## **Traffix Group**

# Traffic Engineering Assessment

Proposed Mixed-Use Development

3-9 Wellington Road & 7 Poplar Street, Box Hill

Prepared for Shangyi Vision Pty Ltd

June 2023

G29378R-02B

## **Document Control**

Our Reference: G29378R-02B

Issue No.	Туре	Date	Prepared By	Approved By
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В	Second Issue	12/07/2023	Alexander Bui	Daniel Milder RPE No. 7838

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## 1. Introduction

Traffix Group has been engaged by Shangyi Vision Pty Ltd to prepare a traffic engineering assessment for the proposed expansion at 3-9 Wellington Road & 7 Poplar Street, Box Hill.

Council have previously issued a planning permit (WH/2021/636) for 5-9 Wellington Road & 7 Poplar Street in Box Hill for a 24-storey apartment building following orders from the Tribunal.

This report provides our traffic engineering assessment of the parking and traffic issues associated with the proposed amended development which seeks to increase the site area to include 3 Wellington Road and an extended built form over five storeys containing a medical centre and office.

## 2. Existing Conditions

## 2.1. Site Locality

The subject site is located between Wellington Road and Poplar Street in Box Hill, approximately 100m north of Whitehorse Road, as presented in the locality plan at Figure 1 below.

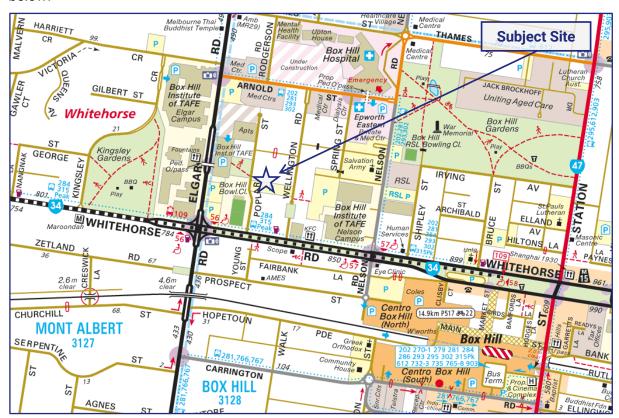


Figure 1: Locality Map

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The site has an area of approximately 3,220m<sup>2</sup>. The site has frontages to Poplar Street and Wellington Road of approximately 15m and 66m respectively.



Historically the site has been used as follows:

- · four single storey dwellings (3 Wellington Road),
- private carpark for Box Hill TAFE (7 Poplar Street and 5 Wellington Road), and
- two single storey dwellings (7-9 Wellington Road).

Vehicle access to the site is provided as follows:

- 2.9m wide crossover to Poplar Street (7 Poplar Street) mid-boundary of the lot,
- 3.3m wide crossover to Wellington Road (5-9 Wellington Road) at the northern end of the carpark site,
- 2.8m wide crossover to Wellington Road (5-9 Wellington Road) at the southern boundary of #7,
- 2.9m wide crossover to Wellington Road (5-9 Wellington Road) at the lot's northern boundary (#9),
- approximately 3.5m wide crossover to Wellington Road (3 Wellington Road) midway at the lot's eastern boundary (#3), and
- approximately 3m wide crossover to Wellington Road (3 Wellington Road) at the lot's south-eastern corner (#3).



Figure 2: Aerial Photograph of the site (Metromap: December 2022)

## 2.2. Land Use

The site is located within a Residential Growth Zone – Schedule 3 (RGZ3) under the Whitehorse Planning Scheme as presented in Figure 3 below. Land-use in the immediate vicinity of the site is predominantly residential, with significant commercial uses to the south fronting Whitehorse Road and the Box Hill Hospital/medical precinct located approximately 200m to the north.

The site is within the Box Hill Major Activity Centre and is also affected by a Significant Landscape Overlay – Schedule 9 (SLO9) and a Parking Overlay – Precinct 1 (PO1)(Clause 45.09).

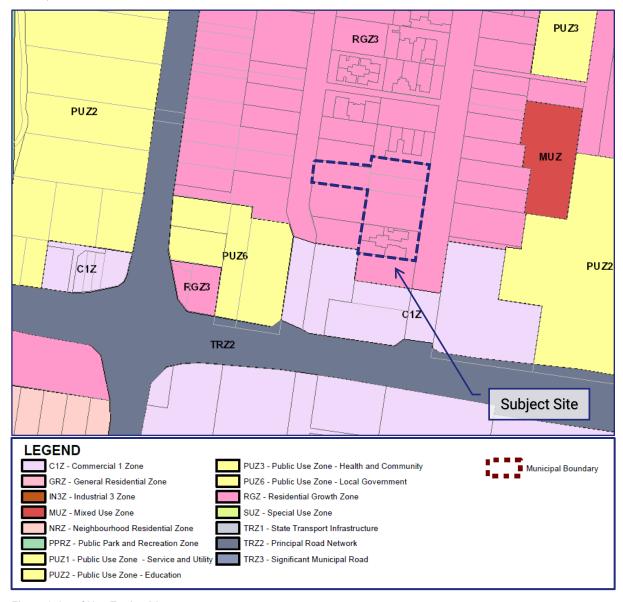


Figure 3: Land Use Zoning Map

### 2.3. Road Network

**Wellington Road** is classified as an 'access road' under Council's Register of Public Roads aligned in a north-south direction between Whitehorse Road to the south and Arnold Street to the north. Wellington Road is closed to through traffic approximately 50m north of Whitehorse Road.

In the vicinity of the subject site, Wellington Road has a carriageway width of approximately 10m, which accommodates restricted kerbside parking on either side of the road and through traffic in each direction.

The available on-street parking on Wellington Road is generally short-term (2P) ticketed parking, which applies '8:30am-6:00pm Mon-Sat'. Parking fees are \$2 per hour.

There are footpaths provided on both sides of the road.

The default urban speed limit of 50km/h applies to Wellington Road.





Figure 4: Wellington Road view North

Figure 5: Wellington Road view South

**Poplar Street** is classified as an 'access road' under Council's Register of Public Roads aligned in a north-south direction from Whitehorse Road to a court bowl approximately 250m north of Whitehorse Road.

In the vicinity of the site, Poplar Street has a carriageway width of 7.8m. The pavement provides sufficient width for vehicles to park on both sides of the road (outside of No Stopping restrictions which apply along various sections during the day), with one through lane of traffic. Alternatively, the road width can accommodate two through lanes of traffic and one lane of parking.

Parking along Poplar Street is a mixture of short-term parking (2P 7:30am-7:30pm Mon-Fri, Except as Signed – Parking Area No. 2) and spaces controlled by 'No Stopping 7:30am-7:30pm Mon-Fri' restrictions.

The intersection between Poplar Street and Whitehorse Road is restricted to left-in/left-out movements only due to the central median. The closest U-turn opportunity for exiting vehicles is available at the signalised intersection between Whitehorse Road and Nelson Road, approximately 270m east of Poplar Street.

There are footpaths provided on both sides of the road.

The default urban speed limit of 50km/h applies to Poplar Street.



Figure 6: Poplar Street view North



Figure 7: Poplar Street view South

## 2.4. Sustainable Transport

## 2.4.1. Principal Public Transport Network (PPTN)

The site is located within the Principal Public Transport Network (PPTN) area as shown in Figure 8 below.

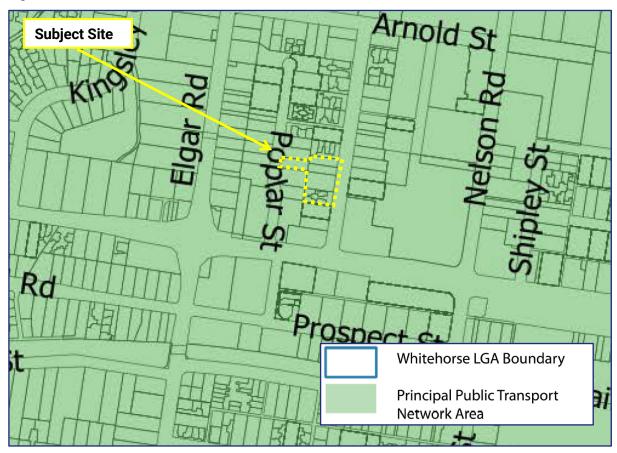


Figure 8: Excerpt from the Principal Public Transport Network Map (Whitehorse)

### 2.4.2. Public Transport

The site has extensive access to public transport services and is located within the Box Hill MAC.

The following public transport services operate within reasonable walking distance of the subject site:

- Box Hill Railway Station is located approximately 700m south of the subject site. It is serviced by the Lilydale and Belgrave lines and provides a connection to Melbourne CBD via Richmond, Camberwell and Ringwood.
- Tram Route 109 operates along Whitehorse Road, approximately 100m walking distance south of the subject site. It provides a connection between Box Hill and Port Melbourne via Balwyn, Kew and Melbourne CBD.
- Bus Route 201 operates along Whitehorse Road, approximately 100m walking distance south of the subject site. It provides an express connection between Box Hill Station and Deakin University.
- Bus Route 284 operates along Whitehorse Road, approximately 100m walking distance south of the subject site. It provides a connection between Doncaster Park, Ride and Box Hill via Union Road.
- Bus Route 766 operates along Whitehorse Road, approximately 100m walking distance south of the subject site. It provides a connection between Box Hill and Burwood via Surrey Hills.
- Bus Route 767 operates along Whitehorse Road, approximately 100m walking distance south of the subject site. It provides a connection between Southland and Box Hill via Chadstone, Jordanville and Deakin University.
- Bus Route 281 operates along Arnold Street, approximately 250m walking distance north
  of the subject site. It provides a connection between Templestowe and Deakin University
  via Doncaster Shopping Town, Box Hill Station and Whitehorse Road.
- Bus Route 293 operates along Arnold Street, approximately 250m walking distance north
  of the subject site. It provides a connection between Box Hill and Greensborough via
  Doncaster Shopping Town, and Belmore Road.
- Bus Route 302 operates along Arnold Street, approximately 250m walking distance north
  of the subject site. It provides a connection between Melbourne CBD and Box Hill Station
  via Belmore Road and Eastern Freeway.

The public transport services in proximity to the site are shown in Figure 9 below.



