



9 June 2021

220218rpt20210609_DW_Flood Risk Management Report.docx

Development Link

C/- Crawford Architects

Suite 3.01 Level 3

80 Mount Street

NORTH SYDNEY NSW 2060

Attn: Mr. Paul Godsell

**RE: FLOOD RISK MANAGEMENT REPORT FOR PROPOSED DEVELOPMENT
882A PITTWATER ROAD, DEE WHY, NSW**

1.0 INTRODUCTION

Demlakian Consulting Engineers have been engaged to prepare a flood risk management report for the proposed shop-top housing development as part of the Northern Beaches Council development application.

As the site is located within flood prone land, the aim of this report is to demonstrate the compliance of the proposed development with the flood related development controls outlined within the Warringah Development Control Plan 2011 and the Flood Prone Land Design Standard as required by the Northern Beaches Council. This report should be read in conjunction with all relevant documents included in the Appendices.

2.0 PROPOSED DEVELOPMENT AND CONTEXT

The site currently consists of a single storey commercial building that is proposed to be demolished and replaced with a new nine-storey mixed-use premises.

For this report, the site adjoins existing properties to the northern, southern, and eastern boundaries with Pittwater Road along the western boundary.

The survey plan indicates that the stormwater runoff flows to the north along Pittwater Road. The site is located within the Dee Why Lagoon South Catchment. A copy of the architectural drawings and survey plan is provided in the enclosures.

The main objectives of this report are the following:

- To ensure that the Flood Planning Requirements of the Warringah City Council – Section 6.3 of the Local Environmental Plan 2011 are met

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- To outline measures that have been incorporated into the architectural design to address the flood impacts in the 100-year ARI storm event
- To advise on safety of occupants and/or evacuation measures.

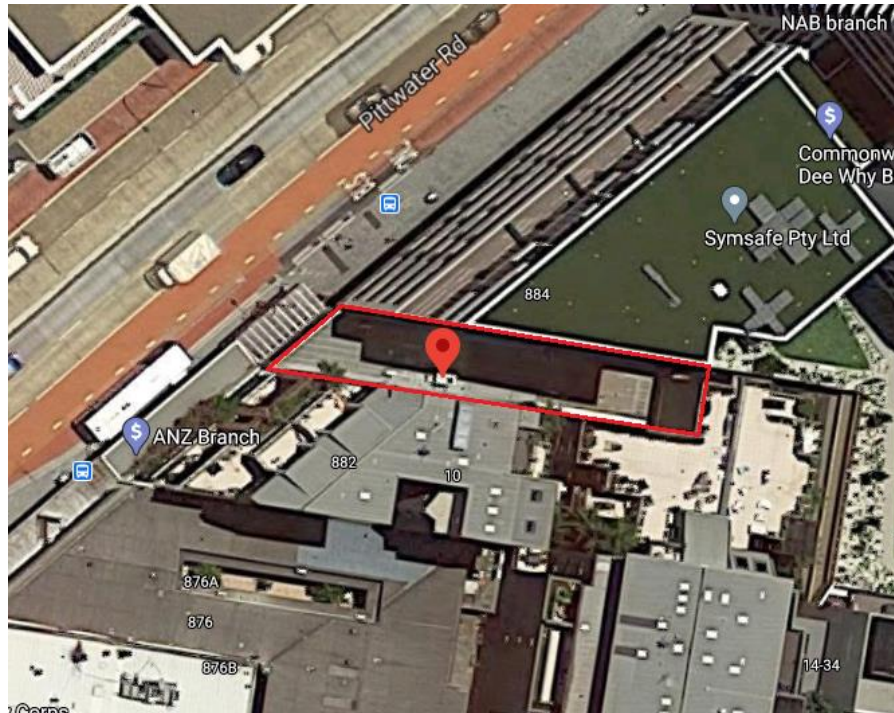


Figure 1 – Locality Plan

3.0 REFERENCED DOCUMENTS

The following documents have been referenced in this report:

1. Architectural drawings prepared by Crawford Architects – project number 20036
2. Site survey plan prepared by Adam Clerke Surveyors Pty Ltd dated 3/10/2020
3. Part E11 of the Warringah Development Control Plan 2011
4. Section 6.3 of the Warringah Local Environmental Plan 2011
5. Northern Beaches Council Guidelines for preparing a flood management report
6. Dee Why South Catchment Floodplain Risk Management Study 2014 prepared by Cardno for Warringah Council
7. Reducing Vulnerability of Buildings to Flood Damage - Guidance on Building in Flood Prone Area.
8. Pre-lodgement Meeting notes dated 14 January 2021.



4.0 FLOOD ANALYSIS INFORMATION

The site is flood affected as identified on the Council website. Figure 2 indicated the extent of the medium flood risk planning precinct. Accordingly, the flood controls in Section 6.3 of the Local Environment Plan 2011 apply.



Figure 2: Medium flood Risk Planning

5.0 FLOOD RISK ASSESSMENT REQUIREMENTS

Since the site is flood affected, the Northern Beaches Council require a Flood Risk Assessment. A copy of the documented requirements is provided in the enclosures. The requirements of the report guidelines are addressed as follows:

5.1 Flood analysis

As noted above, the flood depth and flow information has been provided by Council within the PLM notes dated 14 January 2021.

5.2 Assessment of Impacts

- The specific impacts are outlined in detail in the following sections of this report.
- In summary, the existing site is fully occupied by the existing building structures. Accordingly, overland flow does not occur through or across the site. Therefore, the proposed development does not reduce the existing flood conveyance, which occurs in the roadways. Therefore, the proposed



development does not impact the existing flood regime.

- The existing site does not allow for flood storage. Therefore, the proposed development does not result in loss of flood storage. The habitable floor levels have been set above the required Flood Planning Levels. This is outlined in later sections of the report in written and diagrammatic formats.
- The development does not include any fencing that impacts the existing flood regime.
- The proposed development addresses the requirement for safe occupation and evacuation.

A detailed assessment of the Flood Risk is provided in accordance with the medium Flood Risk matrix requirements as outlined in the Northern Beaches Council Development Control Plan – Part E11. A copy of this matrix is provided in Figure 3.

		Medium Flood Risk						
		Critical Uses	Vulnerable Uses	Subdivision	Residential	Business & Industrial	Recreational & Environmental	Concessional
A	Flood effects caused by Development	A1 A3 A4	A1 A3 A4	A1 A3	A1 A3	A1 A3	A2 A3	A2 A3
B	Drainage Infrastructure & Creek Works	B1 B2	B1 B2	B1 B2	B1 B2	B1 B2	B1 B2	
C	Building Components & Structural	C1 C2 C3	C1 C2 C3		C1 C2 C3	C1 C2 C3	C1 C2 C3	C1 C2 C3
D	Storage of Goods	D1 D2	D1 D2		D1 D2	D1 D2	D1 D2	D1 D2
E	Flood Emergency Response	E1 E2 E3	E1 E2 E3	E1 E4	E1 E2	E1 E2 E3	E1	E1
F	Floor Levels	F2 F3 F7	F2 F3 F7	F5	F1 F2 F3 F4 F6 F8 F9	F1 F2 F3 F4 F6 F8 F9 F10 F11	F2	F1 F2 F3 F4 F6 F11
G	Car Parking	G1 G4 G6 G7 G9 G10	G1 G4 G6 G7 G9 G10	G1	G1 G2 G3 G5 G6 G7 G8	G1 G2 G3 G4 G5 G6 G7	G1 G2 G3 G4 G5 G6 G7	G1 G2 G3 G4 G5 G6 G7
H	Fencing	H1	H1	H1	H1	H1	H1	H1
I	Pools	I1	I1	I1	I1	I1	I1	I1

Figure 3: Medium Flood Risk Matrix

5.3 Assessment of Impacts

For each item, the requirements of the matrix are indicated in italics. Subsequently, the way the requirements have been met is outlined below:



A. Flood effects caused by Development

A1 Jetty

A2 Certification shall be provided in accordance with Northern Beaches Council's Standard Hydraulic Certification Form (Forms A and A1 of Northern Beaches Council's Guidelines for preparing a Flood Management Report) to the effect that the works have been designed and can be constructed to adequately address flood risk management issues.

A3 The applicant shall include in their submission, calculations to illustrate that any fill or other structures that reduce the total flood storage are replaced by Compensatory Works.

A4 Development (including earthworks and subdivision) shall not be approved unless it can be demonstrated in a Flood Management Report that it has been designed and can be constructed so that in a Probable Maximum Flood event:

- (a) There are no adverse impacts on flood levels and velocities caused by alterations to the flood conveyance;*
- (b) There are no adverse impacts on surrounding properties; and (c) It is sited to minimise exposure to flood hazard.*

Where relevant certification shall also be provided in Northern Beaches Council's Standard Certification Form (Forms A and A1 of Northern Beaches

In response to these requirements, the proposed development complies as follows:

- The proposed development does not include the construction of a jetty.
- Form A/A1 has been signed and attached in the Enclosures of this report.
- The proposed development is located on lots which are fully covered with existing buildings therefore the proposed development does not result in loss of flood storage.

Accordingly, the proposed development has no impact.

B. Drainage Infrastructure and Creek Works

B1 Flood mitigation works or storm water devices that modify a major drainage system, storm water system, natural water course, floodway or flood behavior within or outside the development site may be permitted subject to demonstration through a Flood Management Report that they comply with the Flood Prone Land Design Standard found on Council's webpage.

B2 A Section 88B notation under the Conveyancing Act 1919 may be required to be placed on the title describing the location and type of flood mitigation works with a requirement for their retention and maintenance.

In response to these requirements, the proposed development, complies as follows:



- The Council Flood Risk Map (Figure 2) demonstrates that overland flow occurs through Pittwater Road and Oaks Avenue. The proposed development is located on a lot which is fully covered with existing buildings and will not affect the floodway or flood behaviours.
- The proposed development does not require modifications to the existing major drainage systems or stormwater system as the area of the collected stormwater will not change.

Accordingly, the proposed development has no impact on drainage infrastructure or creeks.

C. Building Components and Structural Soundness

C1 All buildings shall be designed and constructed as flood compatible buildings in accordance with Reducing Vulnerability of Buildings to Flood Damage: Guidance on Building in Flood Prone Areas, Hawkesbury Nepean Floodplain Management Steering Committee (2006).

C2 All structures must be designed and constructed to ensure structural integrity up to the Flood Planning Level, taking into account the forces of floodwater, wave action, flowing water with debris, buoyancy and immersion. Structural certification shall be provided confirming the above. Where shelter-in-place refuge is to be provided, the structural integrity is to be to the Probable Maximum Flood level.

C3 All new electrical equipment, power points, wiring, fuel lines, sewerage systems or any other service pipes and connections must be waterproofed and/or located above the Flood Planning Level. All existing electrical equipment and power points located below the Flood Planning Level must have residual current devices installed that turn off all electricity supply to the property when flood waters are detected.

In response to these requirements, the proposed development complies with the following:

- All structural elements below the Flood Planning Level are to be constructed of reinforced concrete and/or reinforced concrete masonry and designed to withstand the forces of flood water, debris, and buoyancy. Considering the flow depth does not exceed 200 mm this can be readily achieved with conventional construction practices.
- Potentially, if the overland flow reaches the structure, the reinforced concrete slab and subfloor walls of this structure may be subject to stormwater. These elements are to be constructed from flood compatible building materials.
- The electrical design shall ensure that all new electrical equipment and similar have suitable waterproofing or are located above the Flood Planning Level and that all existing electrical equipment, etc. shall have suitable devices cutting off electricity supply should flood waters be detected.
- The floor level of retail areas, entry staircases, etc. located on the ground level of the proposed development shall be located at or above the required Flood Planning Level.

By considering the above, the proposed development will comply with the Building Components and Structural Soundness requirements.



D. Storage of Goods

D1 Hazardous or potentially polluting materials shall not be stored below the Flood Planning Level unless adequately protected from floodwaters in accordance with industry standards.

D2 Goods, materials or other products which may be highly susceptible to water damage are to be located/stored above the Flood Planning Level.

As noted above, the building levels have been set to prevent the ingress of storm water by ensuring that habitable levels are at or above the Flood Planning Level. Accordingly, any goods stored on the habitable floors will be above or barricaded from the Flood Planning Level.

Access passageways and ramps that are below the Flood Planning Level have been designed in a watertight manner, and bunded to a level above the Flood Planning Level, thus preventing water ingress to lower levels. Goods and hazardous materials should not be stored in these passageways.

The above measures ensure adequate protection to stored goods and hazardous materials.

E. Flood Emergency Response

E1 Development shall comply with Council's Flood Emergency Response Planning for Development in Pittwater Policy and the outcomes of any Flood Risk Emergency Assessment Report where it applies to the land.

E2 New development must provide an appropriately sized area to safely shelter in place above the Probable Maximum Flood level and appropriate access to this area should be available from all areas within the development.

E3 Adequate Warning Systems, Signage and Exits shall be installed to allow safe and orderly evacuation without reliance upon the SES or other authorised emergency services personnel.

E4 The application shall demonstrate that evacuation/shelter in place in accordance with the requirements of this DCP will be available for any potential development arising from a torrens title subdivision.

In response to these requirements, the proposed development should comply with the following:

- The building's habitable floor levels at Ground Floor and at all levels above are above the Flood Planning Level and the PMF. Accordingly, there is more than adequate floor area available for occupants to safely reside during the storm event.
- The lower levels of the building are provided with egress ramps and stairs that allow access to higher levels in the building, located above the Flood Planning Level and the PMF.
- Since the nature of the flooding is shallow overland flow during a flash flood storm event, evacuation from the site would not be an appropriate emergency response during the storm event. The most appropriate course of action would be to shelter in place or parts of the building above the flood planning and PMF level.



