

1 FOUNTAINDALE ROAD, ROBERTSON

PROPOSED ALTERATIONS & ADDITIONS TO THE EXISTING
ROBERTSON GRAND HOTEL

**TRAFFIC & PARKING
IMPACT ASSESSMENT**

MARCH 2020

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**TRAFFIC & PARKING IMPACT ASSESSMENT
1 FOUNTAINDALE ROAD, ROBERTSON
PROPOSED ALTERATIONS & ADDITIONS TO THE
EXISTING ROBERTSON HOTEL
DATE: 22 MARCH 2020**

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Document Management Traffic & Parking Assessment – 1 Fountaindale Road, Robertson

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1 INTRODUCTION

This report has been prepared by Hemanote Consultants on behalf of AEA Hotels to assess the traffic and parking implications of the proposed alterations & additions to the existing hotel site located at 1 Fountaindale Road, Robertson (Lot 2 in DP610676) and known as the Robertson Grand Hotel.

This report is to be read in conjunction with the architectural plans prepared by X.Pace Design Group (reduced copy of the arch plans attached in Appendix A of this report) and submitted to Wingecarribee Shire Council as part of a Development Application.

This report is set as follows:

- *Section 2:* Description of the existing site location and its use;
- *Section 3:* Description of existing traffic conditions near the subject site;
- *Section 4:* Description of the proposed development, vehicular access and on-site parking provision, layout and circulation;
- *Section 5:* Assessment of Impacts on traffic near the subject site; and
- *Section 6:* Outlines Conclusions.

2 EXISTING SITE DESCRIPTION

➤ Site Location

The subject site is zoned E3 (Environmental Management) under the Wingecarribee LEP 2010 and is located on the eastern side of Fountaindale Road, south of its intersection with Illawarra Highway, at property No. 1 Fountaindale Road, within the suburb of Robertson. The site has a frontage of approximately 200 metres to Fountaindale Road from the west and a longer frontage to Illawarra Highway from the north and Ranelagh House Railway Station and railway line along the rear boundary of the site. Refer to Figure 1 for a site locality map.

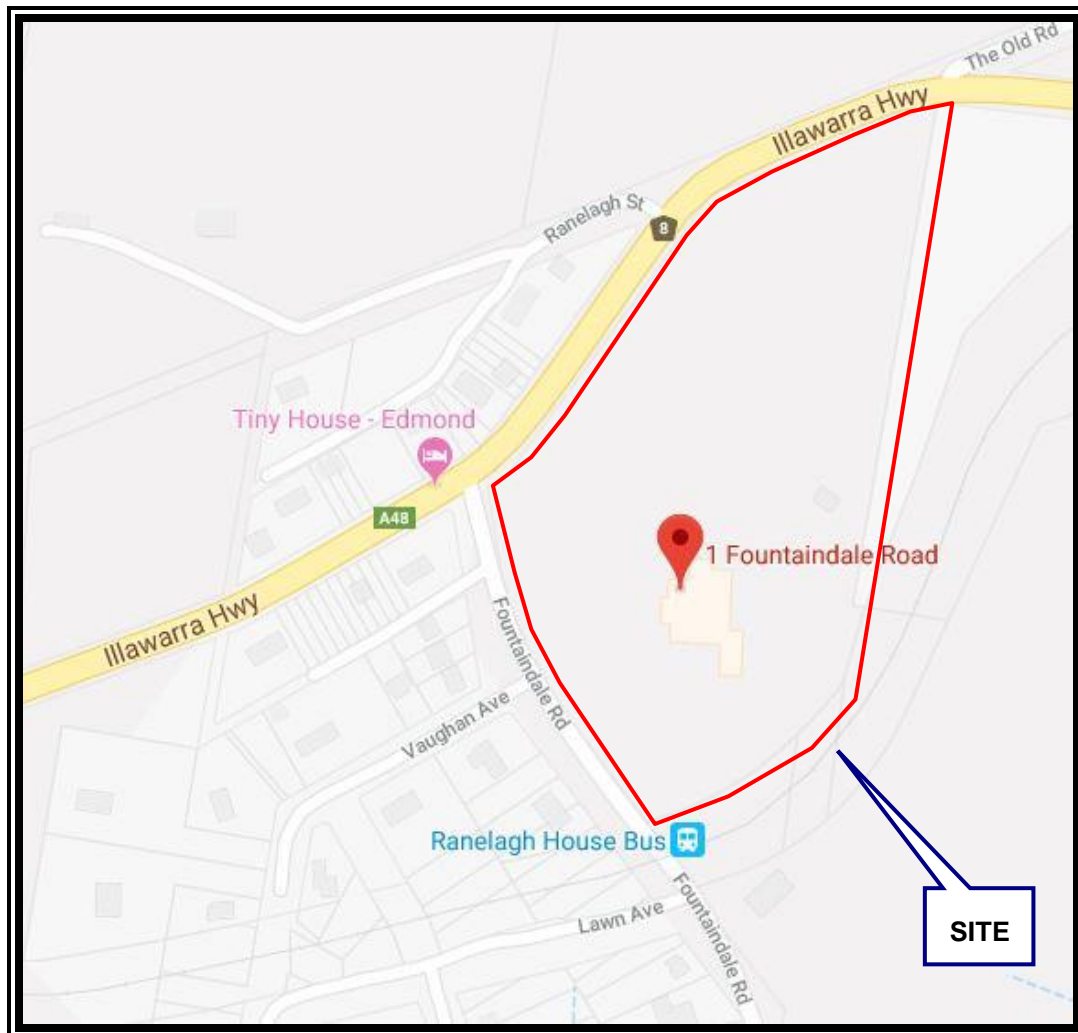


Figure 1: Site Locality Map

➤ **Existing Site & Surrounding Land Use**

The subject site is currently occupied by an existing hotel and is located in a mainly residential area characterised by single dwelling houses on large blocks of land. It is located in close proximity to Robertson Nature Reserve and the existing Ranelagh House Railway Station and railway line towards the rear boundary of the site.



Photo 1: Site frontage & existing vehicular access to the site and Fountaindale Road



Photo 2: Site frontage to Illawarra Highway & existing vehicular access to the site from Fountaindale Road

3 EXISTING TRAFFIC CONDITIONS

3.1 Road Network and Classification

Fountaindale Road is a local road running north-south between Illawarra Highway (State Road under the jurisdiction of the RMS) in the north and a dead end in the south. It intersects with a number of local roads including Vaughan Avenue and Lawn Avenue near the subject site.

3.2 Road Description and Traffic Control

Fountaindale Road has a two-lane two-way undivided carriageway, with a total width of approximately 6 metres. At present, Fountaindale Road generally provides one travel lane per direction in the vicinity of the subject site.