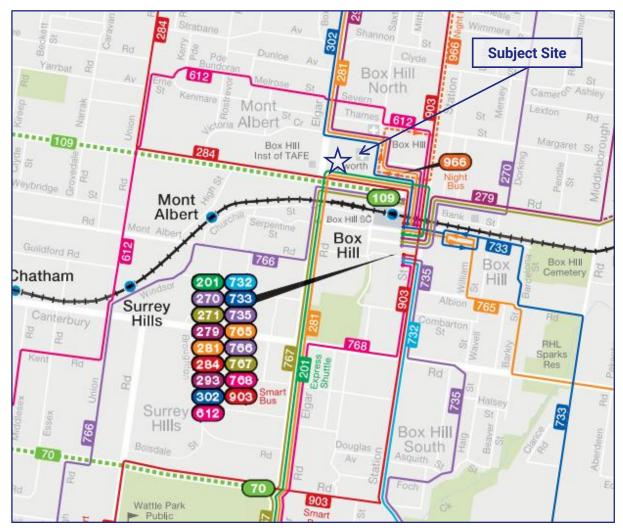


Figure 9: Excerpt from the Public Transport Map (Whitehorse)

In addition to the services detailed above, 10 additional bus services operate via the Box Hill bus interchange, located approximately 700m south of the site, within the Box Hill Railway Station modal interchange.

The proximity of the site to convenient public transport services, which link the site to nearby shopping centres, Melbourne CBD and other regular destinations, significantly reduces the site's dependence on motor vehicles as a mode of transport when compared to a similar development in an outer suburban or non-activity centre area.

We note that the future Box Hill station associated with the suburban rail loop will be located within 500m of the site and will provide further connectivity for persons travelling to and from the Box Hill area.

### 2.4.3. Bicycle and Pedestrian Provisions

A bicycle and pedestrian provision in the vicinity of the site include an informal bike route along Nelson Road, east to the site.

Bicycle and pedestrian provisions within close proximity of the site are shown in the Whitehorse Travel Smart Map at Figure 10 below.

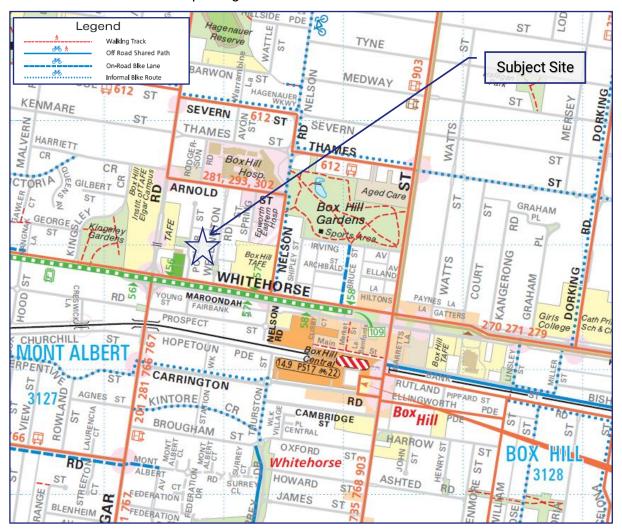


Figure 10: Excerpt from the Whitehorse TravelSmart Map

## 3. Background & Approved Planning Permit

A Planning Permit (WH/2021/636) was issued for a 24-storey residential apartment building in accordance with the development summary in Table 1 below.

Table 1: Approved Permit Development Summary

Use		No.	Car Parking Provision	Bicycle Parking Provision
	1-bedroom	58 dwellings		
Residential	2-bedroom	134 dwellings	186 spaces	120 spaces
	3-bedroom	2 dwellings		
	Visitors	-	20 spaces	12 spaces
Total		194 dwellings	206 spaces	132 spaces

A public park and thoroughfare are provided along the northern boundary of the site to accommodate a pedestrian link between Wellington Road and Poplar Street.

The car parking is spread across four basement levels and a lower ground level.

Access to the site is via:

- a single lane ramp connection with Poplar Street, restricted to entry only with the exception of loading and waste vehicles, and
- a two-way ramp connection with Wellington Road, accommodating ingress and egress movements.

Waste and loading access is proposed via a single lane ramp connection with Poplar Street. Loading and waste vehicles will be permitted to enter and exit the site at the access to/from Poplar Street.

## 4. Proposal

The proposal is to amend the approved development to include an extended five storey built form on the lot immediately to the south of the site, at 3 Wellington Road, and new commercial tenancies in accordance with Table 2 below.

Table 2: Development Schedule

Land Use	Area
Medical Centre	1526.3m <sup>2</sup>
Food and Drink Premises (within approved built form)	216.4m <sup>2</sup>
Office	224.1m <sup>2</sup>

The car parking provision, car parking allocation and bicycle provision provided by the approved and proposed scheme are compared in Table 3 below.

Table 3: Parking Provision Summary

		Approved Permit Development	Proposo Develop		Change
	1 bedroom	186 car parking spaces	191 spaces	52 spaces	
Residential Parking	2 bedrooms			134 spaces	+5
	3 bedrooms			2 spaces	
Medical Centre Parking		-	17 spaces		+17
Food and Drink Premises Parking		-	2 spaces	3	+2
Office Parking		-	2 spaces	3	+2
Visitor/patient parking		20 spaces	43 spaces		+23
On-site Car Parking Provision		206 spaces	252 spaces		+46
Bicycle Parking Provision		132 spaces	129 spaces		-3

Vehicle access is retained at Poplar Street, and the Wellington Road access is to be relocated to the new southern boundary of the site. A copy of the proposed development plans prepared by Rothelowman is attached at Appendix A.

## 5. Car Parking Assessment

## 5.1. Statutory Car Parking Requirement

Clause 52.06 of the Planning Scheme sets out the statutory requirements for car parking. The purposes of Clause 52.06 are:

- To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.
- To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
- To support sustainable transport alternatives to the motor car.
- To promote the efficient use of car parking spaces through the consolidation of car parking facilities.
- To ensure that car parking does not adversely affect the amenity of the locality.
- To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.

The site is located within a Parking Overlay which specifies minimum parking rates for residential developments and office uses. The statutory parking requirement is set out in Table 4 below.

Table 4: Statutory Car Parking Requirement

Use		Measure	Rate	Requirement	Provision
	One- bedroom	58 dwellings	0.5 spaces to each one-bedroom dwelling	29 spaces	52 spaces
Dwelling	Two- bedroom	134 dwellings	0.75 spaces to each two-bedroom dwelling	100 spaces	134 spaces
	Three- or More Bedrooms	2 dwellings	1 space to each three- or more bedroom dwelling	2 spaces	2 spaces
Medical (	Centre	1,526.3m <sup>2</sup>	3.5 spaces to each 100m <sup>2</sup> of leasable floor area	53 spaces	17 secure spaces and 23 common area spaces
Residential Visitors		194 dwellings	0.2 spaces to the first five dwellings plus 0.1 spaces to each subsequent dwelling	19 spaces	20 common area spaces

Use	Measure	Rate	Requirement	Provision
Food and Drink Premises	216.4m <sup>2</sup>	3.5 spaces to each 100m² of net floor area	7 spaces	2 spaces
Office	224.1m <sup>2</sup>	2 spaces to each 100m² of net floor area	4 spaces	2 spaces
TOTAL			214 spaces	252 spaces

The proposed development has a statutory requirement for 214 car parking spaces. The proposal includes provision for 252 on-site parking spaces which exceeds the statutory car parking requirement. The residential statutory car parking requirement is met.

Having regard to the allocation of parking for the medical centre, food and drink premises, and office statutory parking requirements are not met.

Accordingly, a permit to reduce the commercial parking requirement is being sought as part of this amendment application.

## 5.2. Commercial Car Parking Demand Assessment

Clause 52.06-7 requires that:

An application to reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay must be accompanied by a Car Parking Demand Assessment.

The Car Parking Demand Assessment must address the following matters, to the satisfaction of the responsible authority:

- The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.
- The variation of car parking demand likely to be generated by the proposed use over time.
- The short-stay and long-stay car parking demand likely to be generated by the proposed use.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.
- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.
- Any empirical assessment or case study.

A consideration of these matters is provided in Table 5 below.



Table 5: Car Parking Demand Assessment

Matter	Consideration
The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.	Given the proposed use and the site's location within the medical precinct of the Box Hill MAC, we would anticipate that there will be a moderate level of multi-purpose trips associated with the site.
The variation of car parking demand likely to be generated by the proposed use over time.	Office employees will generate parking demands during typical business hours.  Medical centre patients, and customers to the food and drinks premises are expected to be on-site during opening hours, including on Saturdays (although the medical centre will typically operate at reduced capacity).  Residential visitors will generate a car parking demand during extended hours and on weekends.
The short-stay and long-stay car parking demand likely to be generated by the proposed use.	We anticipate long-stay car parking demands to be associated with all staff during the day and overnight stays for residential visitors. Visitors, patients and customers will all generated short stay demands.
The availability of public transport in the locality of the land.	<ul> <li>The site is well served by public transport and is within convenient walking distance to the following services:</li> <li>Box Hill Railway Station located approximately 700m south of the site,</li> <li>Tram stops along Maroondah Highway (Whitehorse Road), and</li> <li>Bus stops along Maroondah Highway (Whitehorse Road) and Arnold Street.</li> <li>This will adequately serve the small number of long stay users (office employees) that are not provided with a car parking space</li> </ul>
The convenience of pedestrian and cyclist access to the land.	Footpaths are provided along Wellington Road and Poplar Street, whilst the surrounding road network is accessible for cyclists.
The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.	The proposal includes provision for 129 bicycle spaces spread across the basement and ground floor levels.

Matter	Consideration
The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.	the method of travel for employees will be self regulating in that there are only a finite number of long-term car parking spaces provided on the site. Any other employee that wishes to travel by private vehicle would have to find alternative long-term parking, i.e. within public carparks. Similarly, visitors/patients/customers of the land will have limited parking opportunities.
Any empirical assessment or case study.	Traffix Group has reviewed case study data for visitor parking demands which show a demand of up to 0.06 spaces per dwelling during business hours, i.e. 12 spaces.

In our experience, food and drinks tenancies typically generate car parking demands at a rate of 1 space to each  $100m^2$  of floor area for staff. Only staff parking demands for this use are to be accommodated on the site and accordingly, the provision of two spaces will meet the expected long-stay demand.

The site is well served by public transport with train and tram stations in close proximity. It is anticipated that 50% of the statutory requirement for the office use will arrive to the site by public transport services. This generates a car parking demand for two spaces during business hours.

