Architect's documentation.
PV3	Paving Street Level terraces. Refer to landscape Architect's documentation.
PV4	Paving Roof terrace. Refer to landscape Architect's documentation.
SCN1	Screen Type 1: Operable aluminium screening system. Folding screen with vertical battens. Subframe concealed behind screen. Powder coat finish, colour equal to PCF6.
SCN2	Screen Type 3: Aluminium screening system to roof plant. Fixed full height vertical elements, 200 x 50mm, concealed base plate and fixings. Fully capped ends to battens. Aluminium powdercoat finish, colour equal to PCF4
SGN1	Building identification signage zone for surface fixed signage. Subject to separate DA submission
TD1	Composite timber decking system. Refer to landscape Architect's documentation

Note: Refer to Landscape documentation for public domain and landscape areas for further information regarding materials and finishes selection.

Rev	Date	Approved by	Revision Notes
A	20/03/2026	CM	For Coordination
B	02/04/2026	CM	For Coordination
C	17/04/2026	CM	For Coordination

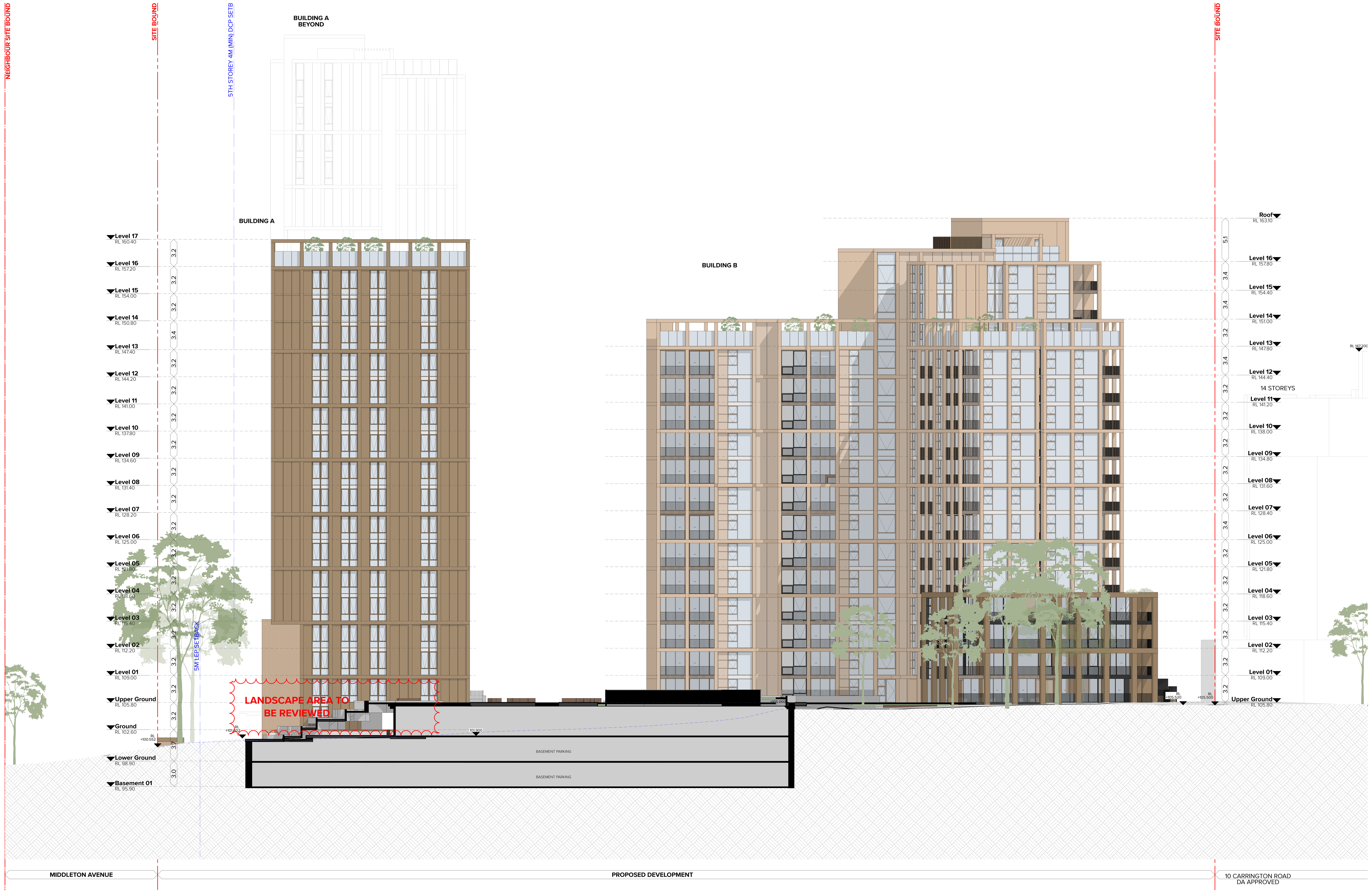
CLIENT **ARADA**
12 Harvey Street Pyrmont Sydney NSW 2000