Fountaindale Road forms a 'T' Intersection with Illawarra Highway in the north and is controlled by 'Give Way' control, with priority given to traffic travelling along Illawarra Highway. Fountaindale Road also intersects with Vaughan Avenue and is controlled by T-priority given to the traffic travelling along Fountaindale Road. It also intersects with a railway crossing near the rear of the subject site and is controlled by railway crossing signals. The legal speed limit on Fountaindale Road is 50 km/h.

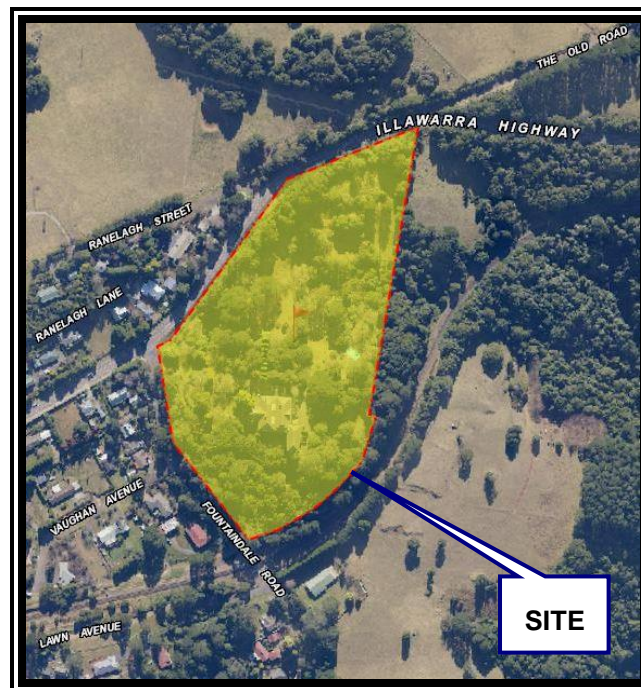


Figure 2: Aerial photograph of the Subject site and surrounding road networks



Photo 3: Fountaindale Road near the subject site – facing south



Photo 4: Fountaindale Road near the subject site – facing north

The current traffic flows on Fountaindale Road are considered to be appropriate for a local road, with free flowing without any major queuing or delays in peak hours, with spare capacity.

Illawarra Highway is a state road under the jurisdiction of the RMS and it runs in a northeast – southwest direction in the vicinity of the subject site. It has a two-lane two-way undivided carriageway with road shoulders, with a total width of approximately 10 metres. At present, the carriageway provides one travel lane per direction in the vicinity of the subject site, where the traffic lanes and road shoulders are line marked and clearly defined.



Photo 5: Illawarra Highway near the subject site – facing northeast



Photo 6: Illawarra Highway near the subject site – facing southwest

It has been observed that the current operational performance of the intersection of Fountaindale Road with Illawarra Road is in good operation at a Level of Service ‘A’, in accordance with Table 4.2 of the *“Guide to Traffic Generating Developments - 2002”* shown on the next page, with an average delay of less than 14 seconds per vehicle, without any major queuing or delay.

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Signs
A	< 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity; at signals, incidents will cause excessive delays Roundabouts require other control mode	At capacity, requires other control mode

Table 4.2: Level of Service Criteria for intersections (RMS Guide)

3.3 Existing Transportation Services

The subject hotel site has good access to bus and coach services along Illawarra Highway and has great access to Ranelagh House Railway Station which is located directly the rear of the site and provides train services on the Moss Vale to Unanderra Line. The proposed development could include the refurbishment of the heritage train platform at the railway station.

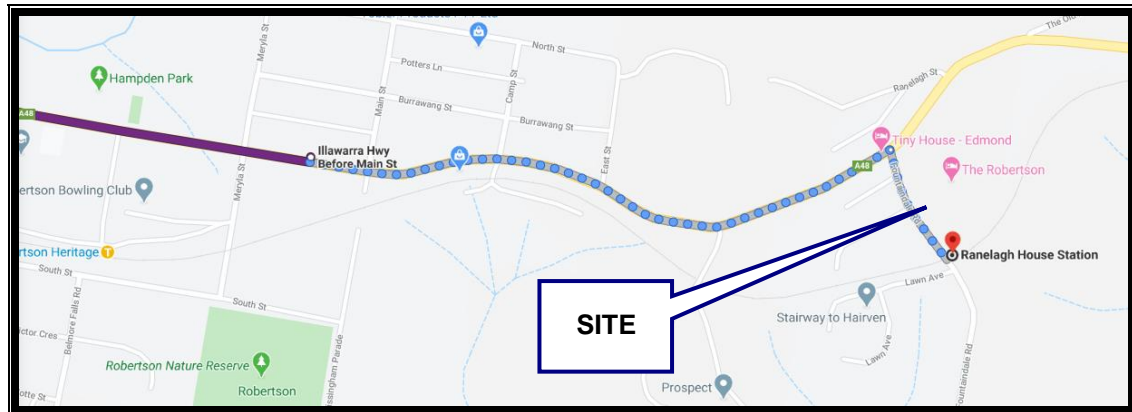


Figure 3: Local bus route map in the vicinity of the subject site

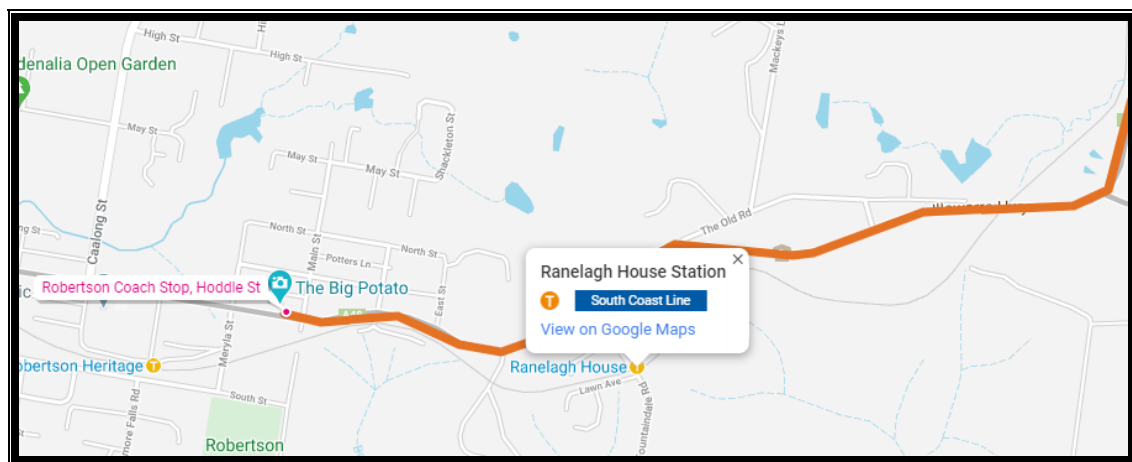


Figure 4: Coach bus route in the vicinity of the subject site

4 PROPOSED DEVELOPMENT

4.1 Description of the proposal

The proposed development application is for the alterations & additions to the existing hotel site located at 1 Fountaindale Road, Robertson (Lot 2 in DP610676) and known as the Robertson Grand Hotel. The hotel will operate seven days per week over the entire 52 weeks of the calendar year and will include the following:

Proposed uses & facilities

- Existing Hotel building and new alterations & additions to the hotel and new eco cabins and eco villas having accommodations facilities for a total of 186 rooms, providing 190 beds (accommodating up to 380 people).
- Associated five (5) restaurants/function rooms having a total seating capacity of 720 seats for the use of the hotel guests. It is expected that these restaurants may generate a maximum of 50 visitors from outside the hotel guests.
- Café with a leasable floor area of 88m².
- Associated bar and lounge, museum and health centre for the use of hotel guests.
- A leisure centre including a swimming pool, spa, gym and massage / treatment facility for the use of the hotel guests; and available to the public.
- It should be noted that the above mentioned uses and facilities will not all coincide or take place at the same time and many uses could be staggered and would not overlap, depending on the need of use, time of the day and proposed operating hours of each facility.
- A total of one hundred and fifty six (156) on-site defined and line-marked car parking spaces on ground and in underground parking levels, including three (3) accessible parking spaces, in addition to motorcycle and bicycle parking and a loading dock for heavy vehicles (accommodating up to a Heavy Rigid Vehicle – HRV 12.5 metres in length). The site also provides a bus drop-off area and a bus/coach parking facility.

- It should be noted that the subject site is large and provides opportunities and areas for the overflow of car parking, if required during special events such as large weddings and swimming carnivals. The overflow parking can be accommodated by opening certain gates and removing lockable bollards, if needed.
- The proposed development will also include the refurbishment of the heritage rail platform located towards the rear of the site.

Staff numbers

- A total of 50 staff members will be employed on site, ranging between full-time, part-time and casual staff, with a maximum of 40 staff members to be located on the site at any one time. Staff will be largely from the local area and is expected to utilise public transport and carpooling to travel to and from the site. It is also anticipated to provide on-site accommodation for up to 20 staff members.

Internal service roads

- A new two-way access driveway and internal service road for the exclusive access and use by heavy vehicles leading to the on-site loading dock. The maximum size vehicle expected to access the site is a Heavy Rigid Vehicle (HRV – 12.5 metres in length).

Refer to *Appendix 'A'* for the proposed development plans.

4.2 Vehicular & Pedestrian Access

The main vehicular access to and from the subject site and proposed off-street car parking areas will be via existing driveway located on Fountaindale Road, near Illawarra Highway. This existing access driveway provides for two-way traffic, where there is adequate space for a vehicle to give way to another vehicle that might be approaching in the opposite direction.

It should be noted that there could be some limitations to widening this existing driveway due to heritage impact reasons, however, it has been functioning well for two-way traffic and is expected to continue to do so, as vehicular access for heavy vehicles and buses/coaches will not be permitted through this driveway.



Photo 7: The existing access driveway to the subject site in Fountaindale Road



Photo 8: The existing access driveway from inside the subject site

The existing driveway crossing has adequate space for the storage of vehicles, where two vehicles travelling in opposite directions can pass each other, without causing any congestion or delay for traffic on Illawarra Highway. All vehicles are to enter and exit the site in a forward direction at all times.



Photo 9: Adequate space between the exiting driveway and the Give-way line at Illawarra Highway

Vehicular access for heavy vehicles, trucks and large buses will be provided through a new access driveway crossing to be located in Fountaindale Road (20 metres south of its junction with Vaughan Avenue). The new access driveway will provide for two-way traffic and is to have a width of 12.5 metres at the boundary line, to accommodate access for HRV trucks, as per the requirements of AS2890.2:2018. This driveway will lead to a new internal service road and will be restricted for truck and large bus access only.

4.3 On-site Parking Provision

The Robertson Village DCP specifies that off-street car parking for Hotels should be provided as follows:

- Accommodation component: 1 car space per hotel room, plus 1 car space per 2 employees.
- Bar, lounge & dining component: subject to a traffic report taking into account the existing supply and demand for parking in the area, and of peak parking periods of individual facilities within the hotel.
- Café: 1 car space per 30m² of leasable floor area.

The proposed development provides for a total of one hundred and fifty six (156) on-site defined and line-marked car parking spaces on ground and in underground parking levels, including three (3) accessible parking spaces, in addition to motorcycle and bicycle parking and a loading dock for heavy vehicles (accommodating up to a Heavy Rigid Vehicle – HRV 12.5 metres in length). The site also provides a bus drop-off area and a bus/coach parking facility.

Some additional car parking spaces can also be provided near the separate cabins and villas for guests/tenants, if required.

The proposed development also allows for additional 'overflow' parking spaces (as shown in the schematic sketch below) for special occasions, such as large weddings and events and swimming carnivals. This additional car parking can be provided and managed by dedicated/authorised staff members, who can open certain gates and remove lockable bollards to allow for the parking of cars in certain areas.



It is considered that the proposed on-site parking is adequate for the proposed development for the following reasons:

- Current use and parking credits for the existing portion of the hotel and existing rooms.
- Some hotel guests are expected to arrive at the site as part of a tourist group or similar and therefore would travel by bus or small coaches, therefore, not generating car parking.
- Other guests will travel to the hotel utilising car pooling and it is expected that guests arriving in a single car could stay in up to 2 or more hotel rooms, such as a family of 4 or 5 people or a small group of friends can book 2 or 3 hotel rooms or suites with multiple rooms, and that is why the proposed hotel provides for interconnected rooms for families and friends, therefore, not generating as much traffic or parking. The same also takes place during special events such as weddings, where members of each family including parents, children and grandparents and/or friends travelling together in one car.
- The majority of the existing and proposed associated facilities are for the sole use of hotel guests, who would be present on site already and therefore would not generate additional parking demand.
- The proposed facilities will not all coincide or take place at the same time and many uses could be staggered/ managed and may not overlap, depending on the need of use, time of the day and proposed operating hours of each facility.
- Current and additional staff members will be largely from the local area and is expected to utilise public transport and/or carpooling to travel to and from the site or also being dropped-off and picked-up by a friend or a family member. It is also anticipated to provide on-site accommodation for up to 20 staff members, therefore, these staff will not need to travel to and from the site and will not generate parking.
- The subject site is large and can easily accommodate additional 'overflow parking' if required during special events or other busy periods.
- Given the location and the size of the subject site, there will not be any adverse impacts on parking in surrounding streets.