Having regard to the site's locality within a medical precinct in Box Hill, it is expected that some patients and staff may also be making use of other nearby facilities. Accordingly, we have assumed that 75% of the statutory parking demand for the medical centre may be onsite during typical business hours and only 50% after hours.

A summary of the car parking demands is outlined in Table 6 below.

Table 6: Car Parking Demand.

	Typical Business Hours	Afterhours
Medical Centre Car Parking Demand	40 spaces	27 spaces
Residential Visitor Car Parking Demand	20 spaces	20 spaces
Food and Drink Premises Car Parking Demand	2 spaces	2 spaces
Office Car Parking Demand	2 spaces	0 spaces
Total	64 spaces	49 spaces



Having regard to the above, the peak parking demand associated with the medical centre, food and drink premise, residential visitors and office uses is 64 spaces during business hours and 49 spaces after hours.

## 5.3. Adequacy of Proposed Car Parking Provision

Clause 52.06-7 also requires that:

Before granting a permit to reduce the number of spaces, the responsible authority must consider the following, as appropriate:

- The Car Parking Demand Assessment.
- Any relevant local planning policy or incorporated plan.
- The availability of alternative car parking in the locality of the land, including:
  - Efficiencies gained from the consolidation of shared car parking spaces.
- Access to or provision of alternative transport modes to and from the land.

### **Car Parking Demand Assessment**

The car parking demand associated with the commercial uses on the site is for up to 64 spaces. The proposed on-site parking provision for long-term commercial staff and shared visitor/patients will meet the expected demand.

#### **Local Planning Policy**

The site is within the Box Hill Metropolitan Activity Centre and is subject to Clause 22.07 of the Whitehorse Planning Scheme.

Clause 22.07-3 states:

The responsible authority will encourage use and development that:

- Encourages lower parking provision rates in new development.
- Supports sharing of parking spaces between multiple users.
- Provides car parking in structures under new buildings instead of open-air car parking.

The proposed development supports the local policy for developments within the Box Hill Metropolitan Activity Centre by providing shared parking spaces for multiple users, parking within the structure rather than open-air and encourages lower parking rates than the standard planning scheme rates.

#### Conclusion

There is sufficient justification to warrant a reduction in the statutory car parking requirement for the commercial portion of the site having regard to the anticipated car parking demand for the commercial uses, the provision of shared spaces for short-term users of the site and the accessibility and connectivity of the nearby public transport services.



## 5.4. Car Park Layout

The proposed car parking layout and access arrangements have been assessed under the relevant sections of the Planning Scheme and the relevant Australian Standards.

Key elements of the design include:

- All accessways and parking spaces are provided at or in excess of the requirements of Clause 52.06-9 of the Planning Scheme.
- All vehicles can enter and exit in a forwards direction.
- Passing areas are provided at both entry points (Poplar Street and Wellington Road).
- A minimum headroom of 2.1m is provided above all parking spaces, accessways and ramps.
- All parking spaces are provided in accordance with the minimum dimensions set out at Clause 52.06-9 Design Standard 2.
- Columns are generally positioned in accordance with the Clearance Diagrams at Clause 52.06-9 Design Standard 2.
  - We note that there are a total of 20 spaces where a column extends into the clearance area. These spaces are generally provided with additional aisle widths and access into these spaces is appropriate for both visitor and staff parking.
- disabled parking spaces are provided in accordance with AS/NZS 2890.6:2022. We note
  that the Planning Scheme allows for 500mm of the parking space to extend into the
  access aisle.
- A maximum grade of 1:10 is provided within 5m of the property boundary.
- A maximum grade of 1:5 is provided along the ramp to the public access basement level.
- A maximum grade of 1:4 is provided along the ramp to the residential basement levels.
- Appropriate transitions are provided at the top and bottom of the ramps to prevent vehicles from scrapping or bottoming out.

We are satisfied that the proposed car parking layout meets the requirements set out at Clause 52.06-9 of the Planning Scheme and will work well.



## 6. Traffic Considerations

### 6.1. Traffic Generation

#### **Dwellings**

The amended proposal increases the number of car spaces allocated to residents by five spaces, and accordingly the generation is only applied to the increase.

The proposed development is conservatively expected to generate in the order of four vehicle trip ends per dwelling per day for apartments with spaces, which is consistent with other medium density developments within similar suburban areas<sup>1</sup>. The increase of five dwellings with an allocated car space generates 20 additional trip ends per dwelling per day.

Approximately 10% of vehicle trip ends will occur in each of the peak hours (or two vehicles per peak hour).

As there are two access points it is expected that the inbound traffic will be split across Poplar Street and Wellington Roads, with the access to Wellington Road accommodating all outbound traffic.

The amendment to the approved scheme will result in an increase of one residential vehicle movement at the Wellington Road and/or Poplar Street access points in each peak period.

#### **Medical Centre**

The following 'first principles' assessment sets out the estimated peak traffic demands generated by the proposed extension to the medical centre.

There are 23 spaces available within the public shared area of the car park for medical centre patients. Assuming that the average duration of stay is 30 minutes for a standard 15 minute appointment, there are expected to be four patient movements for each parking space, i.e. 92 movements in an hour.

Assuming 20 medical service provides on-site, there may be a further 20 movements IN and 20 movements OUT at the AM and PM peak hours respectively.

#### Office

The office component of the site is only being provided with two parking spaces and conservatively we would expect that each of those spaces would generate up to a single movement in the peak periods, i.e. two movements.

This figure was adopted and accepted for the previous development proposal on the site and is appropriate having regard to the reduced statutory parking provision rates that apply here and the proximity to alternate transport modes.

#### **Food and Drink Premises**

The food and drink premise is expected to generate a minimal movement of two traffic movements in peak periods for staff. The premises are not expected to generate any new customer specific traffic, as patrons will likely visit other uses on-site.

## **Summary**

The additional traffic generated by the amended proposal is summarised in Table 7.

Table 7: Traffic Generation Summary

Land Use	Peak Hour
Medical Centre	112 vehicle trip-ends
Dwellings	2 vehicle trip-end
Office	2 vehicle trip-ends
Food and Drink Premises	2 vehicle trip-ends
Total	118 vehicle trip ends

The proposed development is expected to generate up to an additional 118 vehicle trip ends in addition to the traffic generated by the approved scheme during each peak hour.

## 6.2. Traffic Distribution

Having regard to the locality of the site, the following traffic distributions assumptions have been made.

- 50/50 split of inbound vehicle movements between Poplar Street and Wellington Road,
- all outbound vehicle movements will exit to Wellington Road,
- traffic movements associated with the residential visitors will generate two outbound movements in the AM peak and two outbound movements in the PM peak,
- traffic movements associated with the office will generate two inbound movements in the AM peak and two outbound movements in the PM peak,
- traffic movements associated with the food and drink premise will generate two inbound movements in the AM peak and two outbound movements in the PM peak,
- medical staff will arrive in the AM and depart in the PM peak hour,
- 50% of medical centre traffic movements will exit the site and 50% will enter the site in any given hour, and
- all vehicles accessing Poplar Street will be left-IN/left-OUT at Whitehorse Road, while vehicles accessing Wellington Road will do so to/from the north via Arnold Street.

Table 8 below details the expected additional traffic volumes, based on the assumptions listed above.

Table 8: Traffic Distribution

	Poplar Street		Wellington Road	
	Entry Movement	Exit movement	Entry movement	Exit movement
AM Peak Hour	35 movements	movements	35 movements	48 movements
PM Peak Hour	24 movements	0 movements	24 movements	70 movements

## 6.3. Traffic Impact

The approved scheme for development of this site is expected to generate up to 74 movements in the peak periods. The proposed amendment is expected to generate a further 118 movements in the peak period (192 movements in total), primarily associated with the commercial uses.

The site layout allows for simultaneous two-way movements at Wellington Road (75% of additional traffic) and entry only movements at Poplar Street.

Traffic to/from the site will be spread across multiple surrounding roads including Wellington Road, Poplar Street, Elgar Road, Whitehorse Road and Nelson Road. The disbursement of traffic across multiple streets will ensure that the impacts at any given location are reduced.

It is significant to note that Wellington Road is identified within the Box Hill Activity Centre Structure Plan as an area for major development to accommodate higher levels of traffic. Poplar Street is classified as an access road that has an environmental capacity of 3,000 vehicles per day.

Accordingly, the additional movements generated by the amended development will able to be accommodated by the surrounding road network.

Further to the above, the Tribunal decision for the approved scheme noted that:-

"[Council] also takes no issues with the proposal car parking provisions and traffic impacts" and "the management of the traffic and parking impacts is of course an issue that will also necessitate monitoring and management by Council over time."



## 7. Bicycle Assessment

The statutory bicycle parking requirements for the proposed development are outlined under Clause 52.34 of the Planning Scheme. The purpose of Clause 52.34 is:

- To encourage cycling as a mode of transport.
- To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.

It is conservatively assumed that there is up to 20 medical practitioners on site at one time. Table 9 below details the statutory bicycle parking requirement of the development.

Table 9: Statutory Bicycle Parking Requirement

Use	Size/No.	Bicycle Parking Rate		
		Employee/ Resident	Visitor	Requirement
Dwelling	194 dwellings	1 space to every 5 dwellings	1 space to every 10 dwellings	38 resident spaces 19 visitor spaces
Medical Centre	20 practitioners	1 space to each 8 practitioners	1 space to each 4 practitioners	3 employee spaces 5 visitor spaces
Office	224.1m <sup>2</sup> leasable floor area	1 space to each 300m <sup>2</sup> of net floor area if the net floor area exceeds 1,000m <sup>2</sup> .	1 space to each 1,000m <sup>2</sup> of net floor area if the net floor area exceeds 1,000m <sup>2</sup> .	0 spaces
Food and Drink Premises (Retail Premises)	216.4m <sup>2</sup> leasable floor area	1 to each 300m <sup>2</sup> of leasable floor area	1 to each 500m <sup>2</sup> of leasable floor area	1 employee space 0 visitor spaces
Total	66 spaces			

The proposal has a statutory bicycle requirement for 42 secured employee/resident spaces and 24 visitor spaces.

The development has a provision of 129 bicycle spaces spread across the basement and ground floor levels. Accordingly, the provision of bicycle parking by this development exceeds the minimum bicycle parking requirements of Clause 52.34.