- Following conclusion of the storm event the overland flow would quickly dissipate and allow easy evacuation by the specified paths of egress.
- There would be no need for reliance on the emergency services to evacuate the building following conclusion of the storm event.

Accordingly, the proposed development will comply with the Flood Emergency Response requirements.

F. Floor Levels

F1 New floor levels within the development shall be at or above, the Flood Planning Level. A reduced Flood Planning Level may be considered only where it is permitted in this Development Control Plan. The structure must be flood proofed (wet or dry) to the Flood Planning Level. This control cannot be applied to critical or vulnerable uses.

F2 All development structures must be designed and constructed so as not to impede the floodway or flood conveyance on the site, as well as ensuring no loss of flood storage in a 1% AEP Event. Where the dwelling is located over a flow path it must be elevated on suspended pier/pile footings such that the level of the underside of all floors including balconies and decks within the flood affected area are at or above, or raised to the Flood Planning Level to allow clear passage of the floodwaters under the building. The development must comply with the Flood Prone Land Design Standard.

F3 Where the lowest floor has been elevated to allow the passage of flood waters, a restriction shall be imposed on the title of the land, pursuant to S88B of the Conveyancing Act confirming that the undercroft area is not to be enclosed.

F4 A one-off addition or alteration below the Flood Planning Level of less than 30 square metres or an increase of less than 10% of the ground floor area (whichever is the lesser) for residential development may be considered only where:

- (a) it is an extension to an existing room*
- (b) the Flood Planning Level is incompatible with the floor levels of the existing room*

This control will not be permitted if this provision has previously been utilised since the making of this Plan.

The structure must be flood proofed to the Flood Planning Level.

F5 The applicant must demonstrate that future development following a subdivision proposal can be undertaken in accordance with this Control.

F6 Any existing floor level may be retained below the Flood Planning Level when undertaking a first-floor addition provided that:

- (a) it is not located within a floodway;*
- (b) there is no increase to the building footprint below the Flood Planning Level;*
- (c) it is flood proofed to the Flood Planning Level;*



F7 All floor levels within the development shall be at or above the Probable Maximum Flood level or Flood Planning Level whichever is higher.

F8 The minimum floor level of any first-floor additions shall be at or above the Probable Maximum Flood Level.

F9 Foyers – consideration may be given to a minimum floor level of a foyer being set at the 5% AEP flood level, provided it can be demonstrated that it complies with the Flood Prone Land Design Standard.

F10 Consideration may be given to a minimum floor level for the first 5 metres from the street front of new development in business zonings below the Flood Planning Level provided it can be demonstrated that it complies with the Flood Prone Land Design Standard.

F11 A one-off addition or alteration below the Flood Planning Level of less than 100 square metres or an increase of less than 10% of the ground floor area (whichever is the lesser) for non-residential development may be considered only where the required floor level cannot be achieved for the following reason: (a) it would be incompatible with floor levels of the existing building This control will not be considered if the existing floor level of the additions/alterations are located within a high hydraulic hazard area. This control will not be permitted if this provision has previously been utilised since the making of this Plan. Any features of the additions or alterations on the floor level must be flood proofed to the Flood Planning Level.

In response to these requirements, the proposed development should comply with the following:

- In Response to Item F1, the mainstream flood level along the Pittwater Road during the 100-year ARI flood is to be taken as RL18.35 as specified within the Floodplain Planning & Response section of the Pre-lodgement Meeting Notes dated 14 January 2021 attached within the enclosures of this report. Therefore, the ground floor level along the northern façade must be no less than FFL 18.90 to satisfy the condition of 550mm freeboard above the 100-year ARI flood level. We note that whilst the ground floor level towards the back of the building on the ground floor are less than RL18.90, as the front section of the ground floor is set at the flood planning level of RL18.90, these areas will be safeguarded from flooding up to the 100-year storm event.
- In response to F2, the existing lots are fully covered with existing buildings. Therefore, the site does not provide flood storage or conveyance. Therefore, no loss of flood storage will occur.
- Item F3 does not apply to this site.
- Item F4 does not apply to this development.
- Item F5 does not apply to this development.
- Item F6 does not apply to this development.
- In response to item F7, all floor levels within the building will be either at or above the flood planning level or safeguarded from flooding up to the 100-year storm event through the implementation of ramps to higher floor levels to barricade these areas.



- Item F8 does not apply to this development. All habitable floor levels are located above the Flood Planning Level and PMF. Some access ramps are located below the Flood Planning Level but are constructed as watertight up to the Flood Planning Level. Where these access ramps lead to building levels below the Flood Planning Level, they are provided with watertight bunding and landings above the required level before the ramps descend.
- Item F9 does not apply to this development.
- Item F10 does not apply to this development.
- Item F11 does not apply to this development.

By considering the above, the proposed development will comply with the Floor Levels requirement.

G. Car Parking

G1 Open carpark areas and carports shall not be located within a floodway.

G2 The lowest floor level of open carparks and carports (unroofed or with open sides) shall be constructed no lower than the natural ground levels.

G3 All enclosed car parks must be protected from inundation up to the relevant Flood Planning Level. For example, basement carparks must be provided with a crest at the entrance, the crest of which is at the relevant Flood Planning Level.

All access, ventilation and any other potential water entry points to any enclosed car parking shall be above the relevant Flood Planning Level.

Council will not accept any options that rely on electrical, mechanical or manual exclusion of the floodwaters from entering the enclosed carpark.

G4 Vehicle barriers or restraints are to be provided to prevent floating vehicles leaving the site where there is more than 300mm depth of flooding in a 1% AEP flood event.

The minimum height of the vehicle barriers or restraints must be at or above the Flood Planning Level.

Vehicle barriers or restraints must comply with the Flood Prone Land Design Standard.

G5 Enclosed Garages must be located at or above the 1% AEP level.

G6 Carports must comply with the Flood Prone Land Design Standard.

G7 Where a driveway is required to be raised it must be demonstrated that there is no loss to flood stage in the 1% AEP flood event and no impact on flood conveyance through the site.

G8 Multi Dwelling Housing and Shop Top Housing residential carparking – consideration may be given to a minimum floor level for open or covered carparking being set at the 5% AEP flood level, provided it can be demonstrated that it complies with the Flood Prone Land Design Standard.



G9 All enclosed car parks must be protected from inundation up to the Probable Maximum Flood level or Flood Planning Level whichever is higher. For example, basement car parks must be provided with a crest at the entrance, the crest of which is at the relevant Probable Maximum Flood level or Flood Planning Level whichever is higher. All access, ventilation and any other potential water entry points to any enclosed car parking shall be above the relevant Probable Maximum Flood level or Flood Planning Level whichever is higher.

G10 Enclosed Garages must be located at or above the Probable Maximum Flood Level or Flood Planning Level whichever is higher.

The proposed development complies with these requirements as follows:

- As there is no carpark or driveway proposed within this development, items G1 to G10 do not apply to this development.

By considering the above, the proposed development will comply with the Car Parking requirements.

H. Fencing

H1 Fencing, including pool fencing, shall be designed so as not to impede the flow of flood waters and not to increase flood affectation on surrounding land. Appropriate fencing must comply with the Flood Prone Land Design Standard in addition to other regulatory requirements of pool fencing.

- The proposed development does not include construction of a fence that impedes the flow of flood waters.

By considering the above, the proposed development will comply with the Fencing requirements.

I. Pools

I1 Pools located within the 1% AEP flood extent are to be inground, with coping flush with natural ground level. Where it is not possible to have, pool coping flush with natural ground level, it must be demonstrated that the development will result in no net loss of flood storage and no impact on flood conveyance on or from the site.

All electrical equipment associated with the pool (including pool pumps) is to be waterproofed and/or located at or above the Flood Planning Level.

All chemicals associated with the pool are to be stored at or above the Flood Planning Level.

In response to these requirements, the proposed development should comply with the following:

- The proposed development does not include the construction of a pool at the ground level.

By considering the above, the proposed development will comply with the Pools requirements.



6.0 CONCLUSIONS

The floor levels of the proposed development will have at least 550mm freeboard to the gutter invert level along Pittwater Road at the point of the southern boundary of the property. This means a minimum floor level of RL18.90 is required for the front section of the building adjacent to Pittwater Road.

As the proposed development is located on a lot which is covered with existing buildings, neither flood storage nor the floodway will be altered or affected by its construction.

We confirm that the project design shown on these drawings and as outlined above provides suitable compliance with the requirements of the Northern Beaches Council requirements as specified in Part E11 of the Development Control Plan 2011.

We trust the above provides the information required at this time. Should there be any questions please do not hesitate to contact the undersigned.

Yours Sincerely,

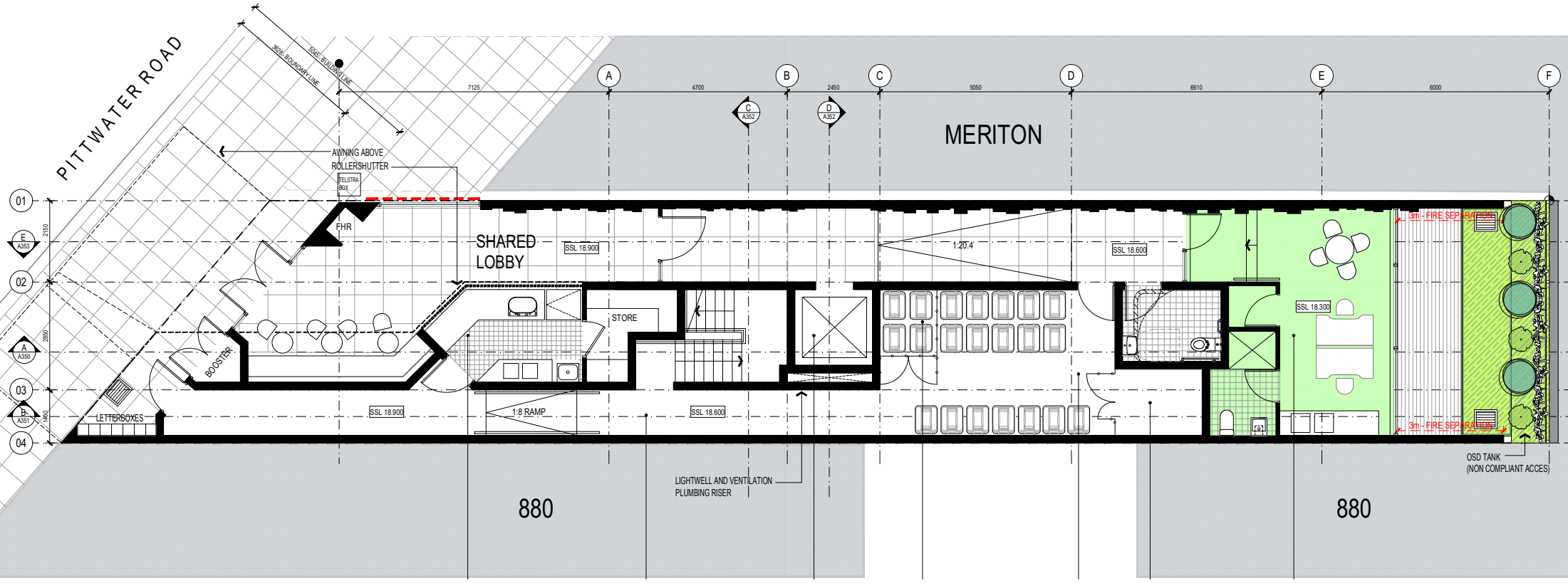
David Wilcox
B.E. (Hons I) FIEAust CPEng NER APEC Engineer IntPE (Aus) RPEQ
Director
DEMLAKIAN CONSULTING ENGINEERS

Encl.:

- Architectural drawings by Crawford Architects
- Site survey plan by Adam Clerke Surveyors Pty Ltd dated 3/10/2020
- Northern Beaches flood risk assessment report guidelines
- Form A/A1

LEGEND

- BOUNDARY
- DRENCHERS
- UNIT 01 --- UNIT NUMBER
- 28.0 SQM --- TOTAL AREA
- 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
- ACCESSIBLE UNIT
- COMMERCIAL SPACE
- CROSS-VENTILATION



880

880

COFFEE SHOP

FIRE EGRESS

LIFT

CAGED COMMERCIAL REFUSE & RECYCLE

BINS

BULKY GOODS 8m³

COMMERCIAL 01 28.4 SQM

OSD TANK (NON COMPLIANT ACCES)

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NORTH SYDNEY, NSW 1585 AUSTRALIA
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NOMINATED ARCHITECTS:
TONY GRAY 0033 & PAUL GODSELL 0726