Therefore, the proposed on-site parking is considered adequate for the proposed development, given the above-mentioned information.

4.4 On-site Parking Layout and Circulation

The layout of the on-site car parking area and manoeuvring arrangements have been designed to enhance vehicular access, where vehicles enter and exit the site in a forward direction at all times, through the provision of adequate traffic aisles and turning space.

AS2890.1:2004 Parking facilities Part 1: Off-street car parking requires a minimum car parking space width of 2.4 metres (for residents and staff) parking and 2.6 metres (for visitors) and a minimum length of 5.4 metres. The proposed off-street car parking spaces have a width of 2.4 metres for residents and staff. 2.6 metres for visitors and a length of 5.4 metres, which is adequate.

The accessible car parking spaces for people with a disability have a width of 2.4 metres and a length of 5.4 metres, in addition to an adjacent 2.4 metres wide shared/no parking area with a bollard, which is adequate in accordance with AS2890.6:2009.

Car parking spaces adjacent to walls/obstructions have been made wider than the minimum width, to accommodate full door opening in accordance with Clause 2.4.2 (d) of AS2890.1:2004. The blind aisle has been extended by a minimum of 1 metre beyond the last parking space, in accordance with Clause 2.4.2(c) of AS2890.1:2004.

Clause 2.4.2 of AS2890.1:2004 requires a minimum aisle width of 5.8 metres for two-way aisles, adjacent to 90 degree angle parking and the proposed aisle has a minimum width of 6.1 metres, which is adequate.

Columns are located 750mm from the front of the adjacent parking space, which is in accordance with AS2890.1:2004.

Clause 2.4.2 of AS2890.1:2004 requires a minimum aisle width of 5.8 metres for two-way aisles, adjacent to 90° angle parking. The proposed aisles within the site have a minimum width of 6.1 metres, which is adequate for two-way traffic and manoeuvring into and out of parking spaces.

The proposed two-way ramps have a clear width of 5.5 metres, in addition to a 300mm wide kerb on either side, which is adequate for two-way traffic in accordance

with Clause 2.5.2 of AS2890.1:2004. The proposed ramp grades are within the maximum grade of 1 in 4 (25%) in accordance with Clause 2.5.3 of AS2890.1:2004 and a change in grade of 1:12 (8%) to prevent vehicle scrapping.

A minimum 2.2 metres headroom clearance is generally provided from the entry to car park level to the underside of all services conduits and suspended stormwater pipelines, in accordance with clause 5.3.1 of AS2890.1:2004. A minimum 2.5 meters headroom clearance is provided above accessible parking spaces and adjacent shared zones in accordance with clause 2.4 of AS2890.6:2009.

All vehicular manoeuvring within the car parking areas has been designed and checked using the B99 and B85 design car turning paths from AS2890.1:2004 and Austroads. Vehicle manoeuvring for trucks have been design and checked for HRV access in accordance with AS2890.2:2018. Access for emergency vehicles is provided for all around the site, where possible. All vehicles are to enter and exit the site in a forward direction at all times. Refer to *Appendix 'B'* of this report for vehicle swept paths diagrams.

Therefore, the car parking layout and circulation are considered to be adequate in accordance with AS2890.1:2004, AS2890.6:2009 and AS2890.2:2018, where vehicles enter and exit the site in a forward direction at all times.

5 EXTERNAL TRAFFIC IMPACT

An indication of the potential traffic generation of the proposed development is provided by the *RMS Guide to Traffic Generating Development - 2002*.

The Guide specifies the following traffic generation rates for Motel/Hotel type developments, based on 100% occupancy:

- Daily vehicle trips = 3 per room.
- Evening peak hour vehicle trips = 0.4 per room.

Therefore, the proposed development with 186 guest rooms has an estimated traffic generation as follows:

- 74 peak hour vehicle trips.
- 558 daily vehicle trips.

As indicated in Section 4.3 of this report, some hotel guests are expected to arrive at the site as part of a tourist group or similar and therefore would travel by bus or small coaches, therefore, not generating many traffic trips. Some guests also will travel to the hotel utilising car pooling and it is expected that guests arriving in a single car could stay in up to 2 or more hotel rooms, such as a family of 4 or 5 people or a small group of friends can book 2 or 3 hotel rooms or suites with multiple rooms, as the hotel provides for interconnected rooms for families and friends, therefore, not generating as much traffic trips. The same also takes place during special events such as weddings, where members of each family including parents, children and grandparents and/or friends travelling together in one car

Therefore, **the estimated peak hour traffic generation from the proposed development would be reduced further** and is considered to be acceptable and of low impact on existing flows on the surrounding road network.

The traffic generated by the operation of the proposed hotel development will not have an adverse impact and additional traffic generated can be readily accommodated within the existing road network.