Bicycle parking will be provided as a combination of 'Ned Kelly' style wall mounted bicycle racks, and horizontal rails in accordance with appropriate design standards.

More than 20% of bicycle parking will be provided at horizontal rails as per the requirements of AS/NZS 2890.3-2015.

## 8. Loading and Waste Collection

The proposed loading and waste collection arrangements will remain unchanged from the previously approved scheme with regard to design and accessibility but we note that its use may be more frequent as a result of the additional uses on the site.

Traffix Group has prepared swept path diagrams, copy attached at Appendix B, which demonstrate suitable access to the loading area by the waste collection vehicle and a 6.4m small rigid vehicle (SRV) which will be suitable for the commercial uses.



## 9. Conclusion

Having undertaken a traffic engineering assessment of the proposed amended development at 3-9 Wellington Road and 7 Poplar Street in Box Hill, we are of the opinion that:

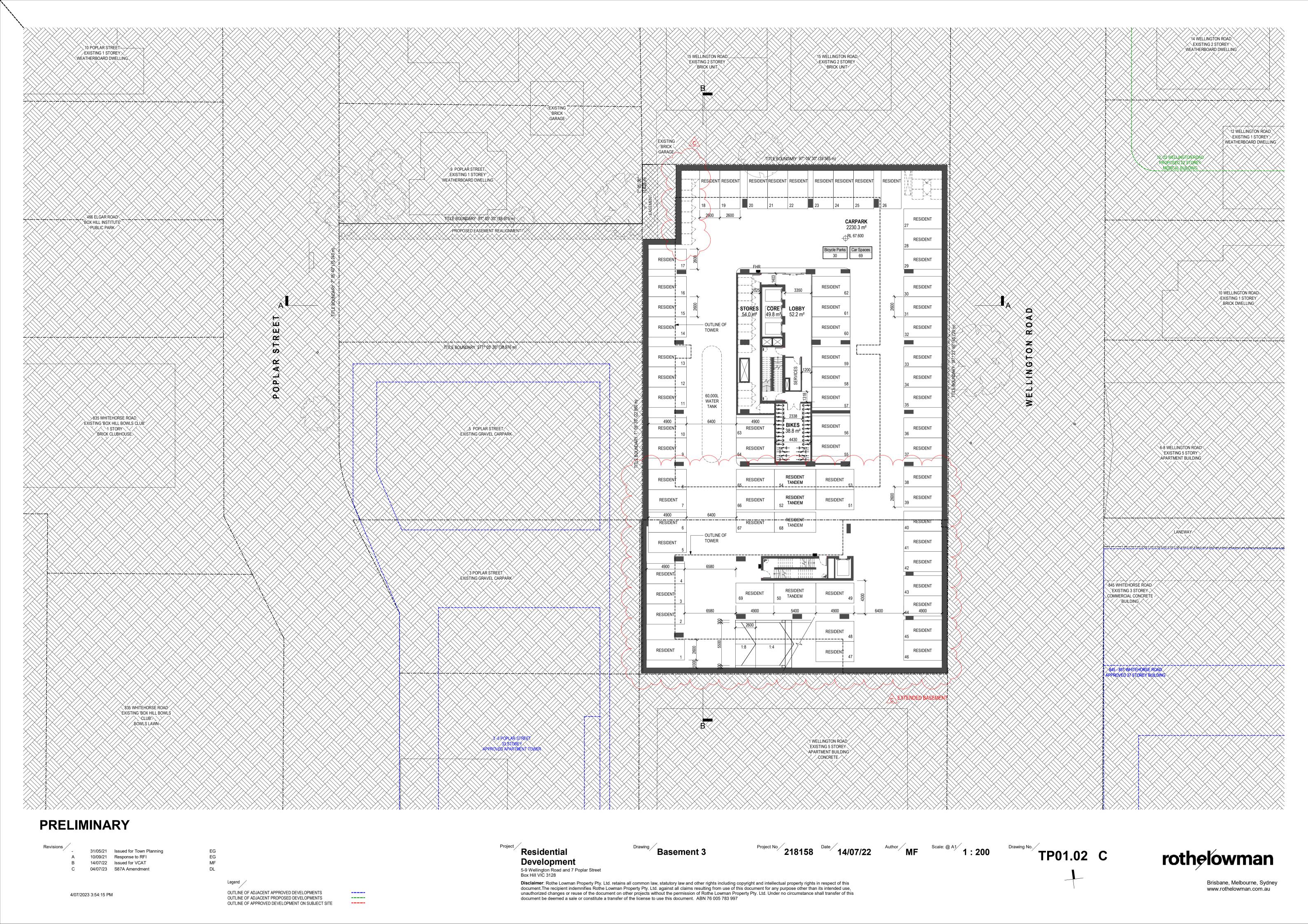
- a) the proposed amended development has a statutory car parking requirement for 214 spaces,
- b) the provision of 252 car parking spaces is in excess of the statutory car park requirement,
- c) the allocation of parking for the development results in a statutory shortfall of parking for the medical centre, office, and food and drink premises and accordingly, a permit to reduce the car parking requirement is being sought as a part of this amended application,
- d) there is sufficient justification to reduce the statutory car parking requirement having regard to:
  - i) provision of shared parking for visitors, customers and patients,
  - ii) access to and provision of alternative transport within close vicinity to the site,
  - iii) the site location within a medical precinct, which provides other short term parking opportunities, and
  - iv) the site's location with the Box Hill Metropolitan Activity Centre,
- e) the car park layout and access points are provided generally in accordance with the approved development, generally satisfy the requirements of Clause 52.06, and provide a functional outcome for vehicles on the site,
- traffic generated by the amended development will be disbursed across the local road network,
- g) Wellington Road is identified ford major developments and to accommodate higher traffic volumes,
- h) the provision and design of bicycle parking satisfies the Planning Scheme and Australian Standard requirements and standards,
- i) there is no change to the loading and waste facilities from the previous scheme, and
- j) there are no traffic engineering reasons why an amended planning permit for the proposed mixed-use development at 3-9 Wellington Road and 7 Poplar Street in Box Hill, should not be granted.