P 02 9960 3644 www.crawford.com.au
E arch@crawford.com.au

7	21/03/21	ISSUED TO CONSULTANT
ISSUE	DATE	AMENDMENTS

CLIENT

DEVELOPMENT LINK

PROJECT

ARH DEE WHY

882A PITTWATER ROAD, DEE WHY NSW 2039

TITLE

GROUND FLOOR

SCALE 1:50 @ A1

APPROVED

CHECKED

DATE

STATUS

MT

PG

NOV 2020

DA

PROJECT NUMBER






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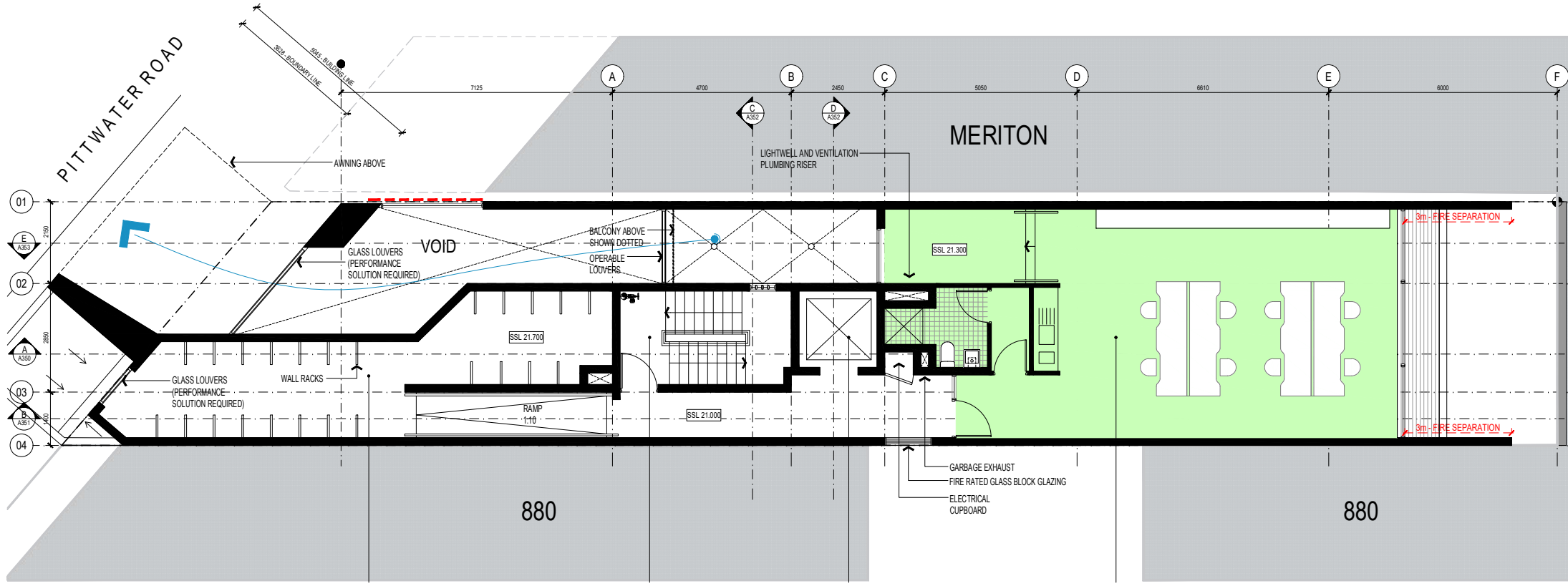
20036

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LEGEND

-  BOUNDARY
-  DRENCHERS
- UNIT 01** — UNIT NUMBER
- 28.0 SQM — TOTAL AREA
- 20.0 SQM — TOTAL AREA EXCLUDING KITCHEN & TOILETS
-  ACCESSIBLE UNIT
-  COMMERCIAL SPACE
-  CROSS-VENTILATION



BICYCLE STORAGE

FIRE EGRESS STAIR

LIFT

COMMERCIAL 02
71.7 SQM

FIRE ISOLATED STAIR PROVIDES ACCESS TO ROOF

AS1428 COMPLIANT STRETCHER COMPLIANT

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G	21.02.23	ISSUED TO CONSULTANTS	
F	21.12.25	ISSUED TO CLIENT	
E	21.01.07	REVISED ISSUE	
D	21.05.08	REVISED ISSUE	
C	21.12.18	REVISED ISSUE	
B	20.11.17	Q&A PRESENTATION	
A	20.11.16	GROUP MEETING/REVISED ISSUE	
ISSUE	DATE	AMENDMENTS	

CLIENT
DEVELOPMENT LINK

PROJECT
ARH DEE WHY

TITLE
FIRST FLOOR

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APPROVED DRAWN	MT
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DATE	NOV 2020
STATUS	DA

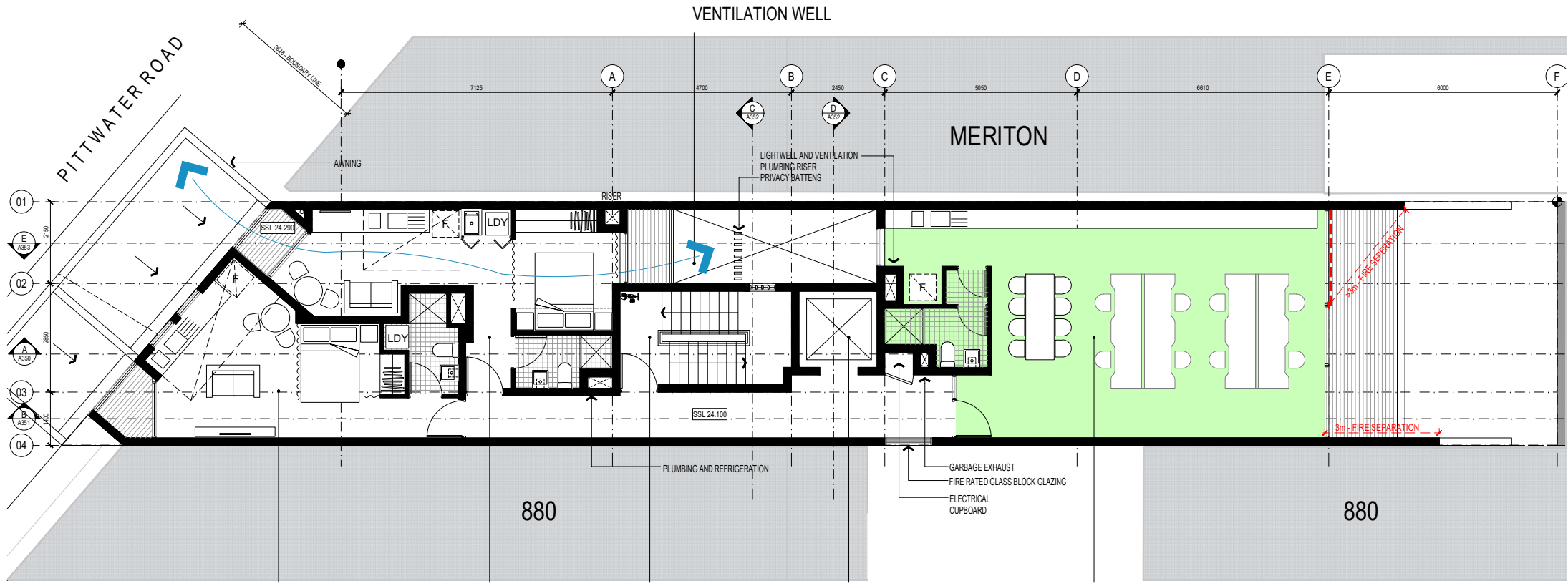
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882A PITTWATER ROAD, DEE WHY NSW 2099

- LEGEND**
- BOUNDARY
 - DRENCHERS
 - UNIT 01 --- UNIT NUMBER
 - 28.0 SQM --- TOTAL AREA
 - 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
 - ACCESSIBLE UNIT
 - COMMERCIAL SPACE
 - CROSS-VENTILATION



L2.01
27.8 SQM
17.6 SQM

SINGLE ASPECT
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

L2.02
28.5 SQM
20.8 SQM

CROSS VENTILATION
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

FIRE EGRESS STAIR
-

FIRE ISOLATED STAIR
PROVIDES ACCESS TO ROOF

LIFT
-

AS1428 COMPLIANT
STRETCHER COMPLIANT

COMMERCIAL 03
64.3 SQM

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D	21.05.08	REVISED ISSUE	
C	21.01.08	REVISED ISSUE	
B	20.11.07	Q&A PRESENTATION	
A	20.11.04	GROUP PRESENTATION/MEETING ISSUE	
ISSUE	DATE	AMENDMENTS	

CLIENT
DEVELOPMENT LINK

PROJECT
ARR DEE WHY

TITLE
LEVEL 2 FLOOR PLAN

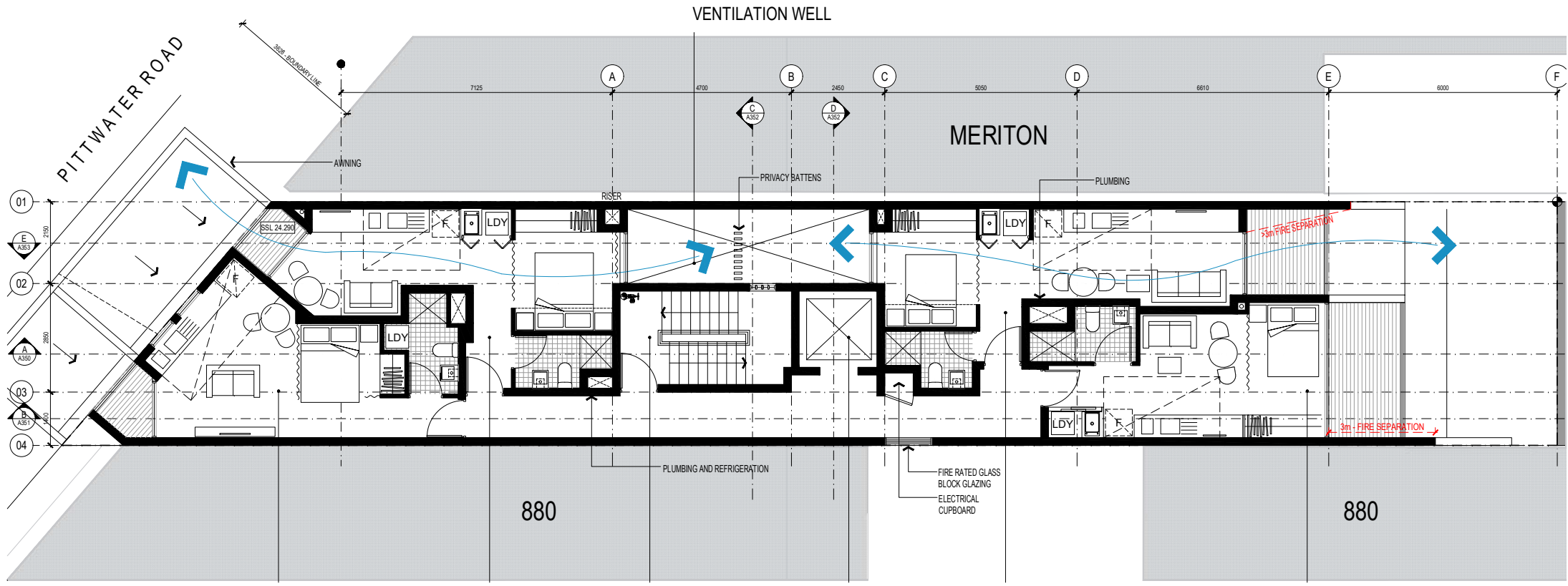
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SCALE 1:50 @ A1
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DATE NOV 2020
STATUS DA

PROJECT NUMBER DRAWING NUMBER
20036 A102



- LEGEND**
- BOUNDARY
 - DRENCHERS
 - UNIT 01 --- UNIT NUMBER
 - 28.0 SQM --- TOTAL AREA
 - 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
 - ACCESSIBLE UNIT
 - COMMERCIAL SPACE
 - CROSS-VENTILATION



L3.01
27.8 SQM
17.6 SQM

SINGLE ASPECT
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

L3.02
28.5 SQM
20.8 SQM

CROSS VENTILATION
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

FIRE EGRESS STAIR
-
-

FIRE ISOLATED STAIR
PROVIDES ACCESS TO ROOF

LIFT
-
-

AS1428 COMPLIANT
STRETCHER COMPLIANT

L3.03
29.6 SQM
21.4 SQM

CROSS VENTILATION
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

L3.04
24.7 SQM
16.2 SQM

SINGLE ASPECT
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

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M	21.02.24	ISSUED TO CONSULTANTS																											
G	21.02.03	ISSUED TO CONSULTANTS																											
F	21.02.25	ISSUED TO CLIENT																											
E	21.02.07	REVISED ISSUE																											
D	21.02.26	REVISED ISSUE																											
C	21.02.08	REVISED ISSUE																											
B	20.11.07	GAAP PRESENTATION																											
A	20.11.04	GAAP PRESENTATION																											
ISSUE	DATE	AMENDMENTS																											