6 CONCLUSION

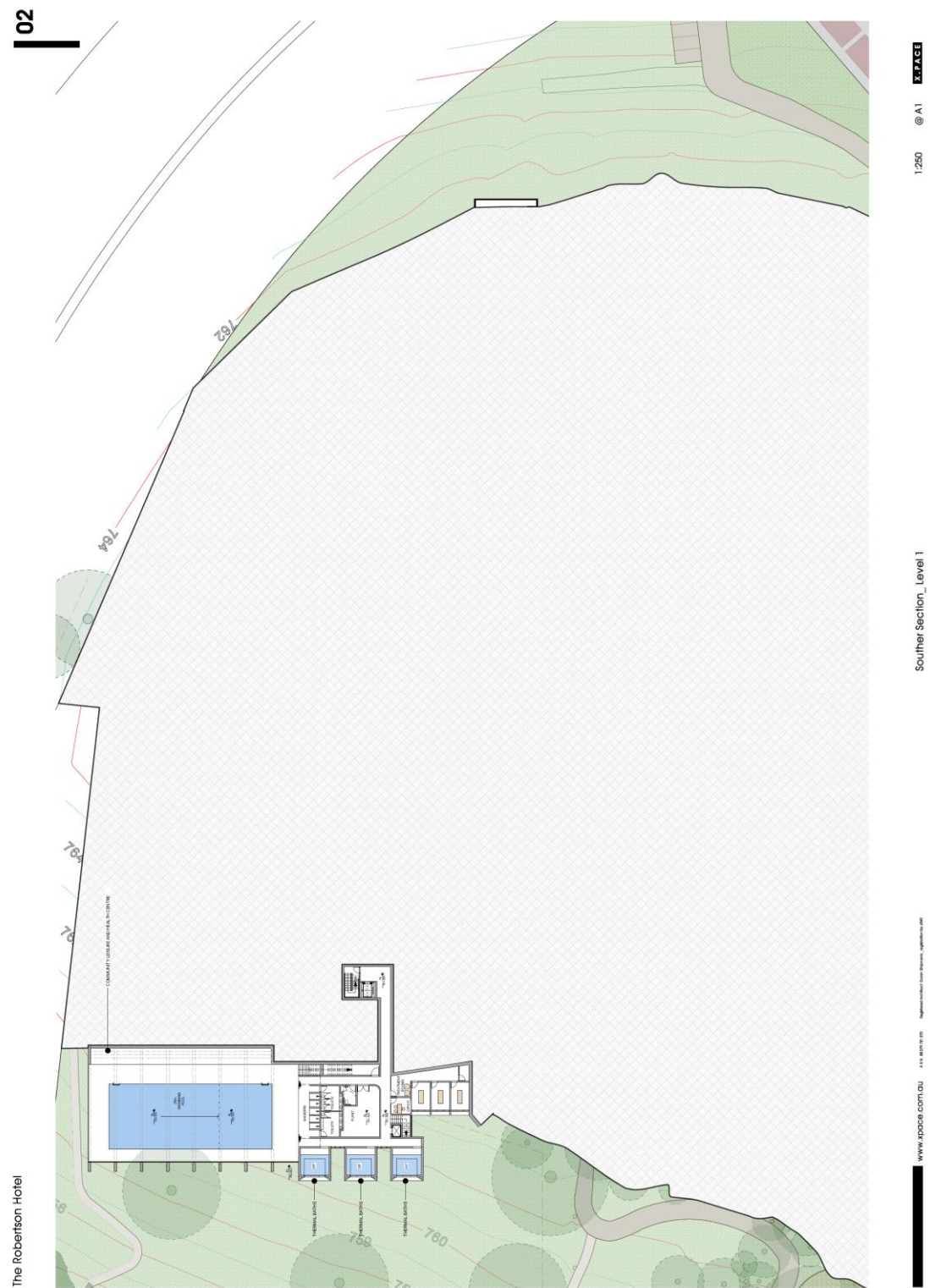
It can be concluded from the traffic and parking impact assessment that the proposed hotel development at 1 Fountaindale Road, Robertson is considered to be adequate and will have no adverse impacts on existing traffic or parking conditions.

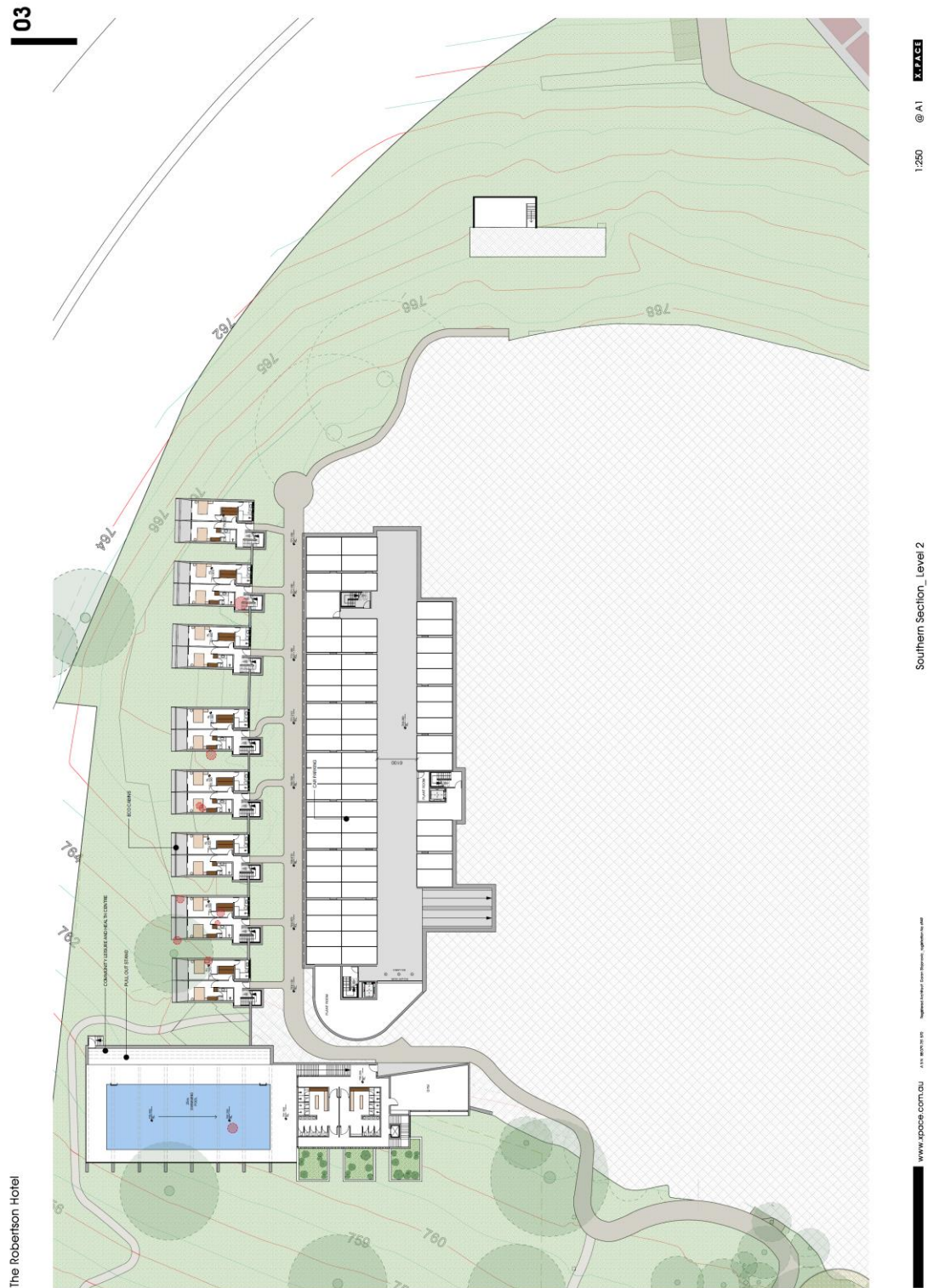
- The current traffic flows on Fountaindale Road are considered to be appropriate for a local road, with free-flowing traffic without any major queuing or delay in peak traffic periods, with spare capacity.
- The estimated traffic generation from the proposed hotel development is considered to be acceptable and of low impact on the surrounding road network, and additional traffic can be readily accommodated within the existing road network.
- The level of the proposed on-site parking provision is considered to be adequate for the proposed hotel development, with ample overflow parking within the site.
- The on-site vehicular access, car parking layout and circulation is adequate for the proposed development and in accordance with AS2890.1:2004, AS2890.6:2009 and AS2890.2:2018, where vehicles enter and exit the site in a forward direction at all times.
- The subject development site has good access to public transport services.
- The proposed hotel development will have no adverse impacts on parking in the surrounding area.