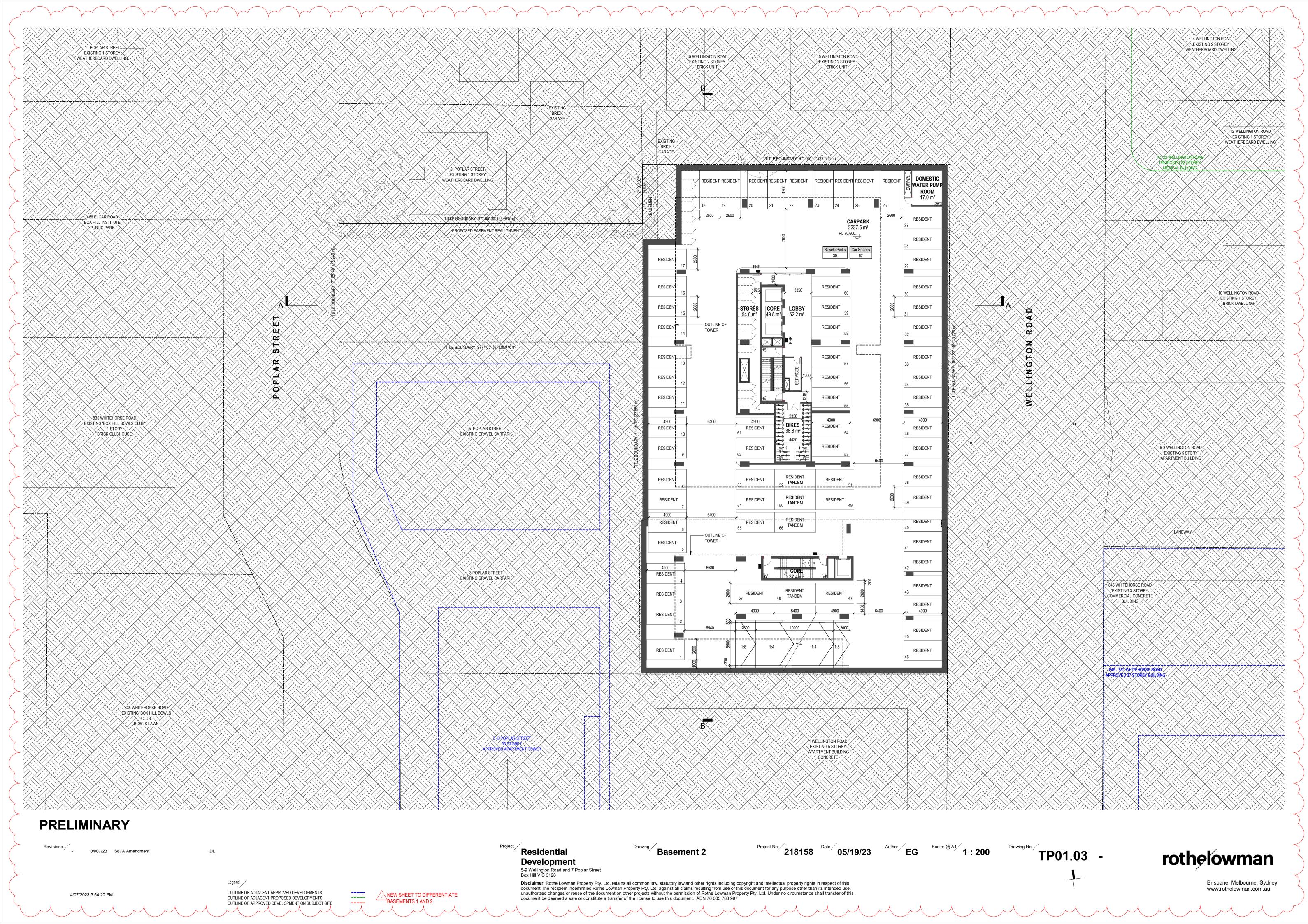


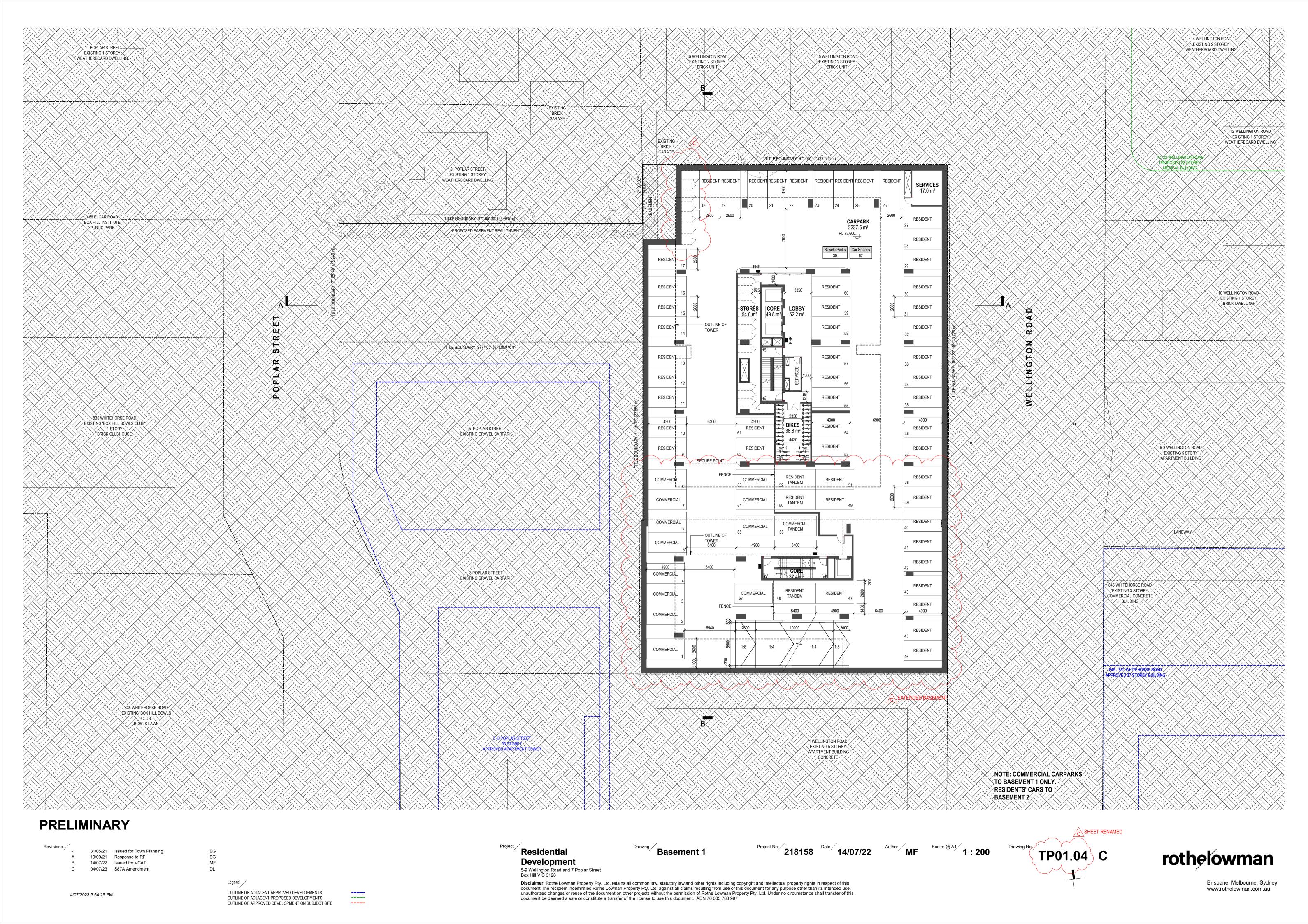


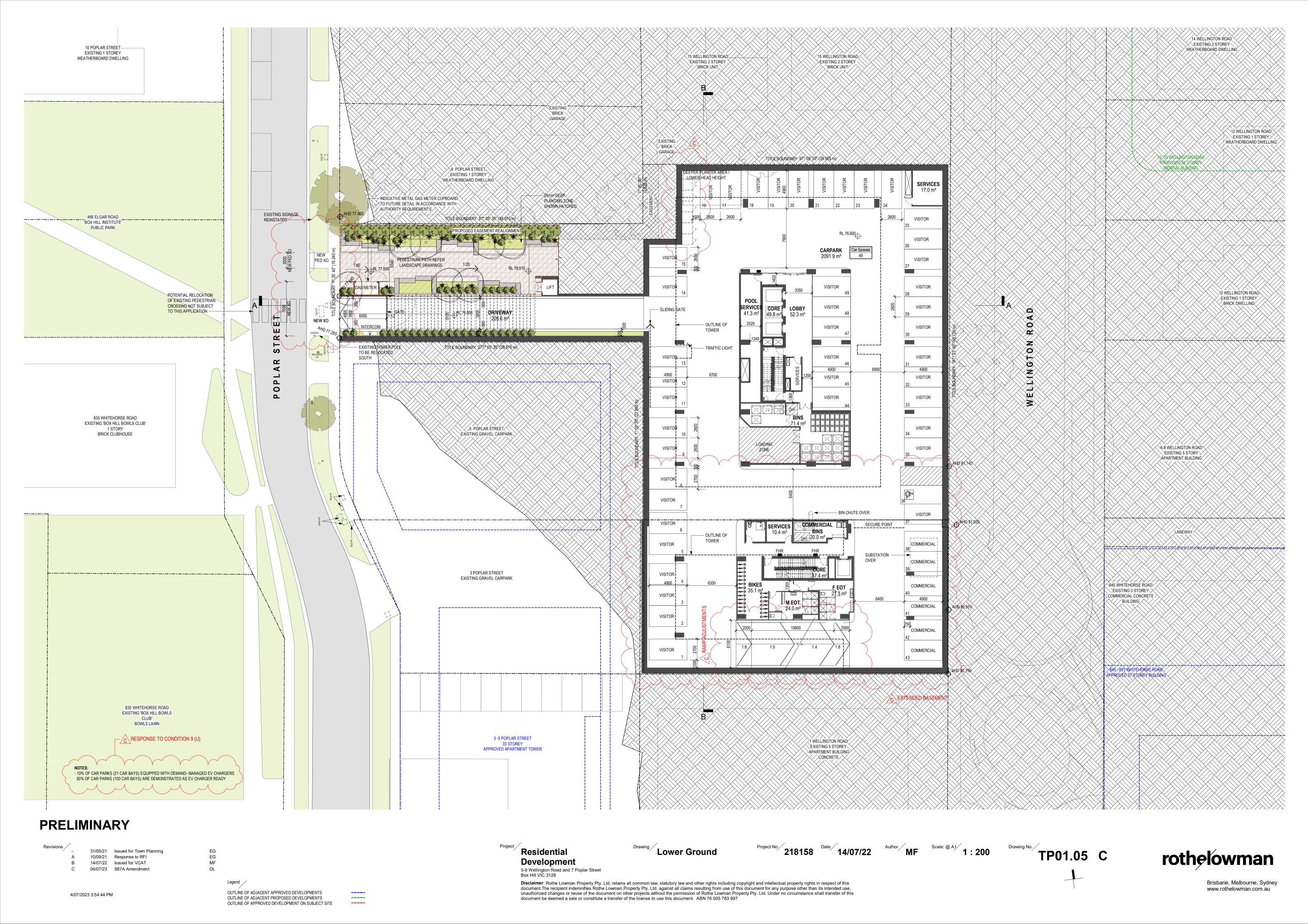
## **Appendix A**

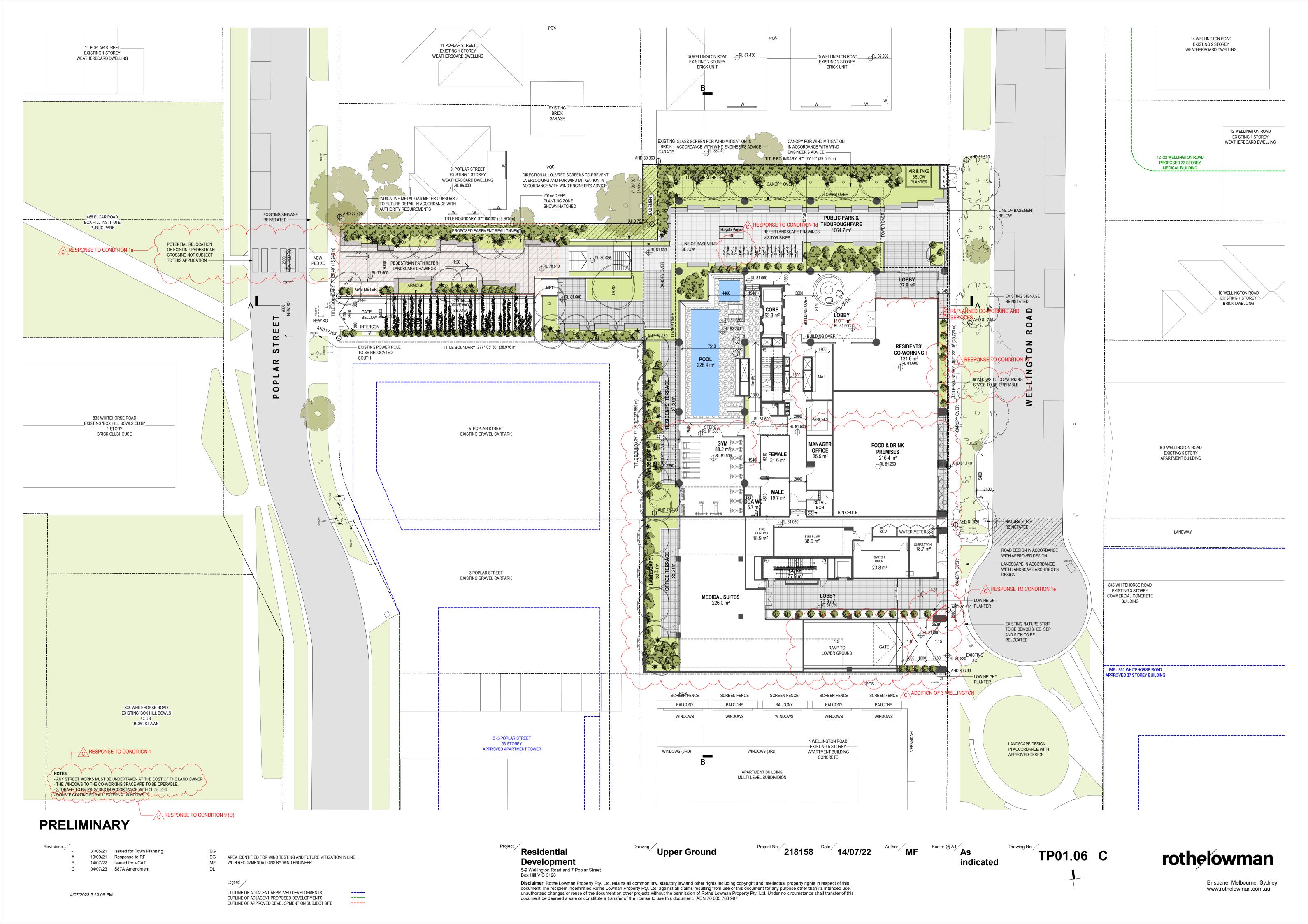
**Proposed Development Plan** 

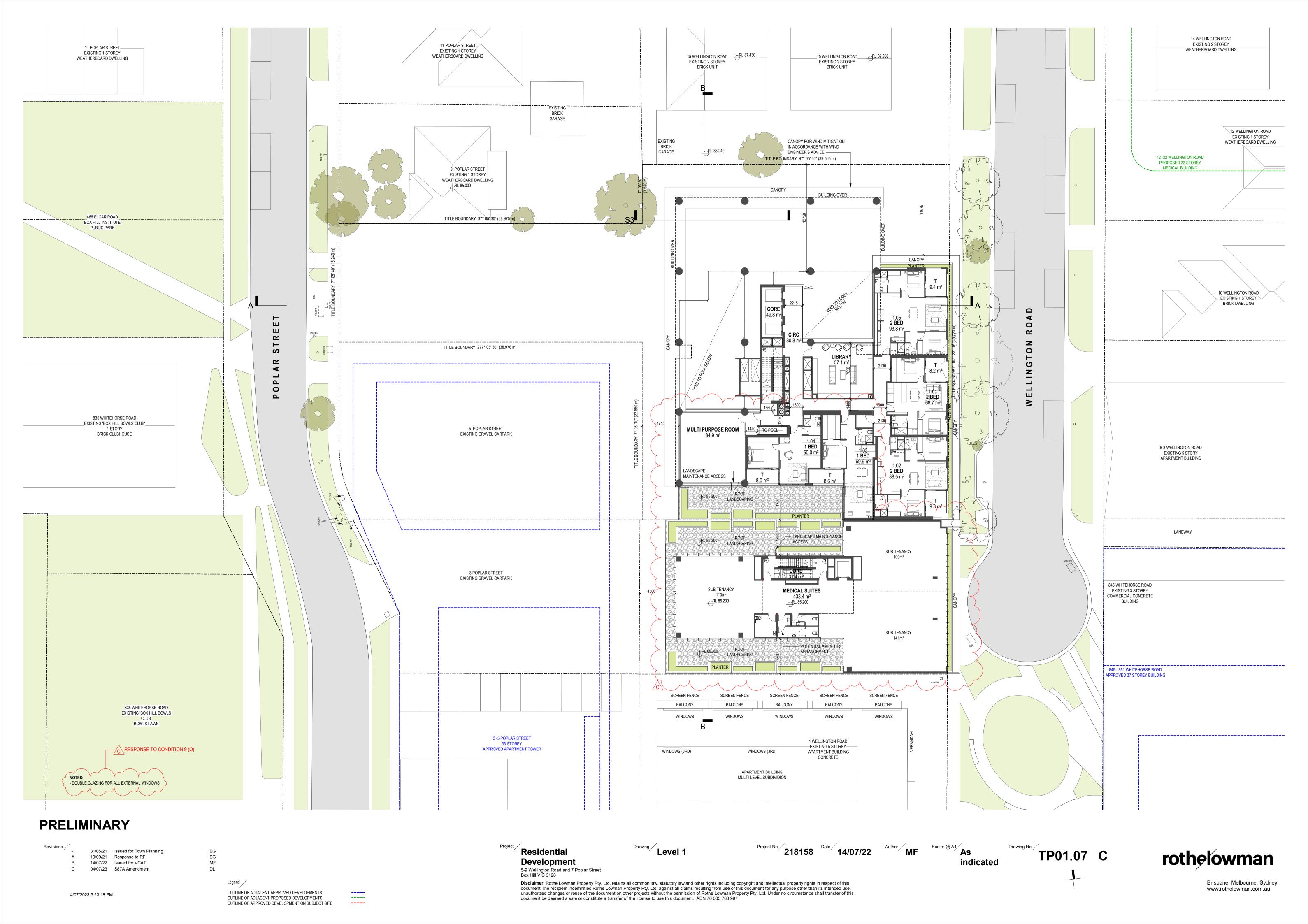


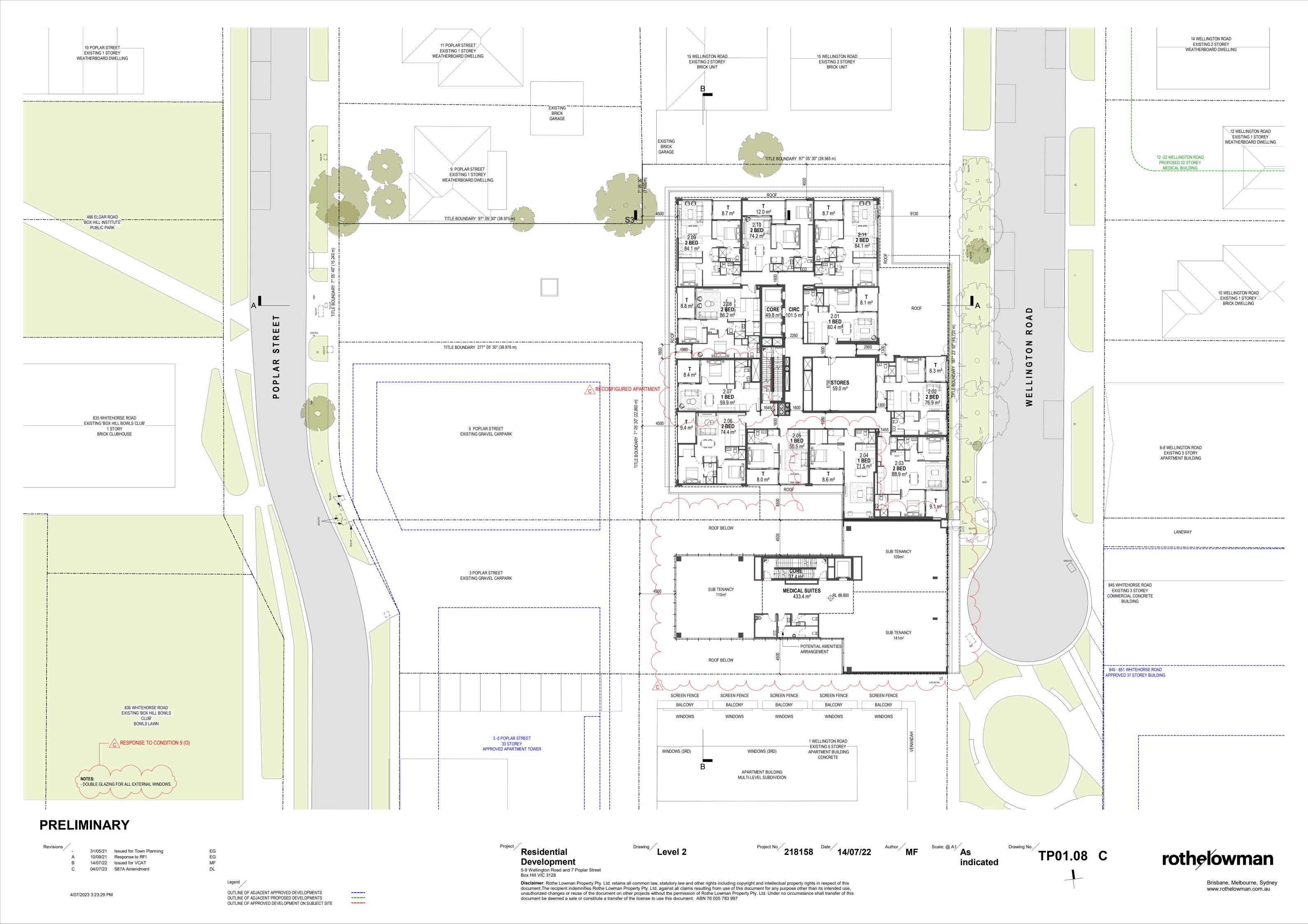


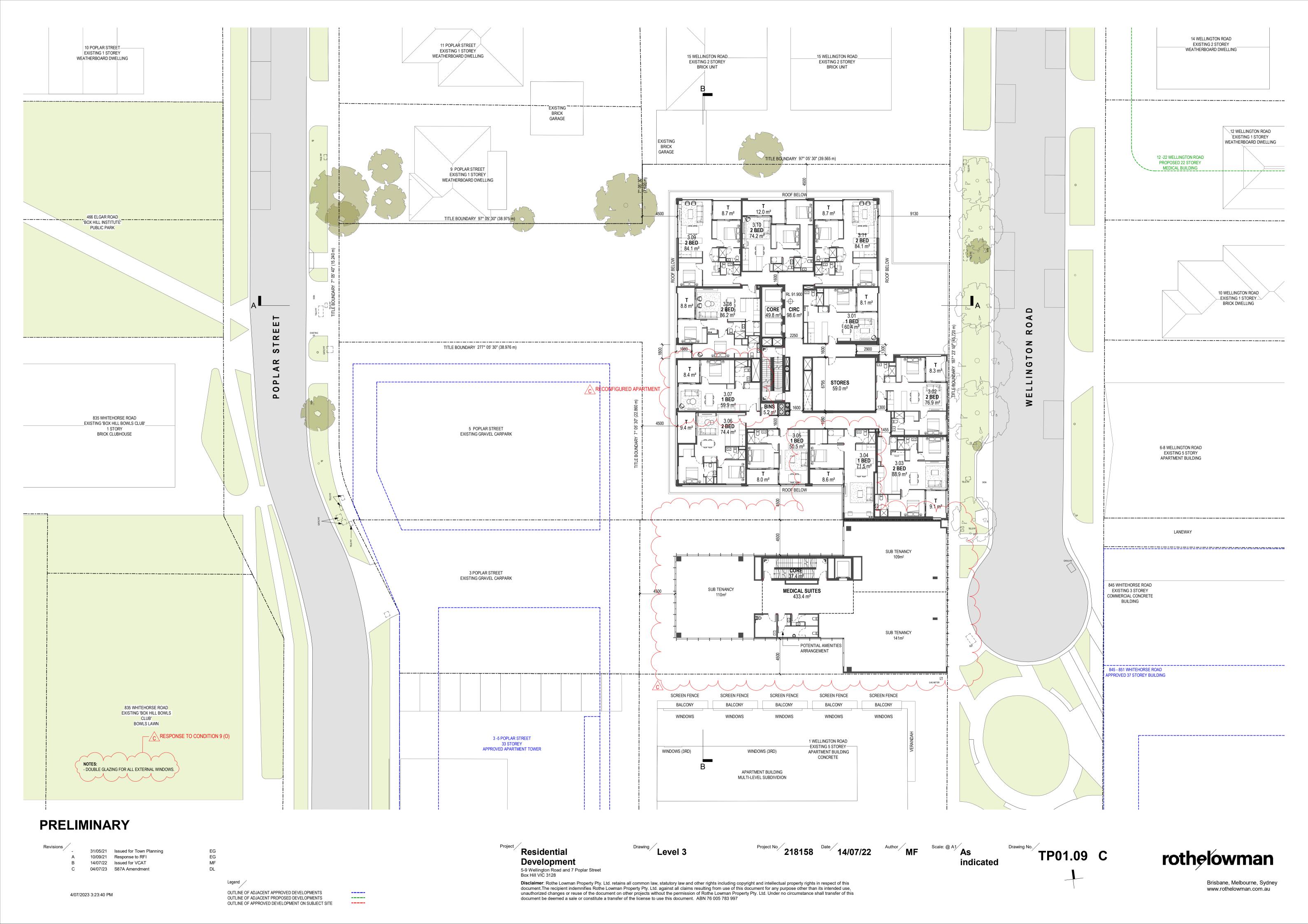