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

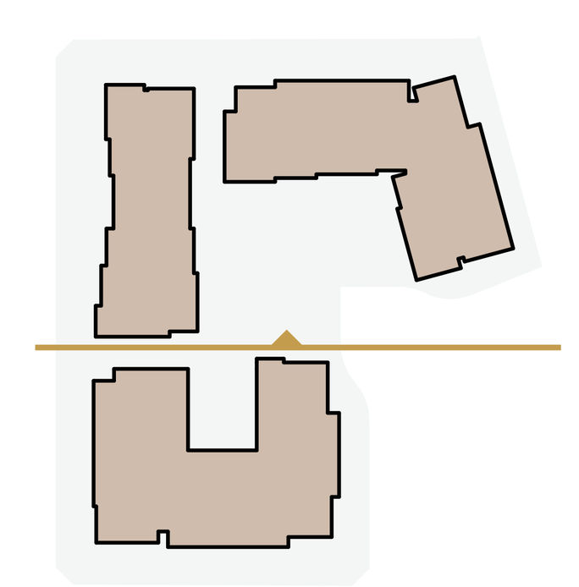
Drawing Title
Internal Elevations
Buildings A & C - East Elevation

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	IJ	
Status	Dwg No.	Rev	
For Information	DA-220-201	C	

TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au



KEY PLAN



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DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

LEGEND

MATERIAL AND FINISHES LEGEND

(Refer to sample board and drawings for further information)