Appendix A – Proposed Development Plans

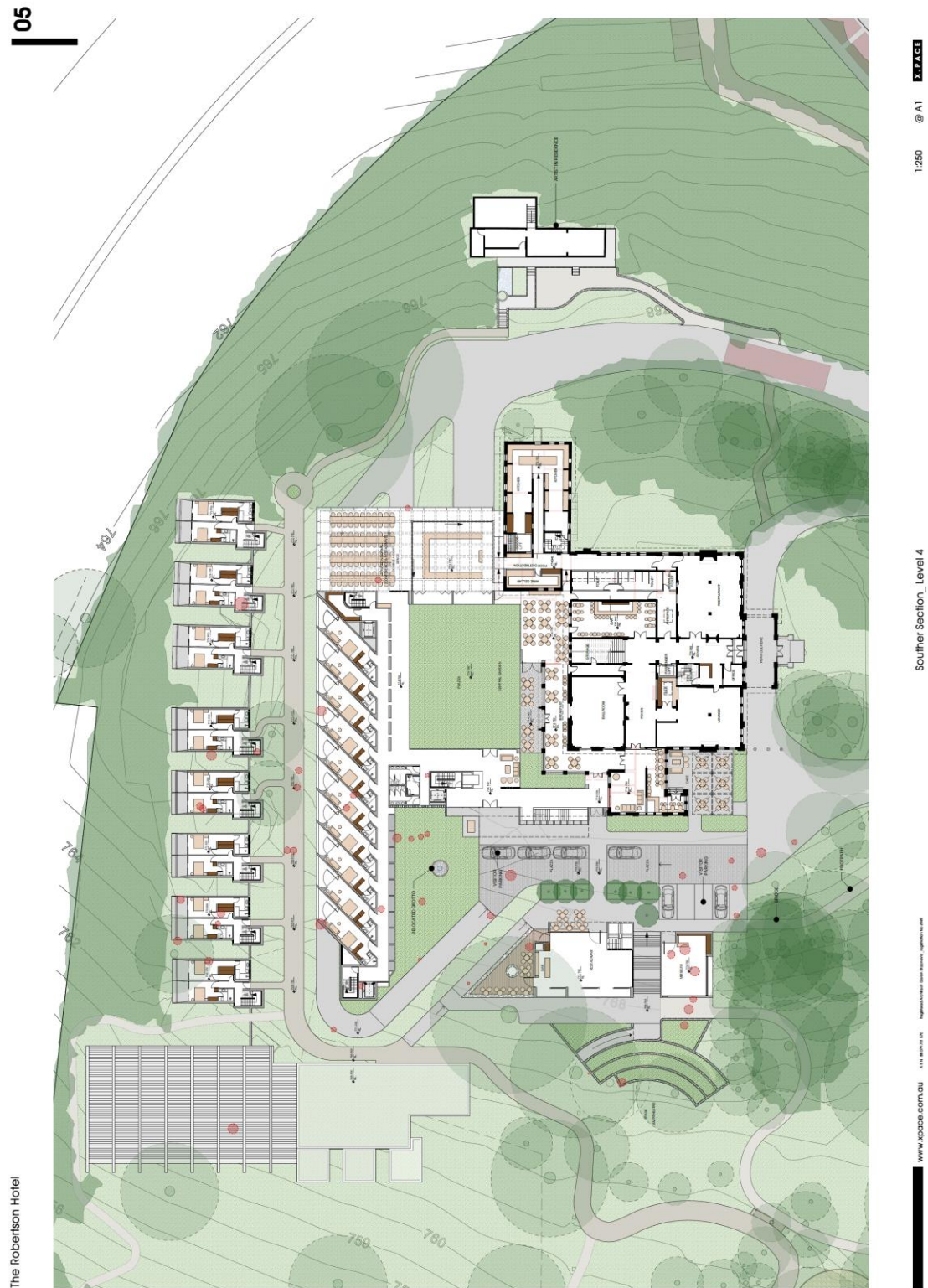






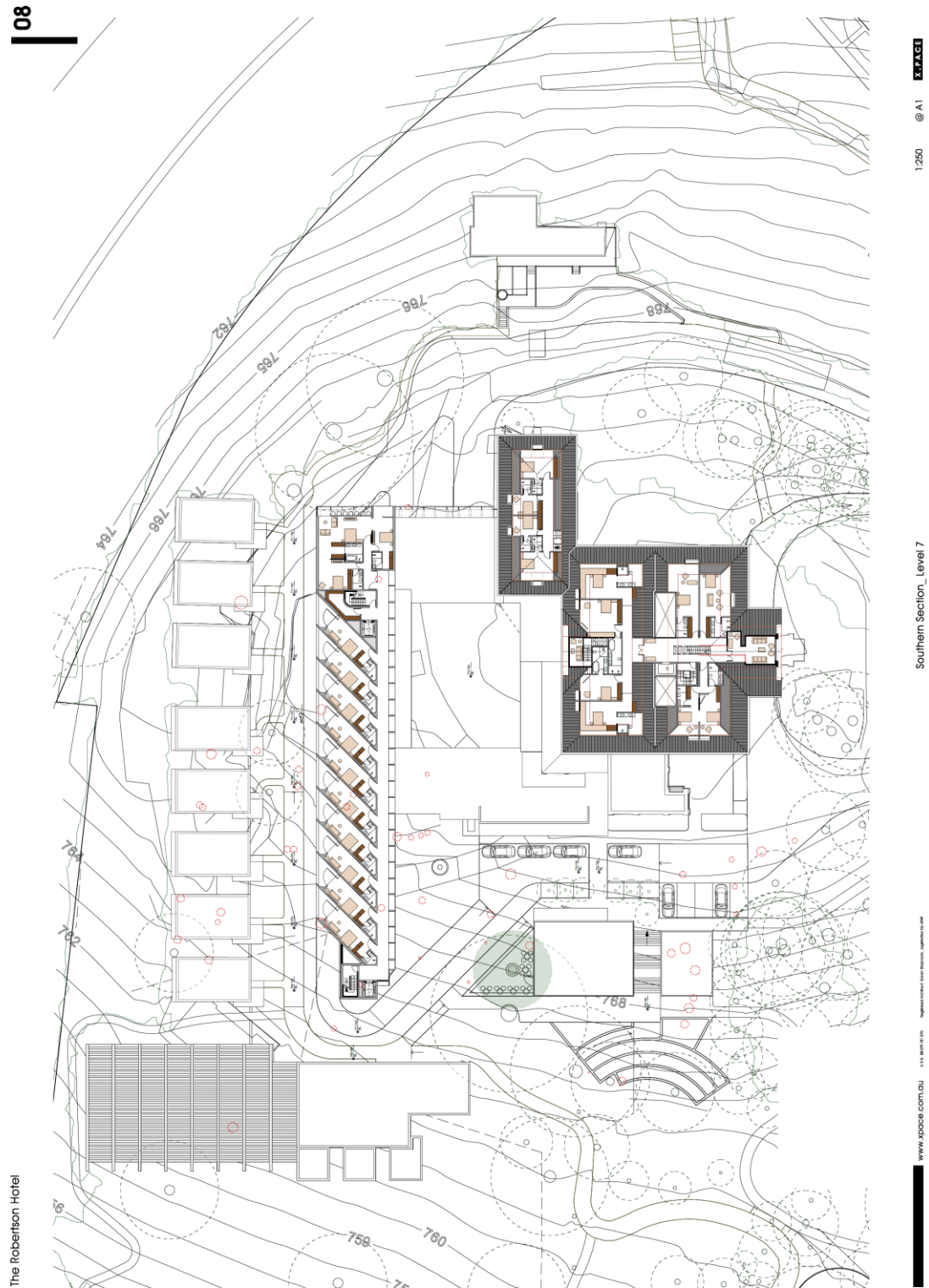






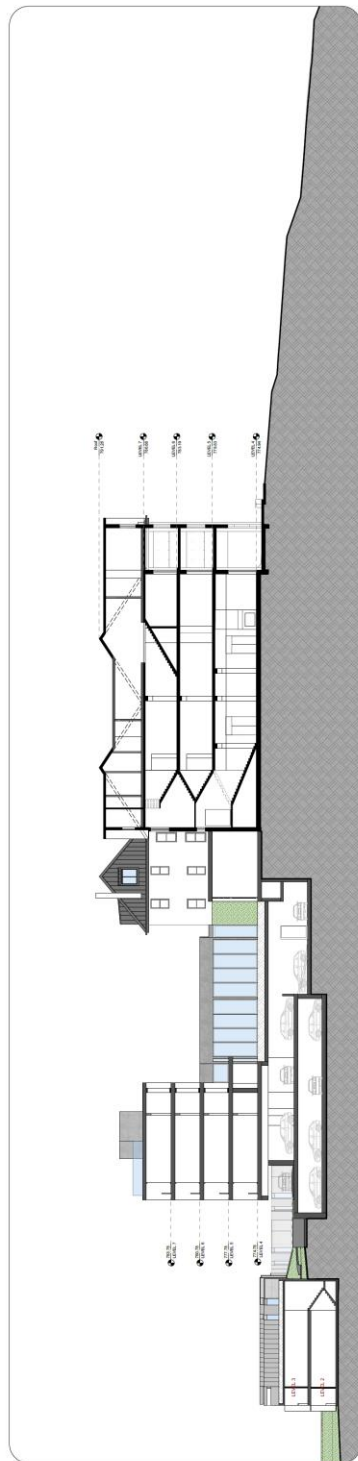




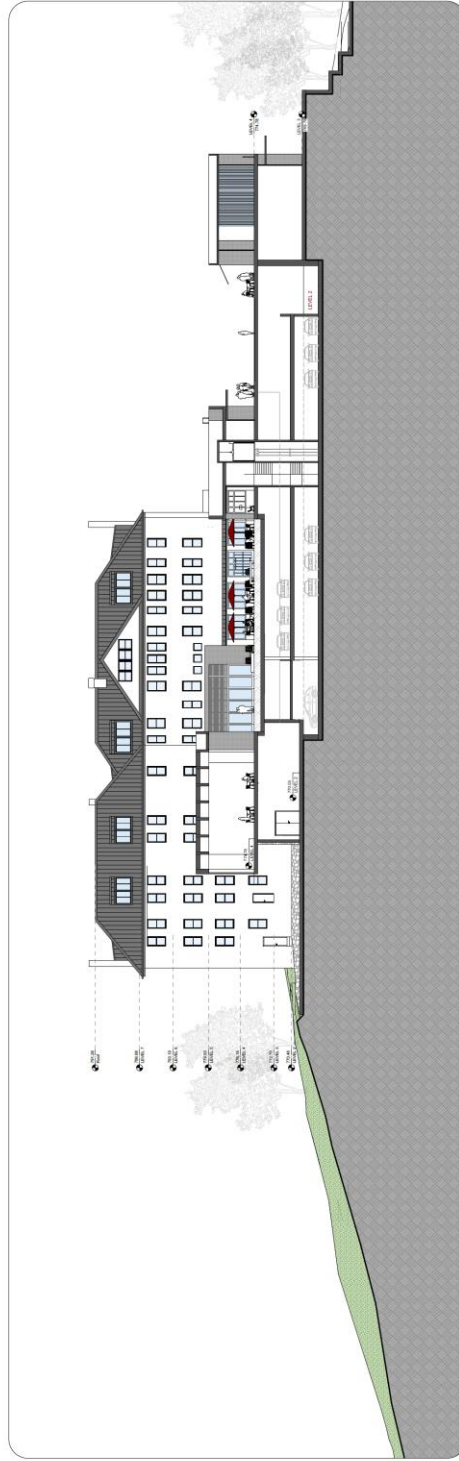








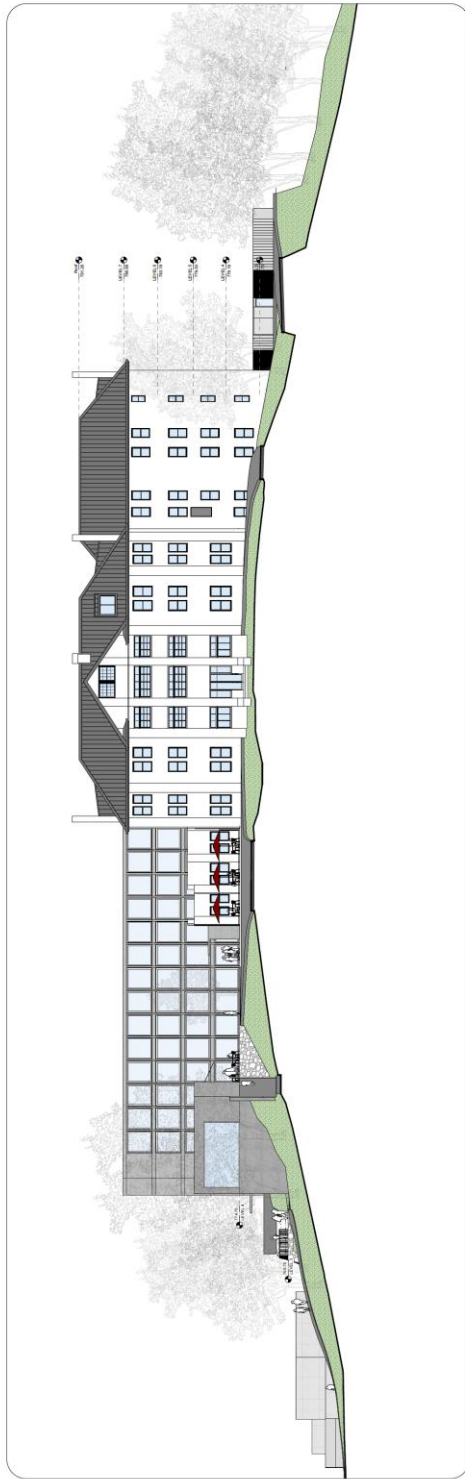
PROPOSED A-A SECTION



PROPOSED B-B SECTION

CLIENT ALEA Property		PROJECT NO. 184018		DRAWN BY P-HB		TITLE THE ROBERTSON HOTEL	
ADDRESS 1 Fountaindale Road		CHECKED JH		ISSUE NO 101		SCALE @ A1	
UNIT 201, 50 Marshall Street, Burry Hills NSW 2010		T 61 2 9558 1332 F 61 2 9558 1344 e-mail mol@hpc.com.au		AMENDMENTS		SCALE 2.01	
DATE 18/03/20		DATE 18/03/20		DATE 18/03/20		DATE 18/03/20	

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ELEVATION 1