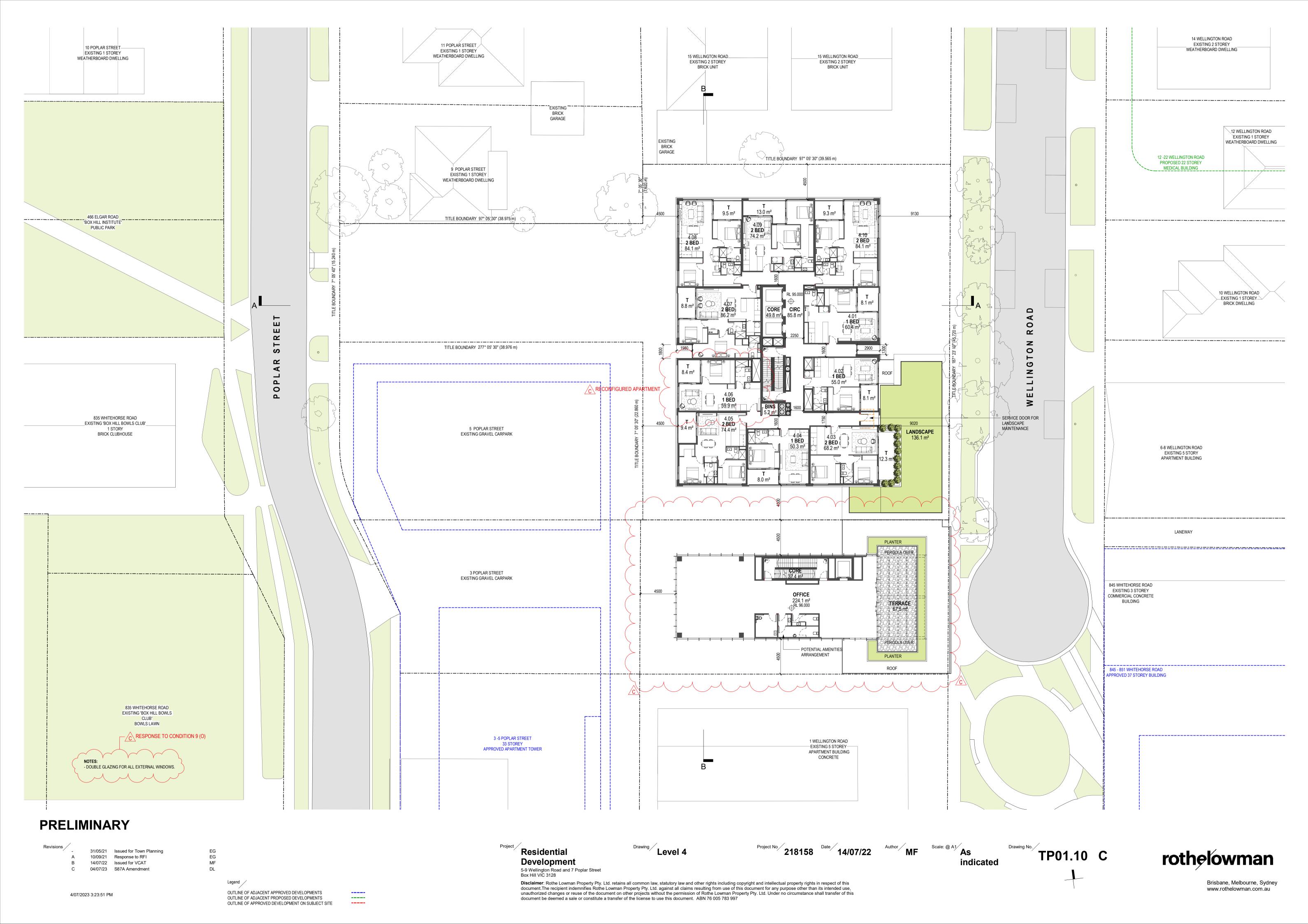


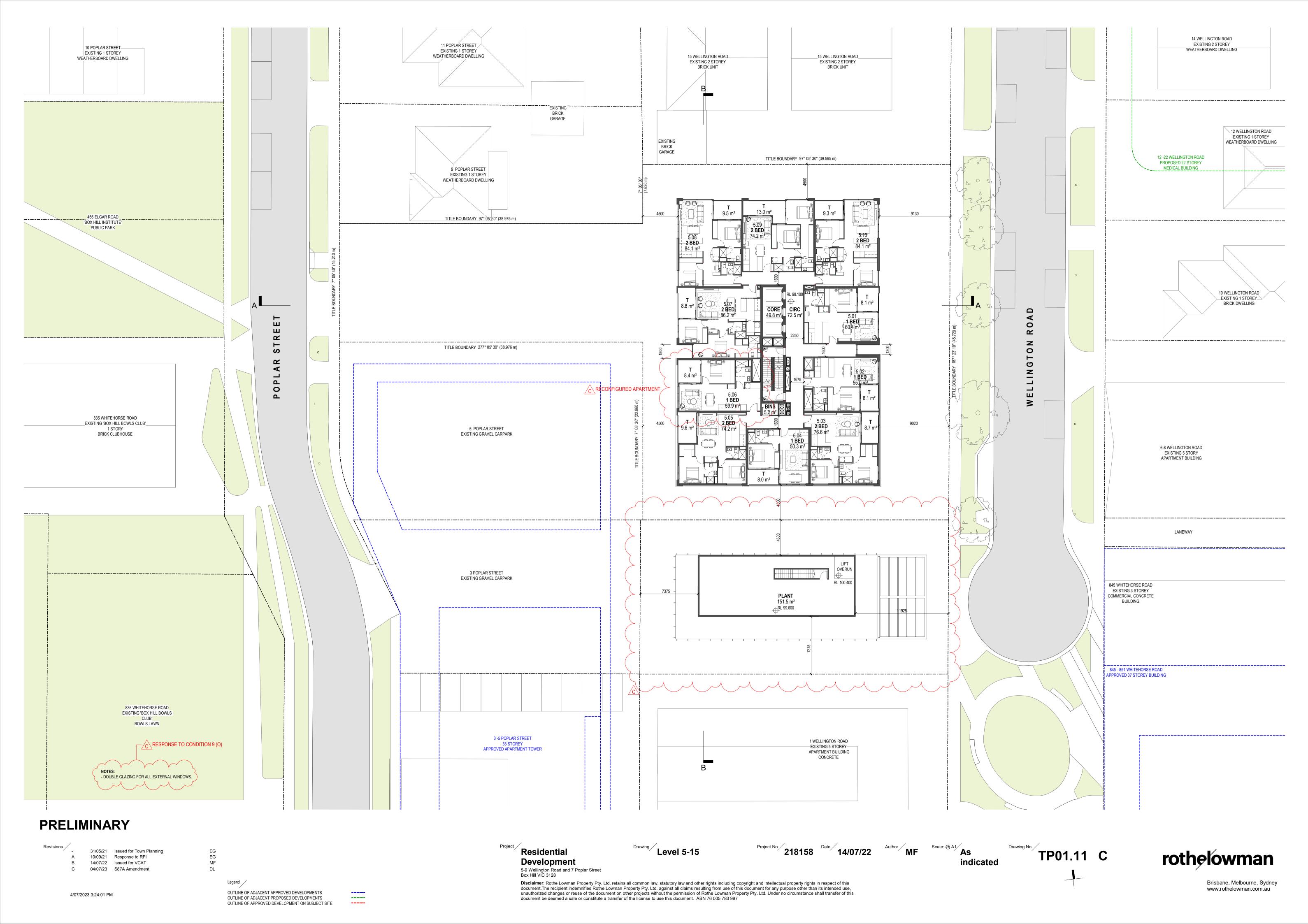














## **PRELIMINARY**

31/05/21 Issued for Town Planning 10/09/21 Response to RFI 14/07/22 Issued for VCAT 04/07/23 S87A Amendment

4/07/2023 3:28:33 PM

LIGHT WARM COLORED TEXTURED CONCRETE FINISH DARK GREY METAL CLADDING CF02 DARK WARM COLOURED TEXTURED CONCRETE MF01 DARK GREY METAL FINISH CF03 LIGHT WARM CONCRETE FINISH
CS01 MID GREY VERTICAL BATTENS CLEAR GLAZING GT01 GT02 MF SPANDREL GLAZING - OPAQUE CS02 TIMBER LOOK VERTICAL BATTENS TRANSLUCENT GLAZING GT03 OUTLINE OF ADJACENT APPROVED DEVELOPMENTS OUTLINE OF ADJACENT PROPOSED DEVELOPMENTS ----