ART1	Future decorative artwork to entry lobby. Artist and artwork subject to future selection.
AWN1	Entry lobby awning, stepped profile leading edge. Colour equal to PCF5 / PF5
AWN2	Steel framed awning structure to street terraces, with inset adjustable aluminium shade/ privacy screens SCN1. Colour and finish to match PCF5/PF5
AWN3	Pergola to communal roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN4	Pergola to private roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN5	Fixed louvres in sofft to private balconies, steel structure with fixed aluminum shading system. Colour to match PCF1 / PCF3
AWN6	Horizontal sunshade fixed to facade transom, maximum 250mm projection to ensure contained within grid depth . Colour to match PCF2 / PCF4
BAL1	Vertical flat bar balusters 75mm deep with matching continuous top rail. Cover plate to where balustrade is face fixed to slab edge, balusters to continue over. PCF, colour and finish to match adjacent primary PCF colour UNO
BAL2	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BAL3	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BWK1	Brickwork Type 1: (Building A Podium) Brickwork, dry pressed, dark colour range. Colour and texture similar to Everyday Life 'Leisure' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO.
BWK2	Brickwork Type 2: (Building B & C Podium) Brickwork, dry pressed, light colour range. Colour and texture similar to Everyday Life 'Unwind' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO
CLD1	Cladding Type 1: (Building A tower grid vertical and horizontal grid elements, Building B & C podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF1
CLD2	Cladding Type 2: (Building A tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF2
CLD3	Cladding Type 3: (Building B & C tower grid vertical and horizontal grid elements, Building A podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF3
CLD4	Cladding Type 4: (Building B & C tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF4
CLD5	Cladding Type 5: (Podium Base Infill) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF5
COF1	Concrete, Off Form Finish, Type 1: Natural, smooth finish. Colour natural grey concrete mix. Penetrating clear matte sealer over.
COF2	Concrete, Off Form Finish, Type 2: Decorative off form concrete. Ribbed textured finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3.. Penetrating clear matte sealer over
COF3	Concrete, Off Form Finish, Type 3: Natural, smooth finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3. Penetrating clear matte sealer over
FEN1	Gate & Fence Type 1: Decorative fence, Gate and portal structure to street level apartments and entries. Vertical 75mm x 10mm steel baluster equally spaced with mid height horizontal plate for support, no top rail. Integrated portal and gate to direct street access interfaces. Powdercoat finish to match PCF5
FEN2	Gate & Fence Type 2: Prefabricated fence & Gate system to street level apartments. Vertical 75mm x 10mm steel fence equally spaced with mid height horizontal plate for support, no top rail. Powdercoat finish to match PCF5.
FEN3	Fence Type 3 Aluminium fence integrated with landscape. Refer to landscape Architects documentation
FT1	Facade Type 1: Residential glazing & lobbies on residential floors Aluminium framed front faced glazing system. Clear glass UNO. Awning windows and sliding door systems. - 'Shadow Box' detail to conceal wall / columns / slab elements / AC's and / or ceiling space behind where design intent for glazing is to be continuous. Colour of backpan to match glazing. - Fixed aluminium infill panel (CLD2/CLD4/CLD5) integrated into glazing suite - Clear glass wind screen & operable glazed louvres to corner balconies integral to overall system in accordance with wind mitigation report. Aluminium frame to be powdercoat finish, colour varies PCF1/PCF3/PCF6, equal to adjacent facade. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%
FT2	Façade Type 2: Glazing system to clerestory windows Aluminium framed glazing system, commercial grade, flush glazed system to clerestory window skylights. Operable via electric controls where required. PCF, colour and finish varies. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT3	Façade Type 3: Entry doors and lobbies Commercial grade aluminium framed glazing system with integrated glazed doors . Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour varies PCF1 /PCF3/ PCF5, equal to adjacent facade. Doors Stainless steel finish. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT4	Façade Type 4: Gym & Wellness Commercial grade aluminium glazed vertical bifold façade system. Motorised upward folding glass façade. Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour equal to PCF4.
FT5	Façade Type 5: Solid aluminium ventilation hatch integrated with glazing system. Solid panel and frame to be powdercoat finish, colour varies PCF1/PCF3
GD1	Garage Door Type 1: Panel Lift door Panel to achieve minimum perforation in accordance with Mechanical Engineers requirements. Colour and finish to match PCF5
G1	Glass type 1, clear. Glazing integral to façade system i.e FT1,2, etc.
G2	Glass type 2, clear, horizontal operable louvres. Glazing integral to façade system FT1
GVL1	Decorative stone for roof ballast. Material and finish to match 30-40mm large format tumbled quartz. Natural off white tones
LA	Landscaped planting area. Refer to Landscape Architects documentation for details.
LV1	Fixed horizontal weatherproof aluminium louvre system for mechanical services, 100mm profile with concealed frame and subframe support / allow for continuous louvre and express joints between. Where integral to a cladding or façade system the colour and finish to match the overall system including backpan elements.
PCF1	Powdercoat Finish 1: (Building A tower grid, Building B & C infill cladding to podium base) Colour and finish to match Dulux 'Terrain Matt', or similar to match BWK2
PCF2	Powdercoat Finish 2: (Building A tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Terrain 15-25% lighter reduced red oxide', or similar
PCF3	Powdercoat Finish 3: (Building B&C tower grid, Building A infill cladding to podium base) Colour and finish to match Dulux 'Dune', or similar to match BWK1
PCF4	Powdercoat Finish 4: (Building B & C tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Grey Nurse', or similar
PCF5	Powdercoat Finish 5: (Podium base, window frames, balustrades, street elements) Colour and finish to match Interpon 2525 'Monument Matt' or similar
PCF6	Powdercoat Finish 5: (Streetscape screens - SCN1) Colour and finish to match Interpon Structura 'Golden Touch', or similar
PF1	Paint finish. Colour and finish similar to PCF1. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF2	Paint finish. Colour and finish similar to PCF2. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF3	Paint finish. Colour and finish similar to PCF3. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF4	Paint finish. Colour and finish similar to PCF4. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF5	Paint finish. Colour and finish similar to PCF5. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PV1	Paving Ground Level public domain and foyer areas. Refer to landscape Architect's documentation
PV2	Paving Ground Level driveway and service access areas. Refer to landscape Architect's documentation.
PV3	Paving Street Level terraces. Refer to landscape Architect's documentation.
PV4	Paving Roof terrace. Refer to landscape Architect's documentation.
SCN1	Screen Type 1: Operable aluminium screening system. Folding screen with vertical battens. Subframe concealed behind screen. Powder coat finish, colour equal to PCF6.
SCN2	Screen Type 3: Aluminium screening system to roof plant. Fixed full height vertical elements, 200 x 50mm, concealed base plate and fixings. Fully capped ends to battens. Aluminium powdercoat finish, colour equal to PCF4
SGN1	Building identification signage zone for surface fixed signage. Subject to separate DA submission
TD1	Composite timber decking system. Refer to landscape Architect's documentation

Note: Refer to Landscape documentation for public domain and landscape areas for further information regarding materials and finishes selection.