CLIENT: DEVELOPMENT LINK
PROJECT: ARH DEE WHY
882A PITTWATER ROAD, DEE WHY NSW 2099

TITLE: LEVEL 3 FLOOR PLAN

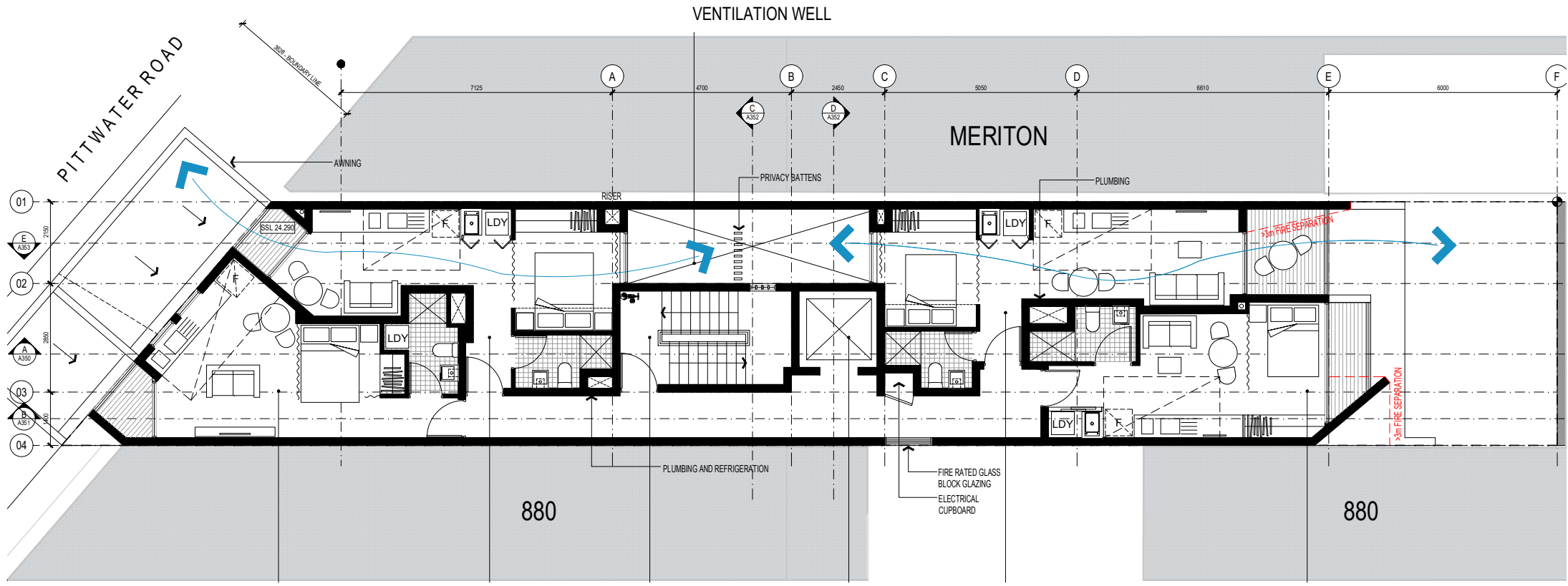


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APPROVED: MT
CHECKED: PG
DATE: NOV 2020
STATUS: DA

PROJECT NUMBER: 20036
DRAWING NUMBER: A103



- LEGEND**
- BOUNDARY
 - DRENCHERS
 - UNIT 01 --- UNIT NUMBER
 - 28.0 SQM --- TOTAL AREA
 - 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
 - ACCESSIBLE UNIT
 - COMMERCIAL SPACE
 - CROSS-VENTILATION



L4.01
27.8 SQM
17.6 SQM

SINGLE ASPECT
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

L4.02
28.5 SQM
20.8 SQM

CROSS VENTILATION
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

FIRE EGRESS STAIR
-

FIRE ISOLATED STAIR
PROVIDES ACCESS TO ROOF

LIFT
-

AS1428 COMPLIANT
STRETCHER COMPLIANT

L4.03
29.5 SQM
21.3 SQM

CROSS VENTILATION
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

L4.04
24.7 SQM
16.1 SQM

SINGLE ASPECT
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

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G	21.02.03	ISSUED TO CONSULTANTS																														
F	21.02.25	ISSUED TO CLIENT																														
E	21.02.07	REVISED ISSUE																														
D	21.02.08	REVISED ISSUE																														
C	21.02.08	REVISED ISSUE																														
B	20.11.07	GAAP PRESENTATION																														
A	20.11.06	GROUP MEETING REVISED ISSUE																														
ISSUE	DATE	AMENDMENTS																														

CLIENT
DEVELOPMENT LINK

PROJECT
ARH DEE WHY

TITLE
LEVEL 4 FLOOR PLAN

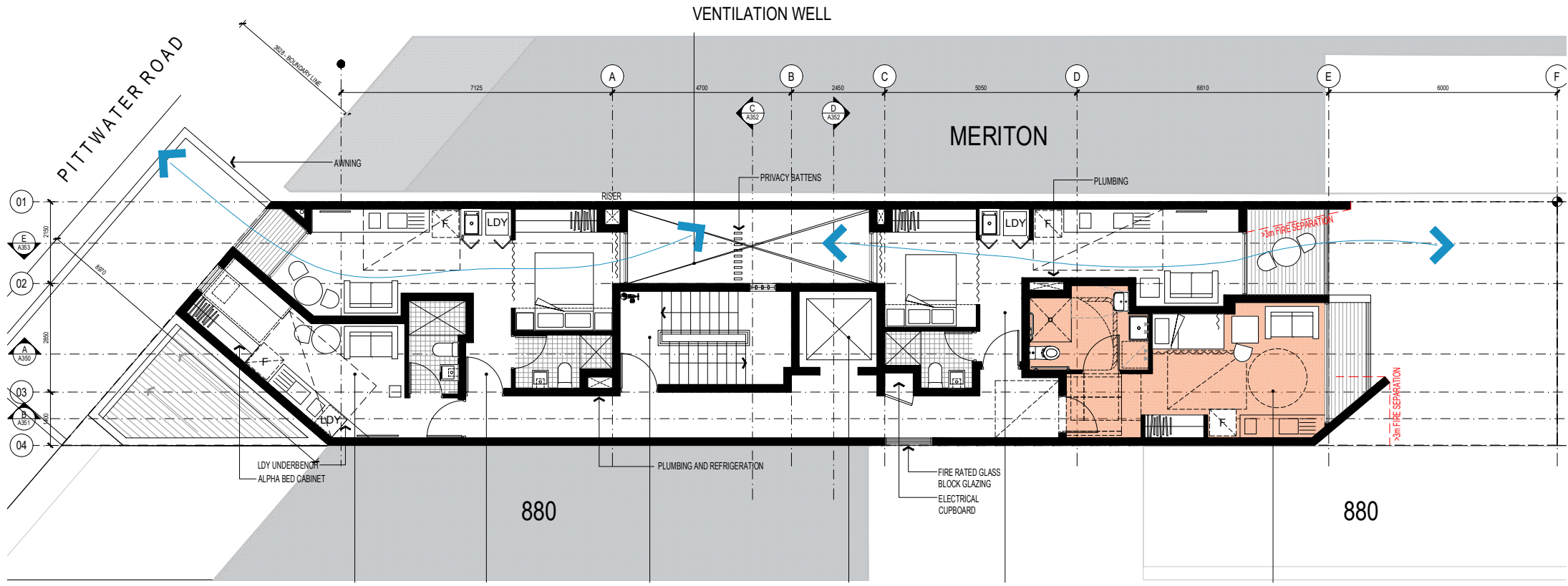
882A PITTSWATER ROAD, DEE WHY NSW 2099

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APPROVED
DRAWN MT
CHECKED PG
DATE NOV 2020
STATUS DA

PROJECT NUMBER DRAWING NUMBER
20036 A104



- LEGEND**
- BOUNDARY
 - DRENCHERS
 - UNIT 01 --- UNIT NUMBER
 - 28.0 SQM --- TOTAL AREA
 - 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
 - ACCESSIBLE UNIT
 - COMMERCIAL SPACE
 - CROSS-VENTILATION



L5.01 19.1 SQM 10.0 SQM	L5.02 28.9 SQM 21.2 SQM	FIRE EGRESS STAIR -	LIFT -	L5.02 27.7 SQM 19.0 SQM	L5.03 ACCESSIBLE 25.7 SQM 15.0 SQM
INTERNAL KITCHEN INTERNAL LAUNDRY INTERNAL BATHROOM	CROSS VENTILATION INTERNAL KITCHENETTE INTERNAL LAUNDRY INTERNAL BATHROOM BALCONY	FIRE ISOLATED STAIR PROVIDES ACCESS TO ROOF	AS1428 COMPLIANT STRETCHER COMPLIANT	CROSS VENTILATION INTERNAL KITCHENETTE INTERNAL LAUNDRY INTERNAL BATHROOM LARGE BALCONY	ACCESSIBLE COMPLIANT INTERNAL CIRCULATION SINGLE ASPECT INTERNAL KITCHENETTE INTERNAL LAUNDRY INTERNAL BATHROOM LARGE BALCONY

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ABN 56 120 779 100
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ISSUE	DATE	AMENDMENTS
M	21.02.24	ISSUED TO CONSULTANTS
G	21.02.23	ISSUED TO CONSULTANTS
F	21.12.24	ISSUED TO CLIENT
E	21.01.27	REVISED ISSUE
D	21.05.28	REVISED ISSUE
C	21.12.18	REVISED ISSUE
B	20.11.17	CLAMP PRESENTATION
A	20.11.16	CLAMP PRESENTATION

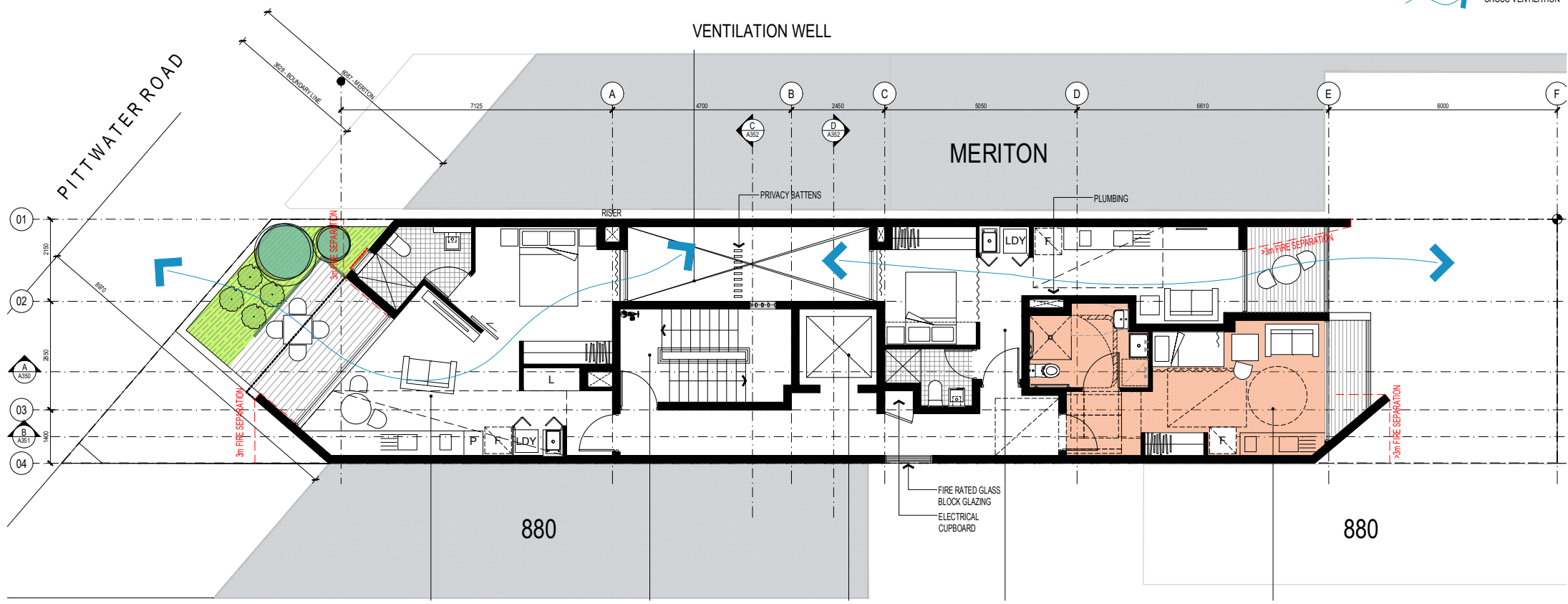
CLIENT: DEVELOPMENT LINK
PROJECT: ARH DEE WHY
TITLE: LEVEL 5 FLOOR PLAN
882A PITTWATER ROAD, DEE WHY NSW 2099

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APPROVED: [Signature]
CHECKED: MT
PG
DATE: NOV 2020
STATUS: DA

PROJECT NUMBER: 20036
DRAWING NUMBER: A105
ISSUE: H
crawford architects

LEGEND

- BOUNDARY
- DRENCHERS
- UNIT 01 --- UNIT NUMBER
- 28.0 SQM --- TOTAL AREA
- 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
- ACCESSIBLE UNIT
- COMMERCIAL SPACE
- CROSS-VENTILATION



MANAGERS OFFICE
40.7 SQM
24.1 SQM

CROSS VENTILATION
INTERNAL KITCHEN
INTERNAL LAUNDRY
INTERNAL BATHROOM
COURTYARD

FIRE EGRESS STAIR
--

FIRE ISOLATED STAIR
PROVIDES ACCESS TO ROOF

LIFT
--

AS1428 COMPLIANT
STRETCHER COMPLIANT

L6.02
27.7 SQM
19.0 SQM

CROSS VENTILATION
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

L6.03 ACCESSIBLE
25.7 SQM
15.0 SQM

ACCESSIBLE
COMPLIANT INTERNAL CIRCULATION
SINGLE ASPECT
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

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02	21.02.26	ISSUED TO CLIENT																														
03	21.02.07	REVISED ISSUE																														
04	21.02.08	REVISED ISSUE																														
05	21.02.08	REVISED ISSUE																														
06	20.11.07	Q&A PRESENTATION																														
07	20.11.06	GROUP MEETING/MEETING ISSUE																														
08																																
09																																
10																																

CLIENT DEVELOPMENT LINK	PROJECT ARH DEE WHY	TITLE LEVEL 6 FLOOR PLAN
882A PITTSWATER ROAD, DEE WHY NSW 2099		

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PROJECT NUMBER: 20036
DRAWING NUMBER: **A106**