ELEVATION 2

CLIENT J&B Property		PROJECT NO. 1333		DRAWN BY J&B	
ADDRESS 1 Fountaindale Road		CHECKED J&B		DATE 10/10/20	
<p>THE ROBERTSON HOTEL</p> <p>PROPOSED</p> <p>1:200</p> <p>@ A1</p> <p>2.02</p> <p>10/10/20</p>					
<p>AMENDMENT</p> <p>NO. 1</p> <p>10/10/20</p>					
<p>ISSUE</p> <p>10/10/20</p>					
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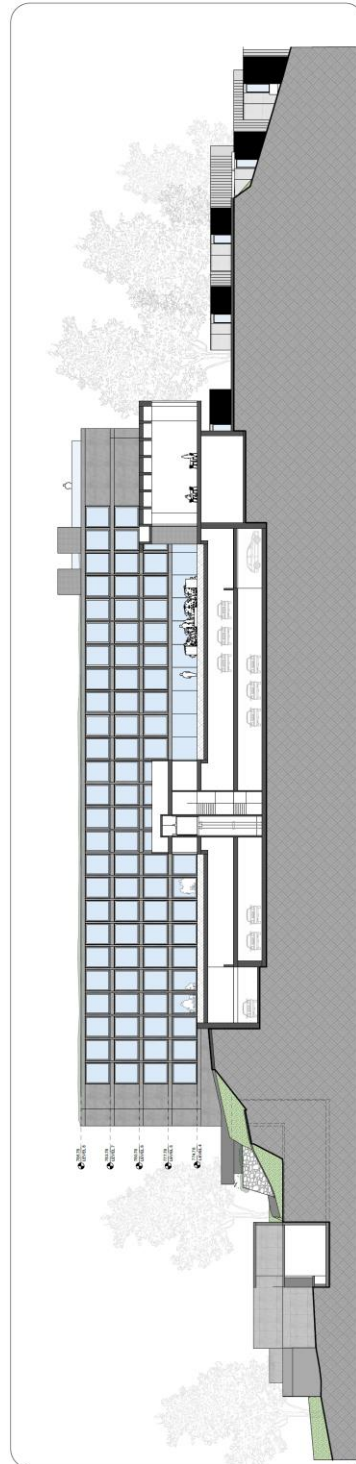
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ELEVATION 3

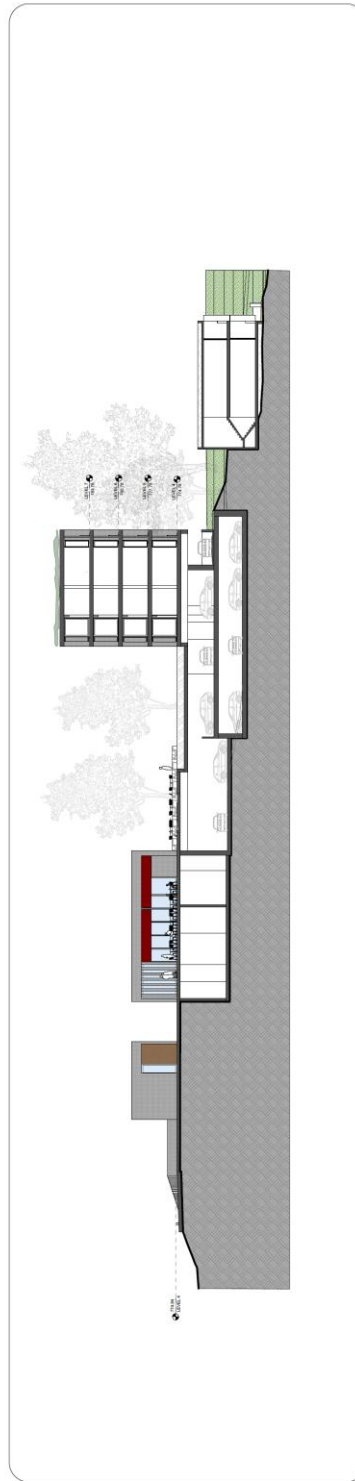


ELEVATION 4

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ELEVATION 5



ELEVATION 6

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CLIENT ACE Property	PROJECT NO. 1000000000	DRAWN BY H. HEMANOTE	CHECKED M. HEMANOTE	AMENDMENTS		ISSUE	
ADDRESS 1 Fountaindale Road				1.0000000000		1.0000000000	
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				72.04		72.04	
				73.04		73.04	
				74.04		74.04	
				75.04		75.04	
				76.04		76.04	
				77.04		77.04	
				78.04		78.04	
				79.04		79.04	
				80.04		80.04	
				81.04		81.04	
				82.04		82.04	
				83.04		83.04	
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				86.04		86.04	
				87.04		87.04	
				88.04		88.04	
				89.04		89.04	
				90.04		90.04	
				91.04		91.04	
				92.04		92.04	
				93.04		93.04	
				94.04		94.04	
				95.04		95.04	
				96.04		96.04	
				97.04		97.04	
				98.04		98.04	
				99.04		99.04	
				100.04		100.04	

Appendix B – Vehicle Swept Paths