Rev	Date	Approved by	Revision Notes
A	20/03/2026	CM	For Coordination
B	02/04/2026	CM	For Coordination
C	17/04/2026	CM	For Coordination

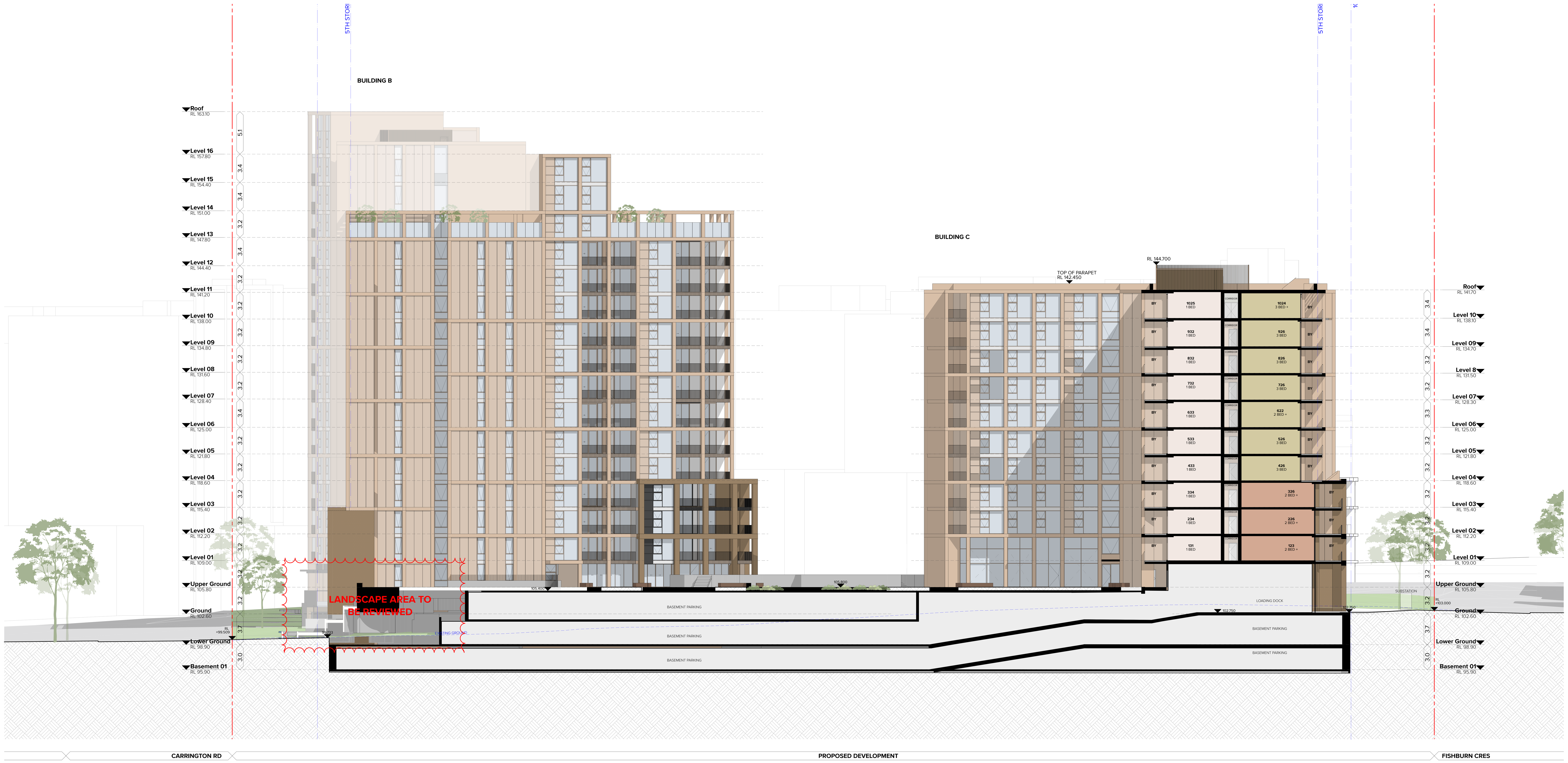
CLIENT **ARADA**
12 Harvey Street Pyrmont Sydney NSW 2000

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

Drawing Title
Internal Elevations
Buildings A & B - South Elevation

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	IJ	
Status	**Dwg No.**	**Rev**	
For Information	DA-220-301	C	

TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au



NOTES

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1. 'All drawings to be read in conjunction with the Architectural Design report prepared and submitted as part of this SSDA submission'
2. Refer to the BASIX Certificate for further information and performance requirements.