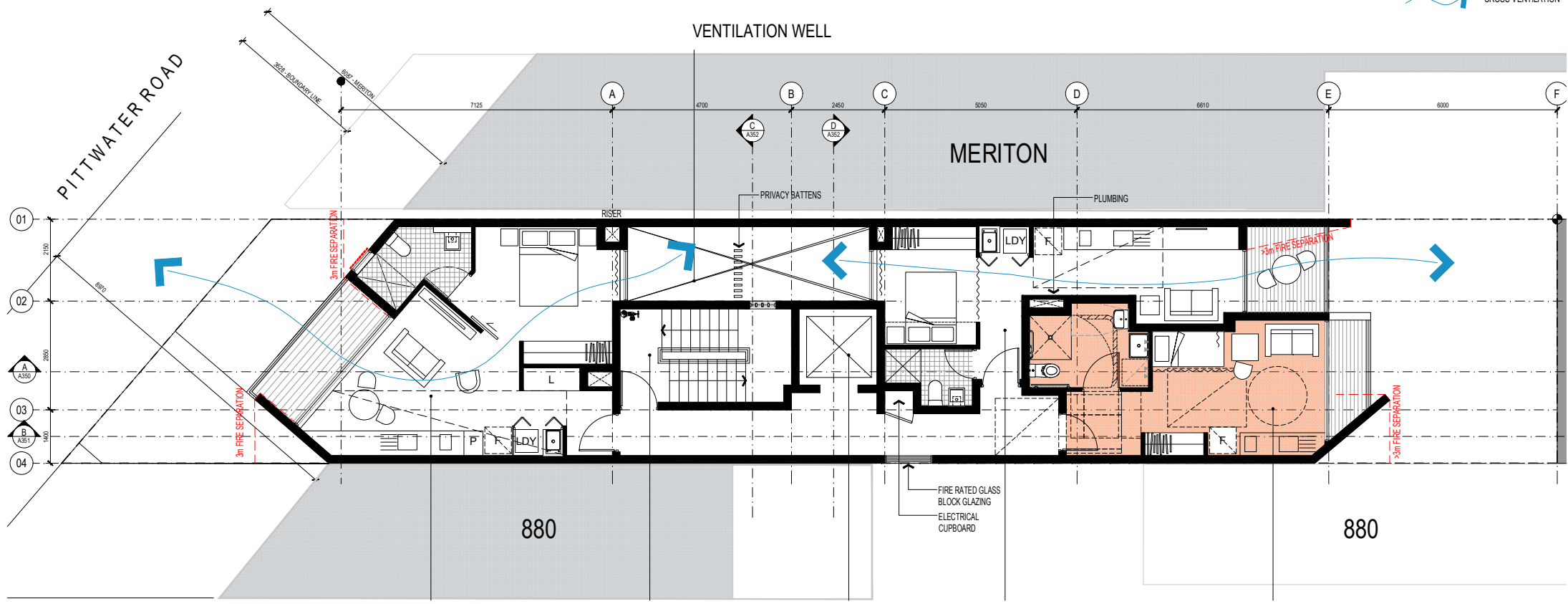
APPROVED: MT
CHECKED: PG
DATE: NOV 2020
STATUS: DA

ISSUE: **G** crawford architects

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- LEGEND**
- BOUNDARY
 - DRENCHERS
 - UNIT 01 --- UNIT NUMBER
 - 28.0 SQM --- TOTAL AREA
 - 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
 - ACCESSIBLE UNIT
 - COMMERCIAL SPACE
 - CROSS-VENTILATION



L7.01
40.7 SQM
24.1 SQM

CROSS VENTILATION
INTERNAL KITCHEN
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

FIRE EGRESS STAIR
-

FIRE ISOLATED STAIR
PROVIDES ACCESS TO ROOF

LIFT
-

AS1428 COMPLIANT
STRETCHER COMPLIANT

L7.02
27.7 SQM
19.0 SQM

CROSS VENTILATION
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

L7.03 ADAPTABLE
25.7 SQM
15.0 SQM

ACCESSIBLE
COMPLIANT INTERNAL CIRCULATION
SINGLE ASPECT
INTERNAL KITCHENETTE
INTERNAL LAUNDRY
INTERNAL BATHROOM
LARGE BALCONY

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NORTH SYDNEY, NSW 2060 AUSTRALIA
ABN 26 120 779 100
NOMINATED ARCHITECTS:
TONY GRAY 0303 & PAUL GODSELL 0726

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ISSUE	DATE	AMENDMENTS
E	21.02.03	ISSUED TO CONSULTANTS
D	21.02.26	ISSUED TO CLIENT
C	21.02.07	REVISED ISSUE
B	21.01.06	REVISED ISSUE
A	20.12.18	PROPOSED ISSUE

CLIENT
DEVELOPMENT LINK

PROJECT
ARH DEE WHY

TITLE
LEVEL 7 FLOOR PLAN

882A PITTWATER ROAD, DEE WHY NSW 2099



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




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CHECKED PG
DATE NOV 2020
STATUS DA

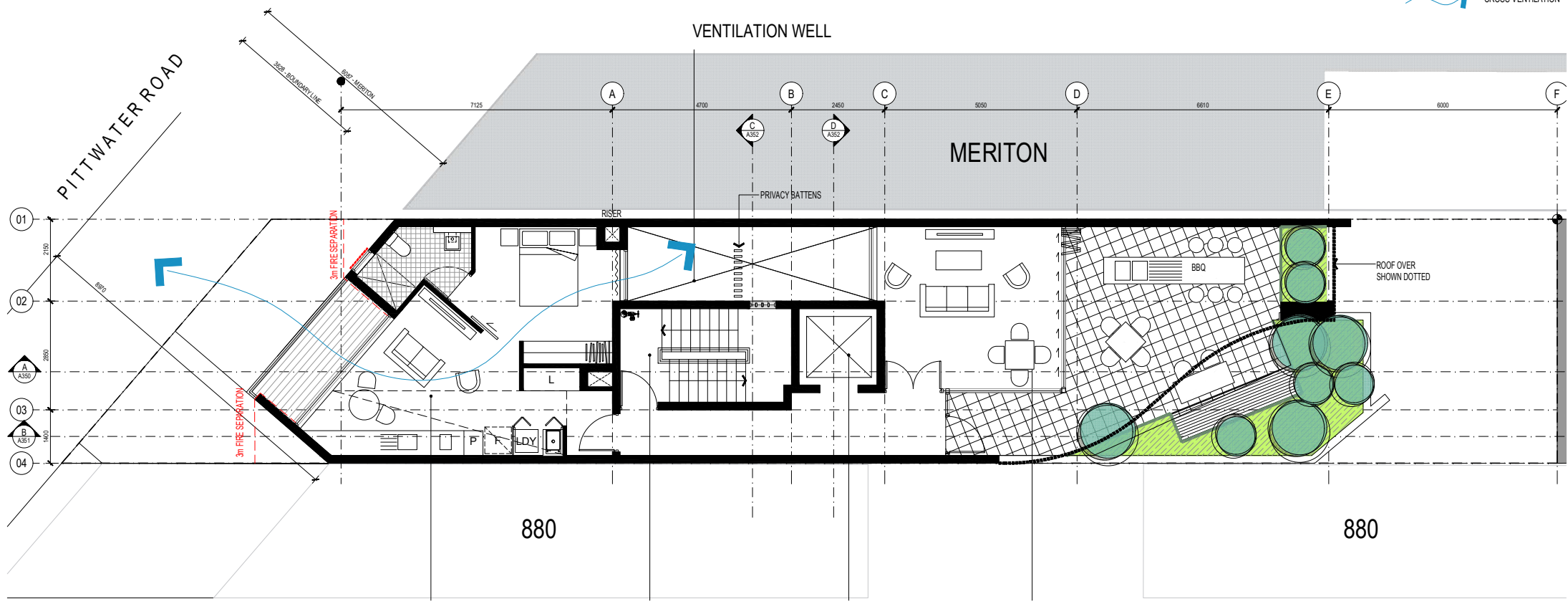
PROJECT NUMBER
20036

DRAWING NUMBER
A107



LEGEND

-  BOUNDARY
-  DRENCHERS
- UNIT 01** — UNIT NUMBER
- 28.0 SQM — TOTAL AREA
- 20.0 SQM — TOTAL AREA EXCLUDING KITCHEN & TOILETS
-  ACCESSIBLE UNIT
-  COMMERCIAL SPACE
-  CROSS-VENTILATION



L8.01
40.7 SQM
24.1 SQM

CROSS VENTILATION
INTERNAL KITCHEN
INTERNAL LAUNDRY
INTERNAL BATHROOM
BALCONY

FIRE EGRESS STAIR

FIRE ISOLATED STAIR
PROVIDES ACCESS TO ROOF

LIFT

AS1428 COMPLIANT
STRETCHER COMPLIANT

COMMUNAL SPACE
20 SQM

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ABN 56 120 779 100
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ISSUE	DATE	AMENDMENTS
E	21.02.03	ISSUED TO CONSULTANTS
D	21.01.26	ISSUED TO CLIENT
C	21.01.07	REVISED ISSUE
B	21.01.06	REVISED ISSUE
A	20.12.18	PROPOSED ISSUE

CLIENT
DEVELOPMENT LINK

PROJECT
ARH DEE WHY

TITLE
LEVEL 8 FLOOR PLAN

882A PITTWATER ROAD, DEE WHY NSW 2099



SCALE 1:50 @ A1
APPROVED: MT
CHECKED: PG
DATE: NOV 2020
STATUS: DA

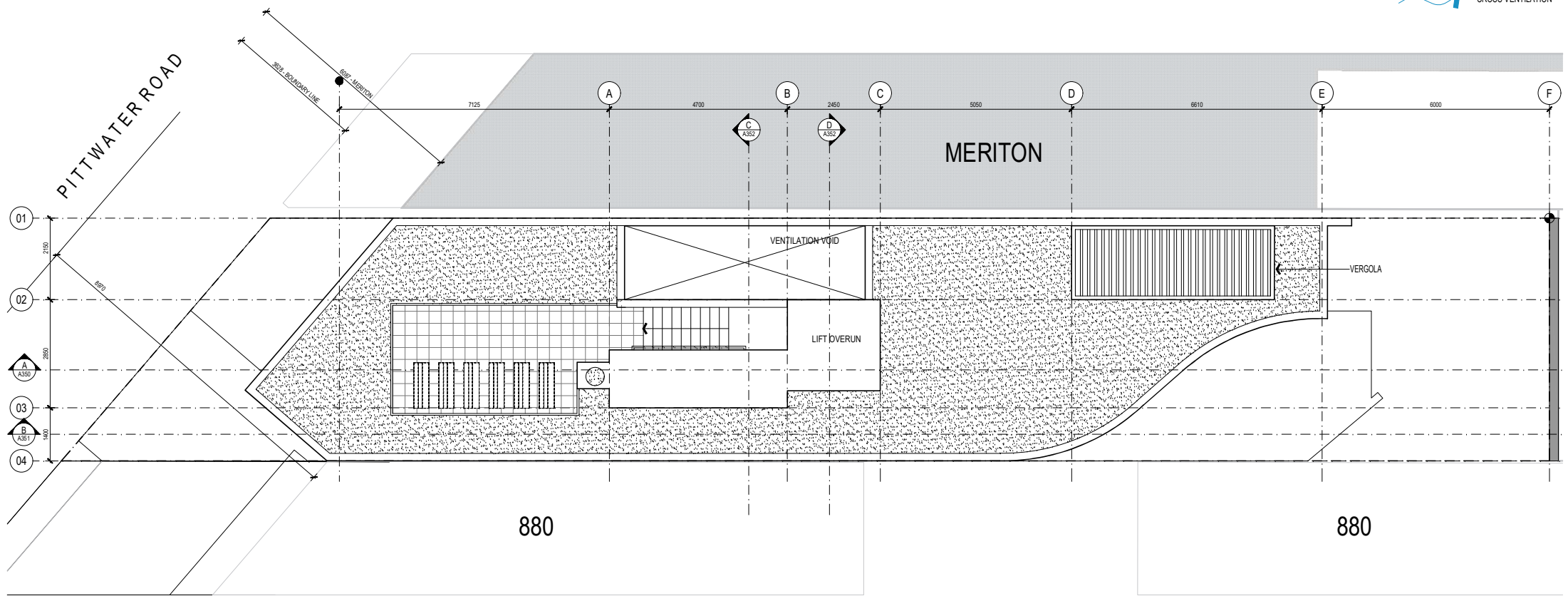
PROJECT NUMBER
20036

A108



LEGEND

- BOUNDARY
- DRENCHERS
- UNIT 01 --- UNIT NUMBER
- 28.0 SQM --- TOTAL AREA
- 20.0 SQM --- TOTAL AREA EXCLUDING KITCHEN & TOILETS
- ACCESSIBLE UNIT
- COMMERCIAL SPACE
- CROSS-VENTILATION



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ISSUE	DATE	AMENDMENTS
D	21.02.20	ISSUED TO CONSULTANTS
E	21.02.25	ISSUED TO CLIENT
D	21.02.27	REVISED ISSUE
C	21.02.08	REVISED ISSUE
B	20.11.17	GAAP PRESENTATION
A	20.11.06	GAAP PRESENTATION