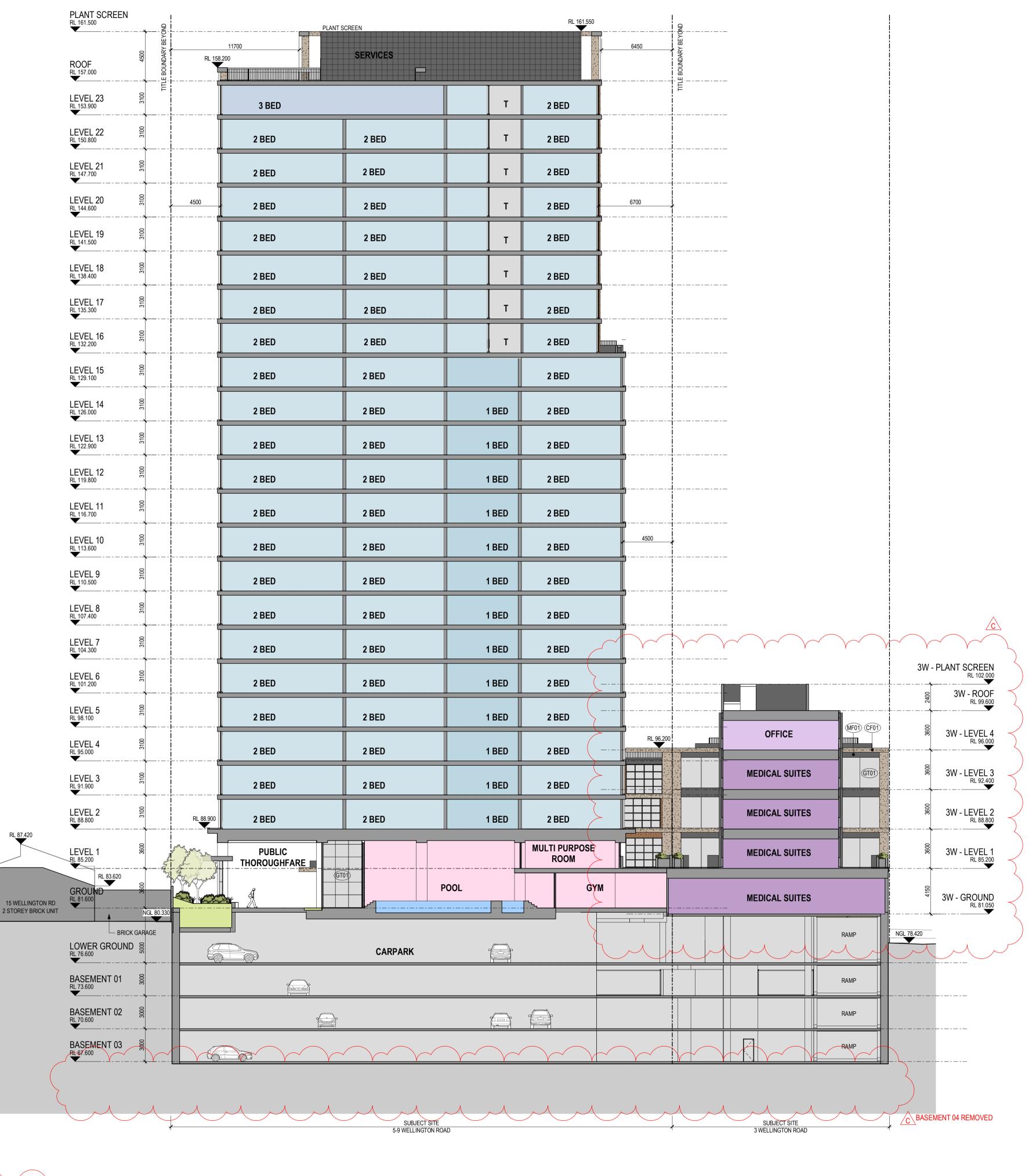
OUTLINE OF APPROVED DEVELOPMENT ON SUBJECT SITE

Residential Development 5-9 Wellington Road and 7 Poplar Street Box Hill VIC 3128 Section A

218158 Date 14/07/22 Author MF Scale: @ A1 1: 200 TP03.01 C

rothelowman

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## **PRELIMINARY**

31/05/21 Issued for Town Planning 10/09/21 Response to RFI 14/07/22 Issued for VCAT 04/07/23 S87A Amendment

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LIGHT WARM COLORED TEXTURED CONCRETE FINISH CF02 DARK WARM COLOURED TEXTURED CONCRETE CF03 CS01 LIGHT WARM CONCRETE FINISH MF MID GREY VERTICAL BATTENS CS02 TIMBER LOOK VERTICAL BATTENS OUTLINE OF ADJACENT APPROVED DEVELOPMENTS OUTLINE OF ADJACENT PROPOSED DEVELOPMENTS OUTLINE OF APPROVED DEVELOPMENT ON SUBJECT SITE

DARK GREY METAL CLADDING MF01 DARK GREY METAL FINISH CLEAR GLAZING GT01 GT02 SPANDREL GLAZING - OPAQUE TRANSLUCENT GLAZING GT03

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Residential Development 5-9 Wellington Road and 7 Poplar Street Box Hill VIC 3128

Section B

218158 Date 14/07/22 Author MF Scale: @ A1 1: 200 TP03.02 C

rothelowman

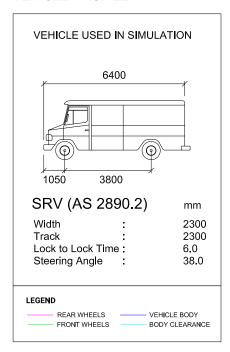
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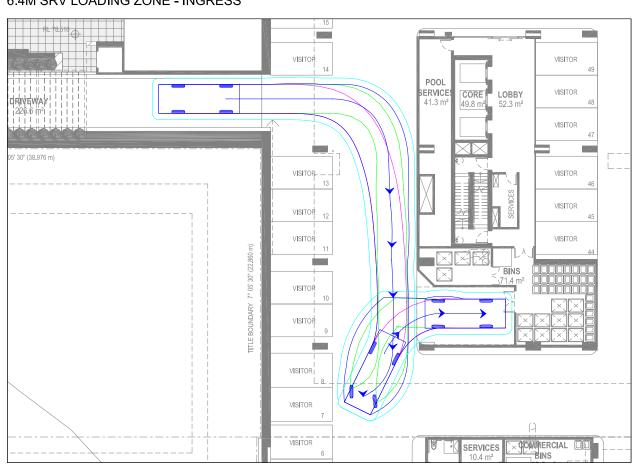
## **Appendix B**

**Loading Swept Path Diagrams** 

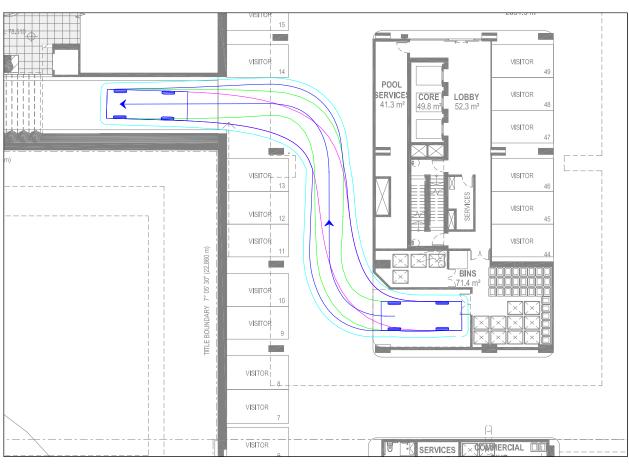
### VEHICLE PROFILE

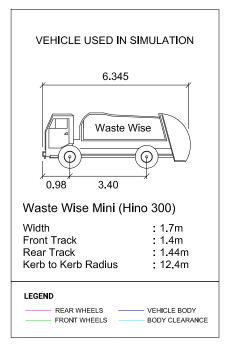


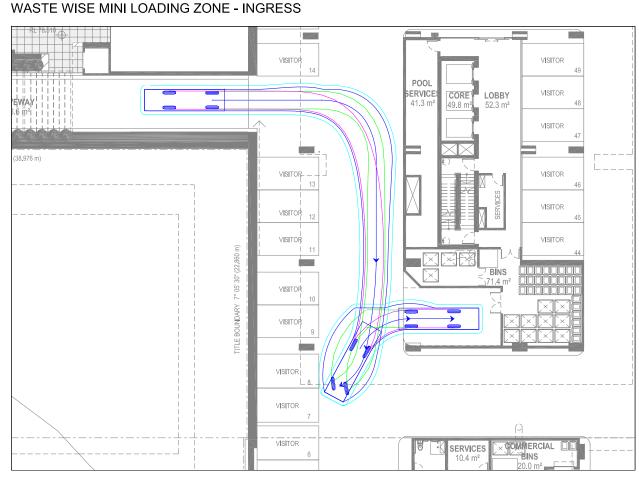
#### 6.4M SRV LOADING ZONE - INGRESS



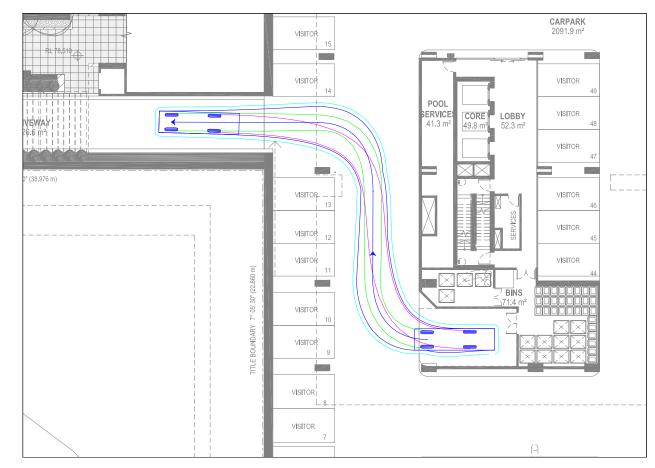
#### 6.4M SRV LOADING ZONE - EGRESS







#### WASTE WISE MINI LOADING ZONE - EGRESS



REV DATE NOTES A 04/07/2023

DESIGNED BY A. BUI

CHECKED BY D. MILDER

3-9 WELLINGTON ROAD & 7 POPLAR STREET, **BOX HILL** 

GENERAL NOTES:

Prepared on base plans by Rothelowman

 $\langle N \rangle$ 

FILE NAME: G29378-02B

SHEET NO.: 01

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