DLCS Quality Endorsed Company ISO 9001:2015, Registration Number 20476
Nominated Architect: Nicholas Turner 6695, ABN 86 064 084 911

LEGEND

MATERIAL AND FINISHES LEGEND

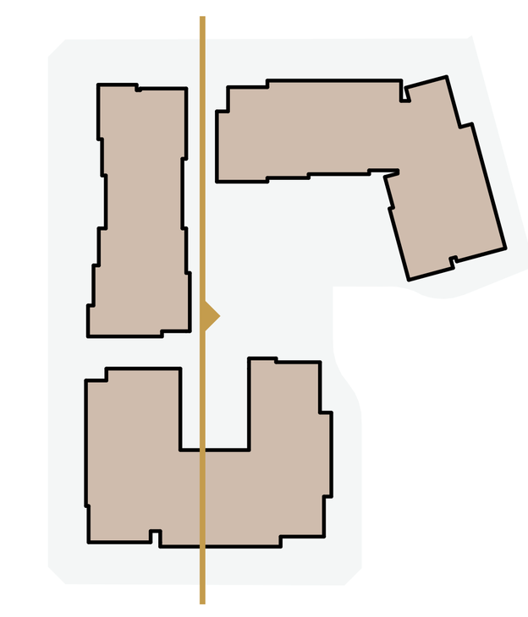
(Refer to sample board and drawings for further information)