CLIENT: DEVELOPMENT LINK
 PROJECT: ARH DEE WHY
 882A PITTWATER ROAD, DEE WHY NSW 2099

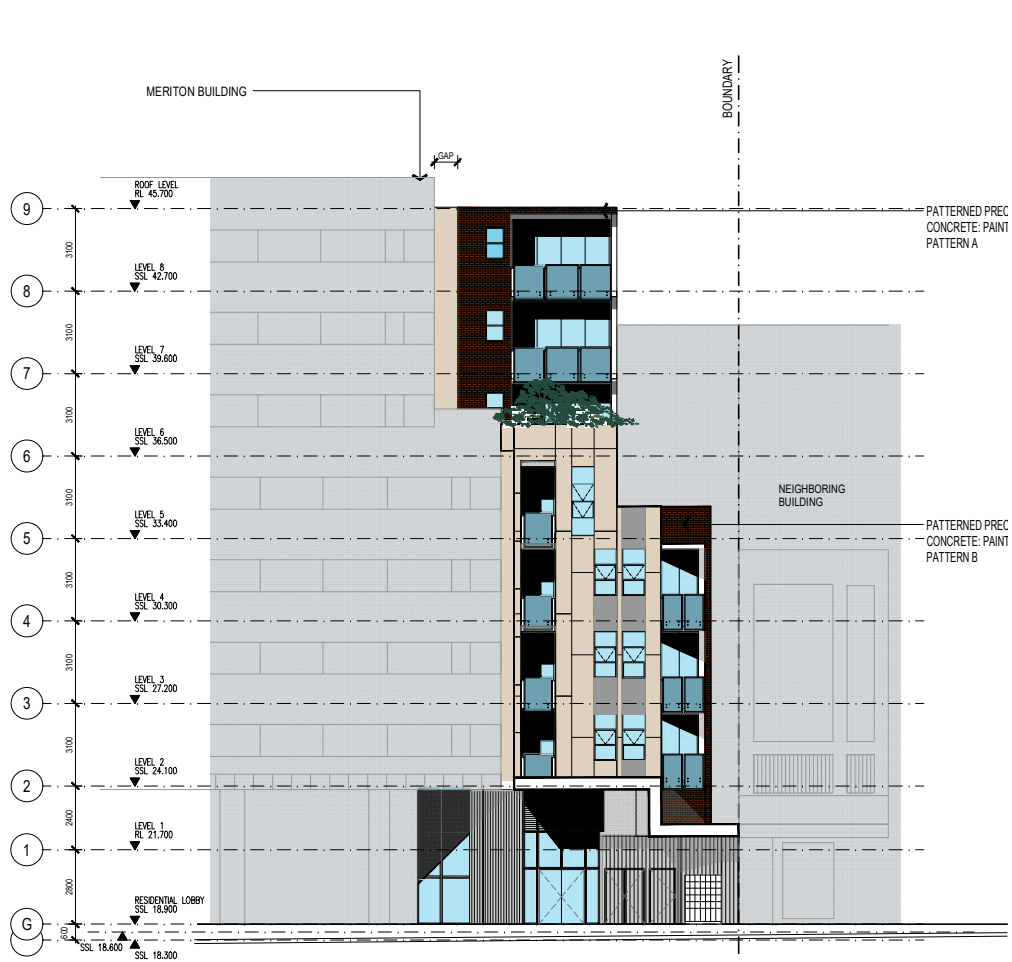
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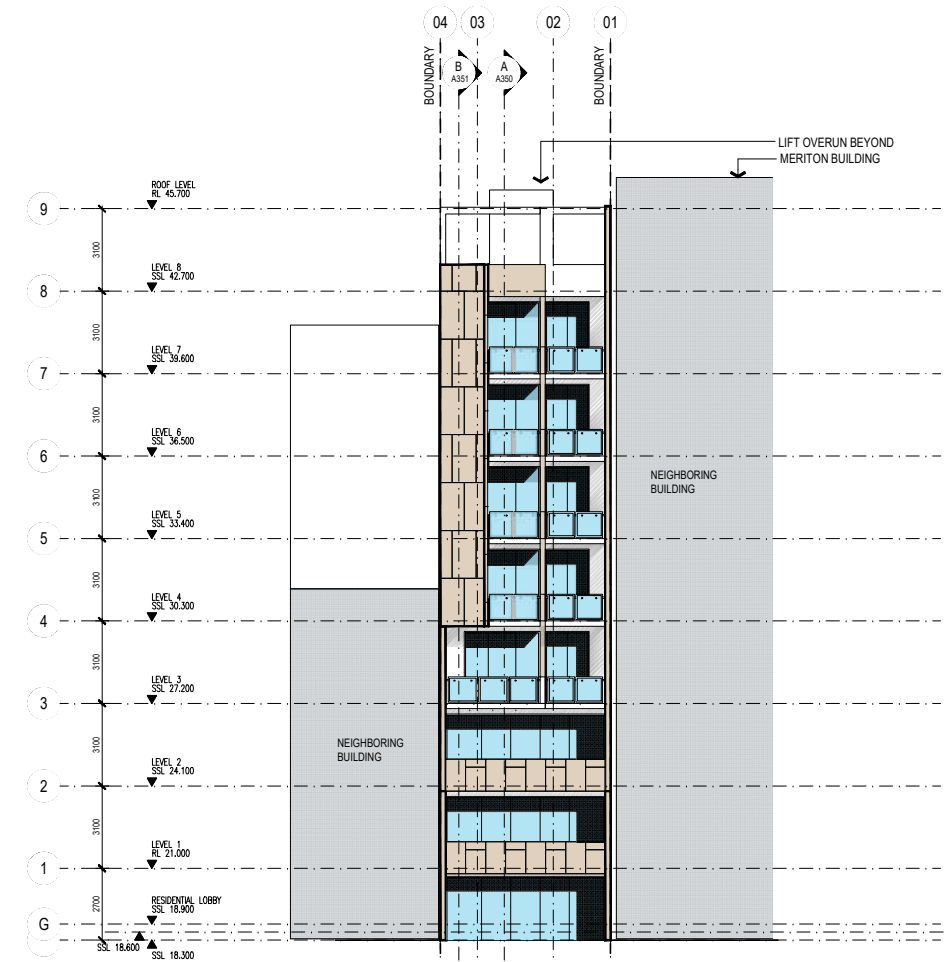
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 DRAWING NUMBER: A109

APPROVED: [Signature]
 CHECKED: PG
 DATE: NOV 2020
 STATUS: DA





01 EAST ELEVATION - PITTWATER ROAD



02 WEST ELEVATION

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 ABN 58 120 779 100
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ISSUE	DATE	AMENDMENTS
D	21/03/17	ISSUED TO CONSULTANT
F	21/03/18	ISSUED TO CONSULTANTS
E	21/01/25	ISSUED TO CLIENT
D	21/01/17	REVISED ISSUE
C	21/01/08	REVISED ISSUE
B	26/11/17	CLAP PRESENTATION
A	25/11/16	CLAP AND PERMITS ISSUE

CLIENT: DEVELOPMENT LINK

PROJECT: ARH DEE WHY

882A PITTWATER ROAD, DEE WHY NSW 2099

TITLE: ELEVATIONS - SHEET 01

SCALE: 1:100 @ A1

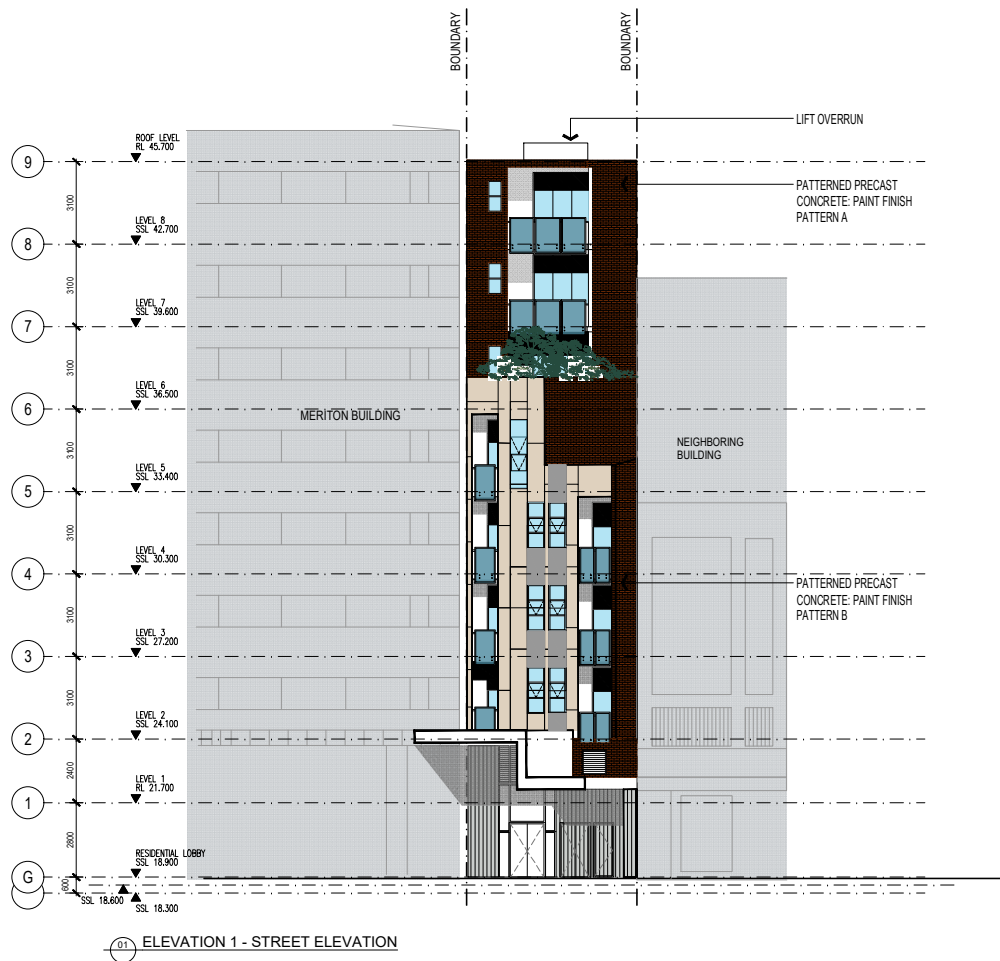
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DRAWING NUMBER: A300

ISSUE: G

APPROVED: MT
 CHECKED: PG
 DATE: NOV 2020
 STATUS: DA

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01 ELEVATION 1 - STREET ELEVATION

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 NOMINATED ARCHITECTS:
 TONY GRAY 6003 & PAUL GODSELL 6726

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ISSUE	DATE	AMENDMENTS
E	21/02/12	ISSUED TO CONSULTANT
D	21/02/14	ISSUED TO CONSULTANTS
C	21/01/25	ISSUED TO CLIENT
B	26/11/17	CMAP PRESENTATION
A	25/11/24	CMAP AND PERMITS TRK ISSUE

CLIENT
 DEVELOPMENT LINK

PROJECT
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 882A PITTSWATER ROAD, DEE WHY NSW 2039

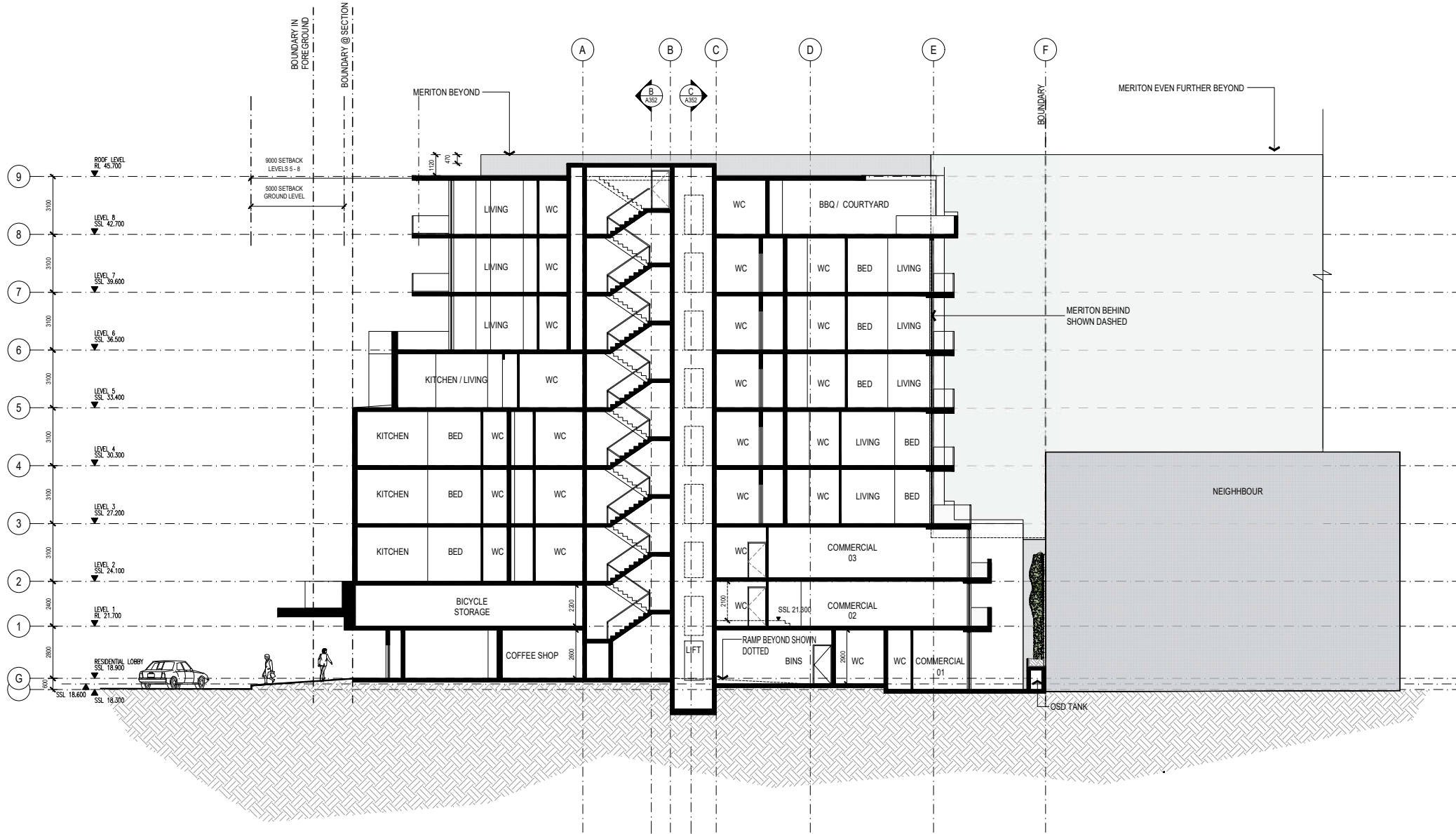
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 APPROVED MT
 DRAWN PG
 CHECKED PG
 DATE NOV 2020
 STATUS DA