ART1	Future decorative artwork to entry lobby. Artist and artwork subject to future selection.
AWN1	Entry lobby awning, stepped profile leading edge. Colour equal to PCF5 / PF5
AWN2	Steel framed awning structure to street terraces, with inset adjustable aluminium shade/ privacy screens SCN1. Colour and finish to match PCF5/PF5
AWN3	Pergola to communal roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN4	Pergola to private roof terraces, steel structure with operable aluminum shading system. Colour to match PCF1/PCF3
AWN5	Fixed louvres in sofft to private balconies, steel structure with fixed aluminum shading system. Colour to match PCF1 / PCF3
AWN6	Horizontal sunshade fixed to facade transom, maximum 250mm projection to ensure contained within grid depth . Colour to match PCF2 / PCF4
BAL1	Vertical flat bar balusters 75mm deep with matching continuous top rail. Cover plate to where balustrade is face fixed to slab edge, balusters to continue over. PCF, colour and finish to match adjacent primary PCF colour UNO
BAL2	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BAL3	Frameless clear glass balustrade system at 1,800mm height with separate steel flat bar handrail / stanchion support behind. Colour to match PCF5. Glass colour GC1.
BWK1	Brickwork Type 1: (Building A Podium) Brickwork, dry pressed, dark colour range. Colour and texture similar to Everyday Life 'Leisure' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO.
BWK2	Brickwork Type 2: (Building B & C Podium) Brickwork, dry pressed, light colour range. Colour and texture similar to Everyday Life 'Unwind' with matching oxide mortar. Horizontal stretcher bond pattern including reveal returns. 230 x 76mm brick size, UNO
CLD1	Cladding Type 1: (Building A tower grid vertical and horizontal grid elements, Building B & C podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF1
CLD2	Cladding Type 2: (Building A tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF2
CLD3	Cladding Type 3: (Building B & C tower grid vertical and horizontal grid elements, Building A podium Infill cladding to side returns) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF3
CLD4	Cladding Type 4: (Building B & C tower infill cladding between grid, solid infill panel in window suite) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF4
CLD5	Cladding Type 5: (Podium Base Infill) Metal Cladding, cassette style panel system, express jointed with concealed fixings equal to Vitradual system. Prefinished coating system. Where required for building services, matching louvre system integrated into overall cladding system. Colour and finish to match PCF5
COF1	Concrete, Off Form Finish, Type 1: Natural, smooth finish. Colour natural grey concrete mix. Penetrating clear matte sealer over.
COF2	Concrete, Off Form Finish, Type 2: Decorative off form concrete. Ribbed textured finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3.. Penetrating clear matte sealer over
COF3	Concrete, Off Form Finish, Type 3: Natural, smooth finish. Colour pigment / paint stain to match adjacent cladding colour PCF1 / PCF3. Penetrating clear matte sealer over
FEN1	Gate & Fence Type 1: Decorative fence, Gate and portal structure to street level apartments and entries. Vertical 75mm x 10mm steel baluster equally spaced with mid height horizontal plate for support, no top rail. Integrated portal and gate to direct street access interfaces. Powdercoat finish to match PCF5
FEN2	Gate & Fence Type 2: Prefabricated fence & Gate system to street level apartments. Vertical 75mm x 10mm steel fence equally spaced with mid height horizontal plate for support, no top rail. Powdercoat finish to match PCF5.
FEN3	Fence Type 3 Aluminium fence integrated with landscape. Refer to landscape Architects documentation
FT1	Facade Type 1: Residential glazing & lobbies on residential floors Aluminium framed front faced glazing system. Clear glass UNO. Awning windows and sliding door systems. - 'Shadow Box' detail to conceal wall / columns / slab elements / AC's and / or ceiling space behind where design intent for glazing is to be continuous. Colour of backpan to match glazing. - Fixed aluminium infill panel (CLD2/CLD4/CLD5) integrated into glazing suite - Clear glass wind screen & operable glazed louvres to corner balconies integral to overall system in accordance with wind mitigation report. Aluminium frame to be powdercoat finish, colour varies PCF1/PCF3/PCF6, equal to adjacent facade. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%
FT2	Façade Type 2: Glazing system to clerestory windows Aluminium framed glazing system, commercial grade, flush glazed system to clerestory window skylights. Operable via electric controls where required. PCF, colour and finish varies. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT3	Façade Type 3: Entry doors and lobbies Commercial grade aluminium framed glazing system with integrated glazed doors . Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour varies PCF1 /PCF3/ PCF5, equal to adjacent facade. Doors Stainless steel finish. Performance of overall system to comply with BASIX and façade engineer's requirements. Reflectivity to be less than 20%.
FT4	Façade Type 4: Gym & Wellness Commercial grade aluminium glazed vertical bifold façade system. Motorised upward folding glass façade. Clear neutral glass GC1 UNO. Aluminium frame powder coat finish, colour equal to PCF4.
FT5	Façade Type 5: Solid aluminium ventilation hatch integrated with glazing system. Solid panel and frame to be powdercoat finish, colour varies PCF1/PCF3
GD1	Garage Door Type 1: Panel Lift door Panel to achieve minimum perforation in accordance with Mechanical Engineers requirements. Colour and finish to match PCF5
G1	Glass type 1, clear. Glazing integral to façade system i.e FT1,2, etc.
G2	Glass type 2, clear, horizontal operable louvres. Glazing integral to façade system FT1
GVL1	Decorative stone for roof ballast. Material and finish to match 30-40mm large format tumbled quartz. Natural off white tones
LA	Landscaped planting area. Refer to Landscape Architects documentation for details.
LV1	Fixed horizontal weatherproof aluminium louvre system for mechanical services, 100mm profile with concealed frame and subframe support / allow for continuous louvre and express joints between. Where integral to a cladding or façade system the colour and finish to match the overall system including backpan elements.
PCF1	Powdercoat Finish 1: (Building A tower grid, Building B & C infill cladding to podium base) Colour and finish to match Dulux 'Terrain Matt', or similar to match BWK2
PCF2	Powdercoat Finish 2: (Building A tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Terrain 15-25% lighter reduced red oxide', or similar
PCF3	Powdercoat Finish 3: (Building B&C tower grid, Building A infill cladding to podium base) Colour and finish to match Dulux 'Dune', or similar to match BWK1
PCF4	Powdercoat Finish 4: (Building B & C tower infill cladding, window frames, balustrades) Colour and finish to match Dulux 'Grey Nurse', or similar
PCF5	Powdercoat Finish 5: (Podium base, window frames, balustrades, street elements) Colour and finish to match Interpon 2525 'Monument Matt' or similar
PCF6	Powdercoat Finish 5: (Streetscape screens - SCN1) Colour and finish to match Interpon Structura 'Golden Touch', or similar
PF1	Paint finish. Colour and finish similar to PCF1. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF2	Paint finish. Colour and finish similar to PCF2. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF3	Paint finish. Colour and finish similar to PCF3. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF4	Paint finish. Colour and finish similar to PCF4. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PF5	Paint finish. Colour and finish similar to PCF5. Extent of colour includes adjacent soffits, return walls and projecting ledges UNO.
PV1	Paving Ground Level public domain and foyer areas. Refer to landscape Architect's documentation
PV2	Paving Ground Level driveway and service access areas. Refer to landscape Architect's documentation.
PV3	Paving Street Level terraces. Refer to landscape Architect's documentation.
PV4	Paving Roof terrace. Refer to landscape Architect's documentation.
SCN1	Screen Type 1: Operable aluminium screening system. Folding screen with vertical battens. Subframe concealed behind screen. Powder coat finish, colour equal to PCF6.
SCN2	Screen Type 3: Aluminium screening system to roof plant. Fixed full height vertical elements, 200 x 50mm, concealed base plate and fixings. Fully capped ends to battens. Aluminium powdercoat finish, colour equal to PCF4
SGN1	Building identification signage zone for surface fixed signage. Subject to separate DA submission
TD1	Composite timber decking system. Refer to landscape Architect's documentation

Note: Refer to Landscape documentation for public domain and landscape areas for further information regarding materials and finishes selection.

Rev	Date	Approved by	Revision Notes
A	20/03/2026	CM	For Coordination
B	02/04/2026	CM	For Coordination
C	17/04/2026	CM	For Coordination

KEY PLAN



CLIENT **ARADA**
12 Harvey Street Pyrmont Sydney NSW 2000

Project Title
Carrington Road
2 Fishburn Crescent Castle Hill NSW 2154

Drawing Title
Internal Elevations
Buildings B & C - West Elevation

Scale	Project No.	Drawn by	North
1:200 @ A0	23104	IJ	
Status	**Dwg No.**	**Rev**	
For Information	DA-220-401	C	

TURNER
Level 7 ONE Oxford Street
Darlinghurst NSW 2010
AUSTRALIA
T +61 2 8668 0000
F +61 2 8668 0088
turnerstudio.com.au

FOUNDATION EARTH SCIENCES

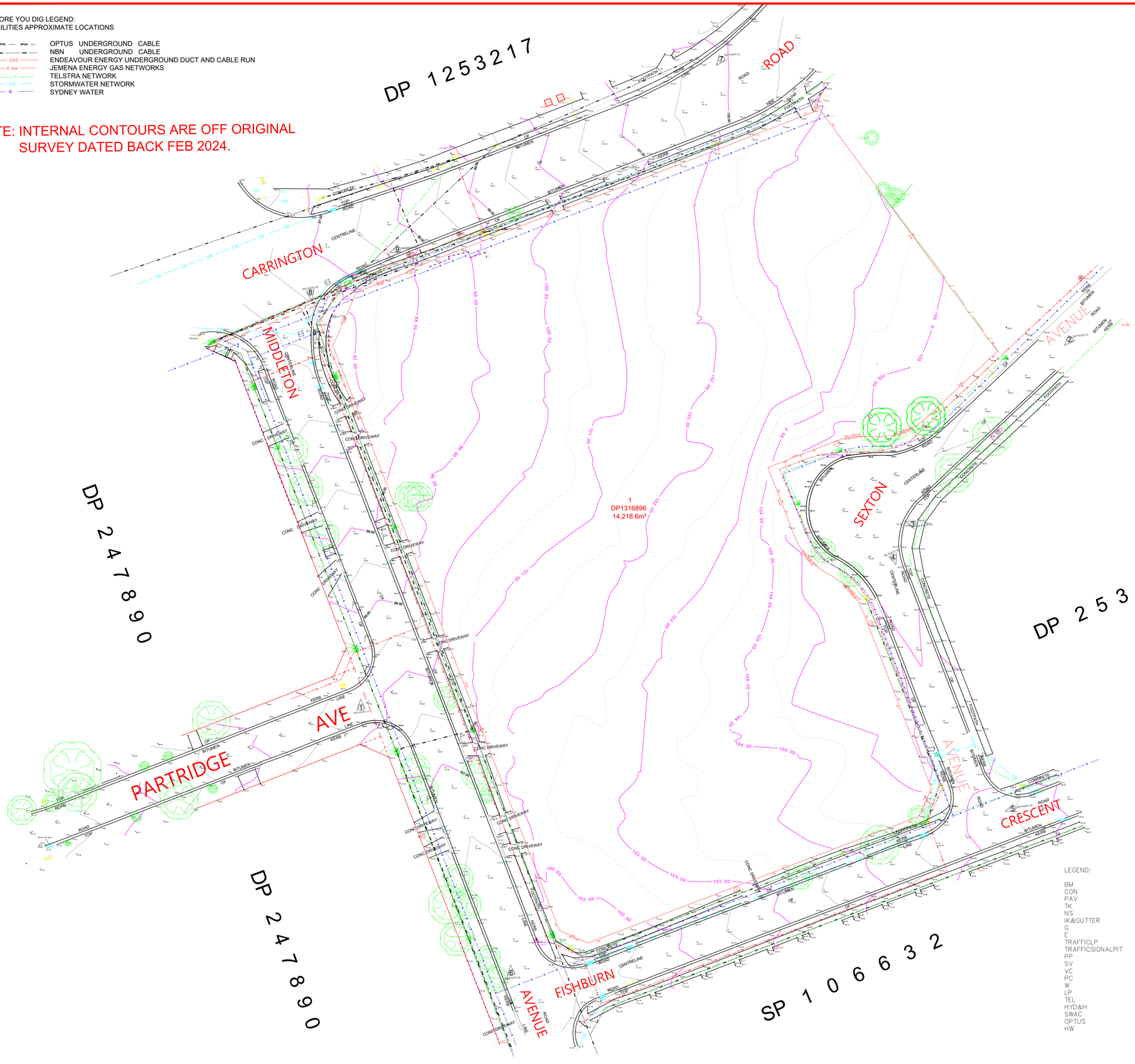
Appendix F

Survey Plan

DIAL BEFORE YOU DIG LEGEND:
Note: FACILITIES APPROXIMATE LOCATIONS

OPTUS	OPTUS UNDERGROUND CABLE
NBN	NBN UNDERGROUND CABLE
GAS	ENDEAVOUR ENERGY UNDERGROUND DUCT AND CABLE RUN
D Gas	JEMENA ENERGY GAS NETWORKS
T	TELSTRA NETWORK
SW	STORMWATER NETWORK
W	SYDNEY WATER

NOTE: INTERNAL CONTOURS ARE OFF ORIGINAL SURVEY DATED BACK FEB 2024.



LEGEND:

BM	BENCHMARK
CON	CONCRETE SURFACE
PAV	PAVING SURFACE
TK	TOP OF KERB
NS	NATURAL SURFACE
IK&GUTTER	INVERT OF KERB
G	GAS
E	GREEN ELEC–BOX
TRAFFICLP	TRAFFIC LIGHT POLE
TRAFFICSIGNALPIT	TRAFFIC LIGHT SIGNAL CONTROL PIT
PP	POWER POLE
SV	STOP VALVE
VC	VECHICULAR CROSSING
PC	PEDESTRIAN CROSSING
W	WATER
LP	LIGHT POLE
TEL	TELSTRA PIT
HYD&H	HYDRANT
SWAC	STORMWATER ACCESS CHAMBER
OPTUS	OPTUS TELECOM PIT