PROJECT NUMBER 20036
 DRAWING NUMBER A301





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H	21/02/12	ISSUED TO CONSULTANT
G	21/02/04	ISSUED TO CONSULTANTS
F	21/02/03	ISSUED TO CONSULTANTS
E	21/01/25	ISSUED TO CLIENT
D	21/01/07	REVISED ISSUE
C	21/01/06	REVISED ISSUE
B	20/11/17	QMAP PRESENTATION
A	20/11/14	QMAP AND PERMITS ISSUE

CLIENT
 DEVELOPMENT LINK

PROJECT
 ARH DEE WHY

882A PITTWATER ROAD, DEE WHY NSW 2099

TITLE
 SECTION AA



SCALE 1:100 @ A1
 APPROVED
 DRAWN MT
 CHECKED PG
 DATE NOV 2020
 STATUS DA

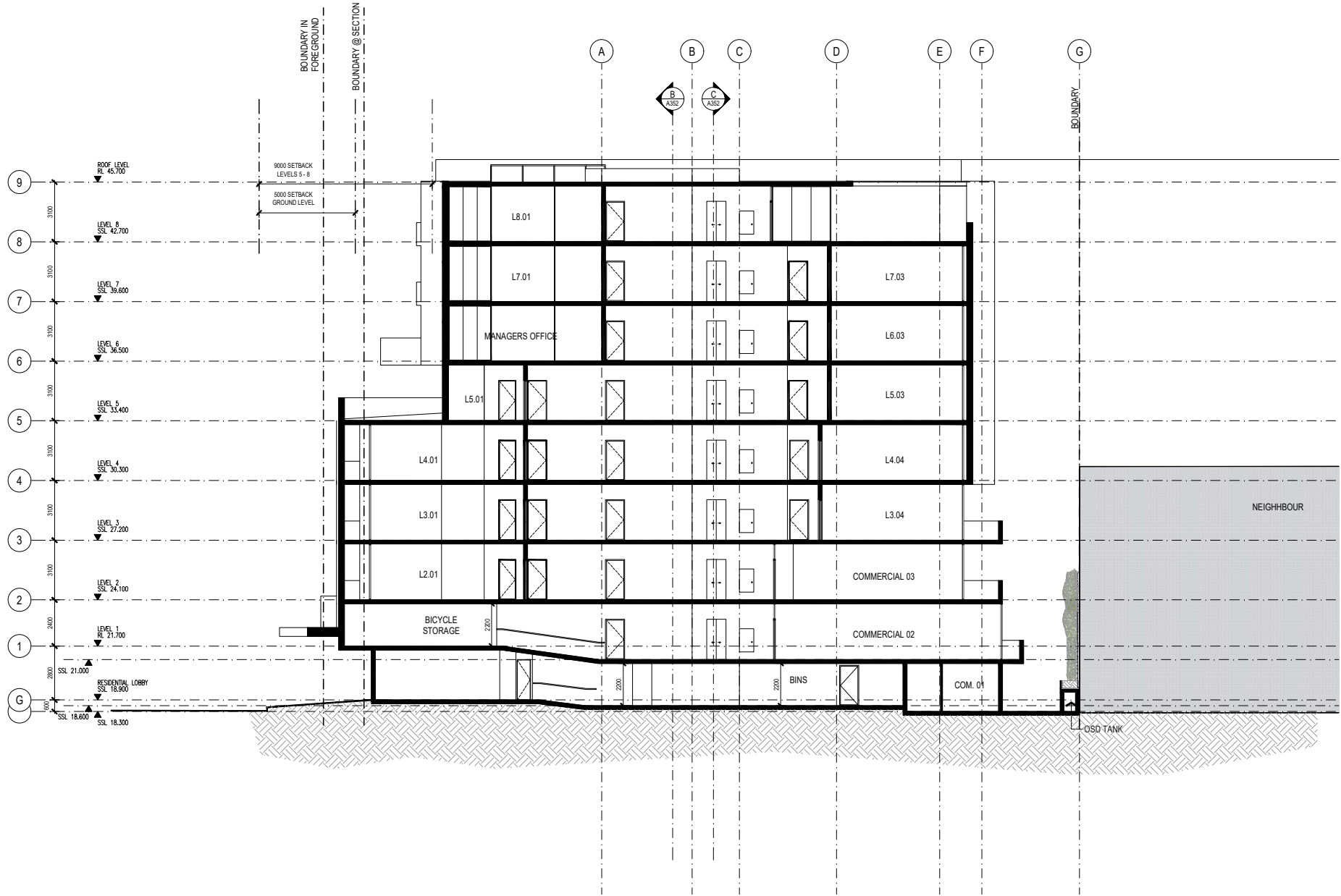
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20036

A350

ISSUE

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H	21/02/12	ISSUED TO CONSULTANT
G	21/02/12	ISSUED TO CONSULTANTS
F	21/02/12	ISSUED TO CONSULTANTS
E	21/01/12	ISSUED TO CLIENT
D	21/01/12	REVISED ISSUE
C	21/01/12	REVISED ISSUE
B	20/11/11	QMAP PRESENTATION
A	20/11/11	QMAP PRESENTATION

CLIENT
 DEVELOPMENT LINK

PROJECT
 ARH DEE WHY

882A PITTSWATER ROAD, DEE WHY NSW 2099

TITLE
 SECTION BB



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 APPROVED
 DRAWN MT
 CHECKED PG
 DATE NOV 2020
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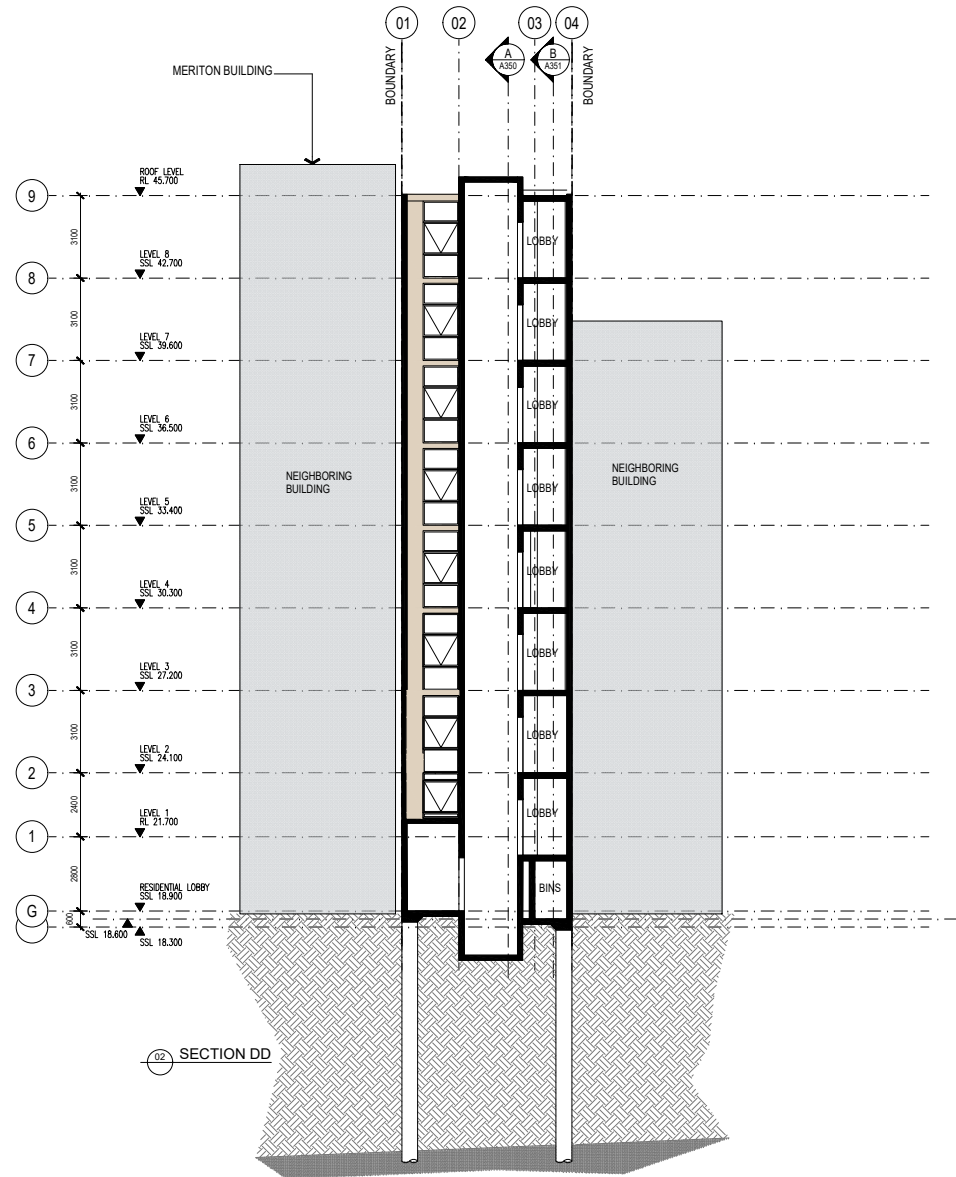
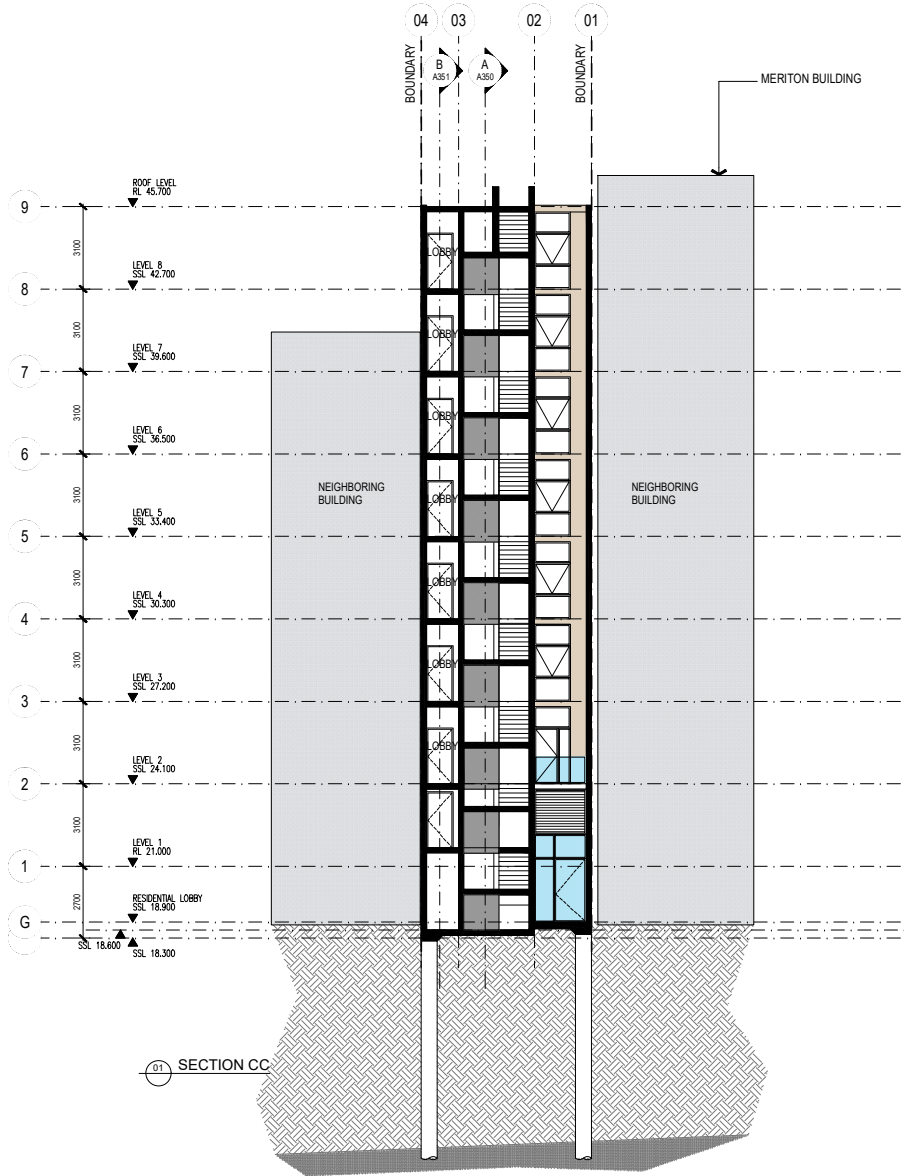
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20036