HW	SYDNEY WATER CONNECTION

DIAL 1100 BEFORE YOU DIG

THE TITLE BOUNDARIES AS SHOWN HEREON WERE NOT MARKED AT THE TIME OF SURVEY AND HAVE BEEN DETERMINED BY PLAN DIMENSIONS ONLY AND NOT BY FIELD SURVEY.

SOME SERVICES SHOWN HEREON HAVE BEEN LOCATED BY FIELD SURVEY.

NOTE: LOCATIONS OF DOMESTIC SERVICE CROSSINGS ARE UNKNOWN.

PRIOR TO EXCAVATION THE CONTRACTOR MUST:
* NOTIFY A.G.L. ON 0419527919
* OBTAIN TELSTRA'S "DUTY OF CARE" DOCUMENT REGARDING WORKING IN THE VICINITY OF TELSTRA PLANT.
* VERIFY CO–AXIAL/OPTIC FIBRE CABLE LOCATION

PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE, THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

EAST coast POSITIONING

SURVEYORS

NORTHWEST

P.O. BOX 7388, BAULKHAM HILLS
N.S.W. 2153, Australia
Mob: 0408556914 or 0458957000
Email: info@ecpsurveyors.com.au

CLIENT/PROJECT

ARADA

16-20 CARRINGTON Rd /
2-12 MIDDLETON AVE /
4-6 FISHBURN CRES /
25-31 SEXTON AVE.
CASTLE HILL

SURVEYOR:	MS, XG, ET, JJ
CHECK:	XG
AUTHORISED:	MS

DETAIL SURVEY

AUTHORITY	THE HILLS SHIRE
PROPERTY	2/DP1257535, 20-32/DP247890, 1&2/DP253774
LOCALITY	CASTLE HILL
ORIGIN OF LEVELS	SS62665
DATUM	A.H.D.
DATE	28/02/2024, 01,04, 06/03/2024
DRAWN BY	XG
SHEET	1 OF 1
DRAWING No.	ECP2896.D.01D
AMENDMENT	D

1 : 400 @ A1 SCALE 1: 800 @ A3
TABLE OF mm

No.	AMENDMENTS	DRAWN	DATE:
D	FIANLISE PLAN	MS	16/03/2026
B	UPDATED INTERVALS	JJ	06/03/2026
C	PARTRIDGE AVE SURV.	JJ	12/03/2026

FILE NAME: ECP2896.D.01D