A351

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A	21/03/18	ISSUED TO CONSULTANT
ISSUE	DATE	AMENDMENTS

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 DEVELOPMENT LINK

PROJECT
 ARH DEE WHY

TITLE
 SECTION BB & CC

882A PITTWATER ROAD, DEE WHY NSW 2099

TITLE
 SECTION BB & CC



SCALE 1:100 @A1

APPROVED
 DRAWN MT
 CHECKED PG

DATE NOV 2020
 STATUS DA

PROJECT NUMBER 20036
 DRAWING NUMBER

A351

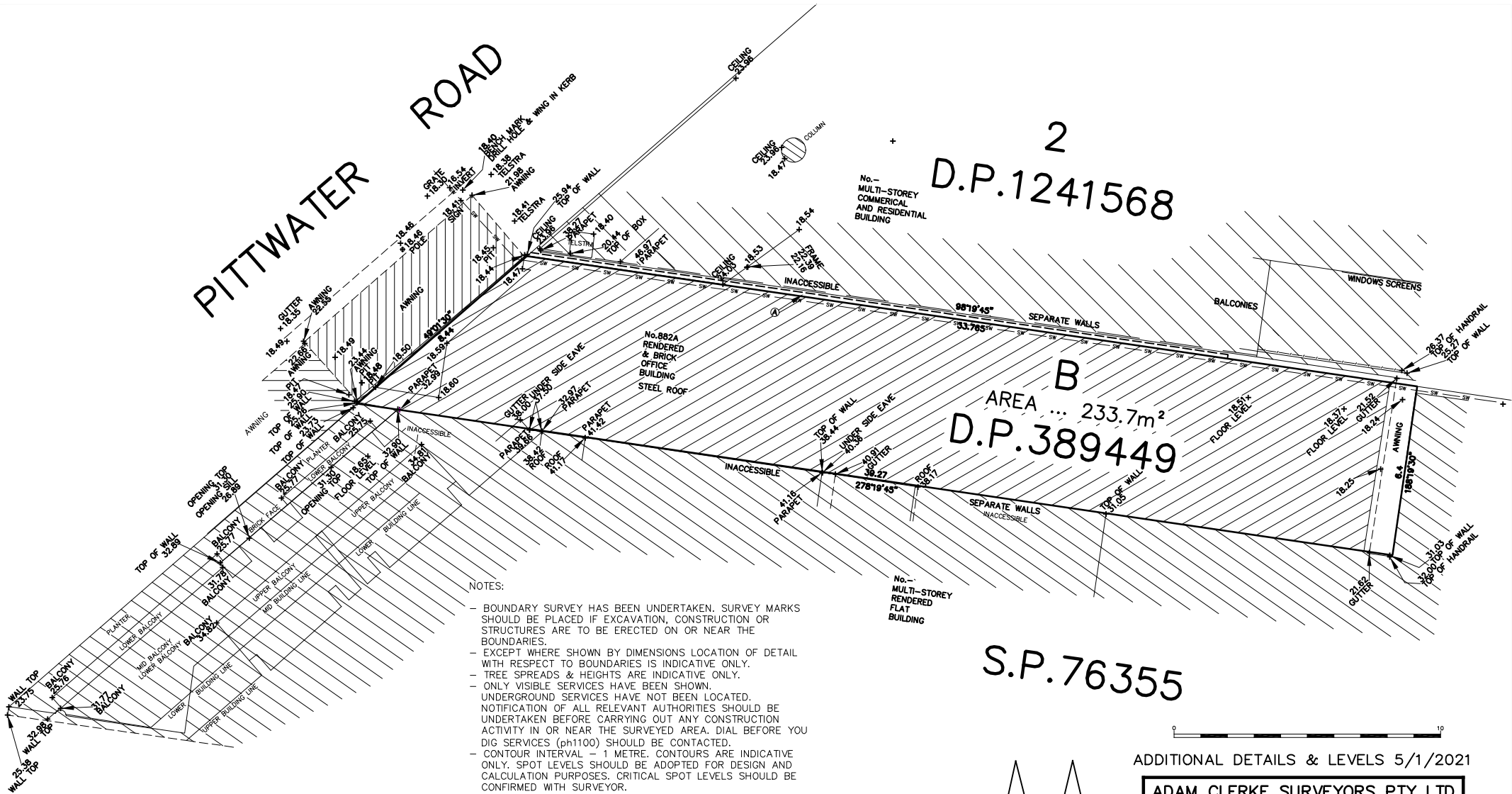
ISSUE
B crawford architects

PITTWATER ROAD

2
D.P.1241568

AREA B
233.7m²
D.P.389449

S.P.76355

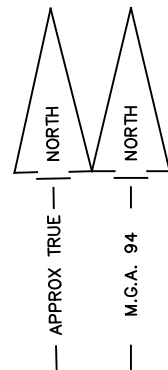


NOTES:

- BOUNDARY SURVEY HAS BEEN UNDERTAKEN. SURVEY MARKS SHOULD BE PLACED IF EXCAVATION, CONSTRUCTION OR STRUCTURES ARE TO BE ERECTED ON OR NEAR THE BOUNDARIES.
- EXCEPT WHERE SHOWN BY DIMENSIONS LOCATION OF DETAIL WITH RESPECT TO BOUNDARIES IS INDICATIVE ONLY.
- TREE SPREADS & HEIGHTS ARE INDICATIVE ONLY.
- ONLY VISIBLE SERVICES HAVE BEEN SHOWN. UNDERGROUND SERVICES HAVE NOT BEEN LOCATED. NOTIFICATION OF ALL RELEVANT AUTHORITIES SHOULD BE UNDERTAKEN BEFORE CARRYING OUT ANY CONSTRUCTION ACTIVITY IN OR NEAR THE SURVEYED AREA. DIAL BEFORE YOU DIG SERVICES (ph1100) SHOULD BE CONTACTED.
- CONTOUR INTERVAL - 1 METRE. CONTOURS ARE INDICATIVE ONLY. SPOT LEVELS SHOULD BE ADOPTED FOR DESIGN AND CALCULATION PURPOSES. CRITICAL SPOT LEVELS SHOULD BE CONFIRMED WITH SURVEYOR.
- DO NOT SCALE FROM THIS PLAN. DIMENSIONS SHOULD BE USED.
- NO PART OF THIS SURVEY MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM, WITHOUT THE WRITTEN PERMISSION OF THE COPYRIGHT OWNER EXCEPT AS PERMITTED BY THE COPYRIGHT ACT 1968.
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- PLAN PREPARED BY REGISTERED SURVEYOR FOR DEVELOPMENT APPLICATION PURPOSES ONLY.

- SUBJECT LAND AFFECTED BY COVENANT (B6502)
- Ⓐ ... EASEMENT FOR OVERHANG 0.15 WIDE (K607819)
- — sw — INDICATIVE POSITION OF STORMWATER MAIN (NOT VISIBLE). POSITION TO BE CONFIRMED BY OTHERS.
- WINDOW, RIDGE & GUTTER HEIGHTS HAVE BEEN OBTAINED BY INDIRECT METHOD AND ARE ACCURATE TO ± 0.05m.

A Clerke
Adam Clerke
Registered surveyor No:8490



ADDITIONAL DETAILS & LEVELS 5/1/2021

ADAM CLERKE SURVEYORS PTY LTD
Incorporating PAUL KEEN & COMPANY
LAND & ENGINEERING SURVEYORS
P.O. BOX 175 NEWPORT NSW 2106
TEL..9918 4111 E..adam@adamclerkesurveyor.com.au

DETAILS AND LEVELS OVER PART OF LOT B IN D.P.389449

No.882A PITTWATER ROAD, DEE WHY

DATE... 3/10/20 REF... 2220A
SCALE...:100(A2) DATUM...A.H.D

GUIDELINES for Preparing a Flood Management Report

Introduction

These guidelines are intended to provide advice to applicants on preparing a Flood Management Report. The purpose of a Flood Management Report is to help applicants measure and manage the flood risk to life and property on their site.

When is a Flood Management Report required?

A Flood Management Report must be submitted with any Development Application on flood prone land, for Council to consider the potential flood impacts and controls. For Residential or Commercial development, it is required for development on land identified within the Medium or High Flood Risk Precinct. For Vulnerable or Critical development, it is required if it is within any Flood Risk Precinct.

Note that the flood extents shown on the mapping are indicative only. It is recommended that flood levels are compared to registered ground survey to more accurately determine the flood extent.

There are some circumstances where a Flood Management Report undertaken by a professional engineer may not be required. However the relevant parts of the DCP and LEP would still need to be addressed, so as to demonstrate compliance. Examples where this may apply include:

- If all proposed works are located outside the relevant Flood Risk Precinct extent
- First floor addition only, where the floor level is above the Probable Maximum Flood level
- Internal works only, where habitable floor areas below the Flood Planning Level are not being increased

Note that development on flood prone land will still be assessed for compliance with the relevant DCP and LEP, and may still be subject to flood related development controls.

What is in a Flood Management Report?

The aim of a Flood Management Report is to demonstrate how a proposed development will comply with the flood related development controls outlined in the relevant LEP and DCP clauses. The report must detail the design, measures and controls needed to achieve compliance, following the steps outlined below.

A Flood Management Report should reflect the size, type and location of the development, proportionate to the scope of the works proposed, and considering its relationship to surrounding development. The report should also assess the flood risk to life and property.

Technical requirements of a Flood Management Report

The technical requirements of a Flood Management Report should include (where relevant):

1. Description of development

The description of development should identify:

- Outline of the proposed development, with plans if necessary for clarity
- Use of the building, hours of operation, proposed traffic usage or movement
- Type of use, ie, critical, vulnerable, subdivision, residential, business, industrial, recreational, environmental or concessional

2. Flood analysis

The flood analysis should include:

- Predicted 1 in 100 year flood level
- Flood Planning Level (FPL)
- Probable Maximum Flood (PMF) level
- Flood Risk Precinct, ie High, Medium or Low
- Flood Life Hazard Category (in former Pittwater Council area only)
- Mapping of relevant extents
- Flood characteristics for the site, eg depth, velocity, hazard and hydraulic category, and the impact these have on the proposed development

Note that if the property is affected by estuarine flooding or other coastal issues, these need to be addressed separately under the relevant DCP.

3. Assessment of impacts

The assessment of impacts should address the various elements of the relevant LEP and DCP. A simple compliance table should be provided, similar to the table one below.

	Compliance		
	Not Applicable	Yes	No
A Flood effects caused by Development			
B Drainage Infrastructure & Creek Works			
C Building Components & Structural			
D Storage of Goods			
E Flood Emergency Response			
F Floor Levels			
G Car Parking			
H Fencing			
I Pools			

Further details of what is required for each of these categories can be found in the *Development Control Plan for Flood Prone Land*.

For any of these categories which are applicable, the assessment should demonstrate how the development complies, or if it doesn't, provide an explanation of why the development should still be considered.

Reporting requirements for a Flood Management Report

The Flood Management Report should include:

- a) Executive summary
- b) Location plan, at an appropriate scale, that includes geographical features, street names and identifies all waterways and Council stormwater pipes, pits and easements
- c) Plan of the proposed development site showing the extent of the predicted 100 year, any high hazard or floodway conditions and the PMF flood event
- d) Development recommendations and construction methodologies
- e) Calculation formulae (particularly for flood storage)
- f) Clear referencing using an accepted academic referencing system (eg. Harvard)
- g) Analysis of development against relevant State Environmental Planning Policies
- h) Analysis of development against relevant Local Environment Plan and Policies
- i) Conclusion detailing key points
- j) Standard Hydraulic Certification (Form A/A1)
- k) Qualifications of author
- l) Any flood advice provided by Council
- m) Any other details which may be relevant

NOTE: Qualifications of Author

Council requires that the Flood Management Report be prepared by a suitably qualified Engineer with experience in flood design / management who has, or is eligible for, membership to the Australian Institute of Engineers.

For further information please contact Stormwater and Floodplain Team on 1300 434 434 or via email at floodplain@northernbeaches.nsw.gov.au

Attachment A

NORTHERN BEACHES COUNCIL STANDARD HYDRAULIC CERTIFICATION FORM FORM A/A1 – To be submitted with Development Application

Development Application for

Address of site: 882A PITWATER ROAD, DEE WHY

Declaration made by hydraulic engineer or professional consultant specialising in flooding/flood risk management as part of undertaking the Flood Management Report:

I, DAVID WILCOX on behalf of DEMLAKIAN CONSULTING ENGINEERS
(Insert Name) (Trading or Business/ Company Name)

on this the 12/02/2021 (Date) certify that I am engineer or a

professional consultant specialising in flooding and I am authorised by the above organisation/ company to issue this document and to certify that the organisation/ company has a current professional indemnity policy of at least \$2 million.

Flood Management Report Details:

Report Title:

FLOOD RISK MANAGEMENT REPORT FOR PROPOSED DEVELOPMENT

Report Date: 12/02/2021

Author: DAVID WILCOX

Author's Company/Organisation: DEMLAKIAN CONSULTING ENGINEERS

I: DAVID WILCOX
(Insert Name)

Please tick all that are applicable (more than one box can be ticked)

have obtained and included flood information from Council (must be less than 12 months old)
(This is mandatory)

have followed Council's Guidelines for Preparing a Flood Management Report

have requested a variation to one or more of the flood related development controls. Details are provided in the *Flood Management Report*.

Signature 

Name DAVID WILCOX