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## Proposed Residential Development 1164 Barrenjoey Road, Palm Beach

#### Construction Traffic Management Plan

# nt Plan

#### **Transport and Traffic Planning Associates**

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### **1.0 Introduction**

This report has been prepared to accompany a Development Application to the Northern Beaches Council for a proposed residential development at 1164 Barrenjoey Road, Palm Beach (Figure 1).



Figure 1 - Site Location

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#### **2.0 Proposed Development**

#### 2.1 The Site, Context & Existing Circumstances

The development site (Figure 2) is Lot 1 in DP398353 which occupies a rectangularly-shaped area of some 745m<sup>2</sup> with a frontage of some 10 meters to Barrenjoey Road.



Figure 2 - Site Boundary

The surrounding uses comprise:

- The residential developments adjoining the site
- Palm Beach, located to the east of the site
- Palm Beach Golf club to the north
- Palm Beach Wharf to the south

#### 2.2 Proposed Development Scheme

It is proposed to undertake demolition works of the existing 2 level building and conduct excavation works to provide for a basement garage and a level building platform to construct a new 5-level residential dwelling comprising 4 bedrooms and associated amenities.

Architectural details of the proposed development are provided on the plans prepared by Rama Architects, which are reproduced in part in Appendix A.

#### 2.3 Construction Program

A process has been established for the completion of the various work with a maximum duration of 78 weeks. The various phases are as follows:

Demolition	2 weeks
Excavation/Earthworks	14 weeks
Construction/Fitout	64 weeks

#### 2.4 Construction Process

#### 2.4.1 Demolition

This activity will involve the demolition of existing buildings on the site. These processes are anticipated to take 2 weeks to complete using up to Standard Bogey Tipper Truck. The truck activity associated with this process will average some 4-6 visitations a day and trucks will enter and depart the site via Barrenjoey Road. The number of workers on-site will be some 10-15 persons.

The demolition stage will need to begin with an initial excavation of the northern wall for the garage level which will also provide a truck set-down area. Trucks will then load and unload from this area for the rest of the demolition and excavation stage.

There will be no on-site parking for construction workers. All workers will be encouraged to use public transport to access the site given the site's proximity to public transport services or to carpool wherever possible.

A tool drop-off and storage facility will be provided on-site. This would allow tradespeople to drop off and store their tools and machinery, enabling them to use public transport to travel to/ from the site on a daily basis. Workers will also be informed of the appropriate tool/ equipment drop-off and storage arrangement within site sheds and amenities. Bus, Train schedules will be provided to all workers during the site induction to promote alternative modes of transport.

#### 2.4.2 Excavation

This activity will involve the excavation of the site to provide the base level for the building. This process is anticipated to take 14 weeks to complete using a small excavator machine with the removal of the spoil by a Standard Bogey Tipper Truck with some 4-6 visitations a day and trucks will enter and depart the site via the excavated truck set-down area on Barrenjoey Road. The number of workers on-site will be some 4-6 persons.

#### 2.4.3 Construction and Fitout

The construction and fitout phase will take approximately 64 weeks and, at peak activity, involve a maximum of 20-25 people on the site at any one time.

Whilst the activity on the site will be more intense during this period, the movement of heavy vehicles will only average around 4 visitations per day, with 8-10 times per day during concrete pours which will take some 10 days over a 12-week duration over the course of the construction process. Trucks during these works will continue to be restricted to a Standard Concrete Truck Truck and trucks will enter and depart the site via Barrenjoey Road. Workers will continue to be encouraged at all times to utilise the highly accessible public transport system which exists in the vicinity of the site and alternatively to carpool wherever possible.

The provision for loading/unloading for this process will involve trucks entering the site forwards and reversing into the on-site loading zone, with all materials being unloaded and stored within the site. Pedestrians walking past the development will continue to be protected by a A-Class Fence and under the supervision of TfNSW-certified traffic controllers.

A site crane will also be established to assist in the loading/unloading of materials to the upper levels of the development.

A site access plan has been provided in Appendix B.

#### 209/2024

## **3.0 Existing Road Network and Traffic Conditions**

#### 3.1 Road Network

The road network serving the site (Figure 3) comprises:

- Barrenjoey Road a State Road and sub-arterial route which connects Palm Beach to Pittwater Road and Warriewood
- Whale Beach Road a major local route which connects Barrenjoey Road to Palm Beach and services Whale Beach



Figure 3 - Road Network

#### 3.2 Traffic Conditions

An indication of the existing traffic conditions in the vicinity of the site is provided by data published by TfNSW is expressed in terms of Annual Average Daily Traffic (AADT) and the most recently available data is summarised in the following:



AADT Barrenjoey Road – 30m North of the Crescent, Northbound 9,074 Avalon Beach Southbound 9,606

The operation of the intersections in the vicinity of the site is relatively satisfactory with access to Barrenjoey Road largely limited to residential access and tourists.

#### 3.3 Transport Services

Access to the Metropolitan Transport Network for the site is provided by bus services, which run along Barrenjoey Road. Some of the available routes are:

Route 199: Palm Beach to Manly via Mona Vale & Dee Why

Details of the available public transport services available are provided in Appendix C.

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#### 4.0 Construction Traffic Management Plan

#### 4.1 Construction Vehicle Route

Truck movements will approach and depart the site on Barrenjoey Road, as illustrated in Figure 4. All trucks involved with the works will access the site using the classified State and Regional Road system.

It is unlikely that works of this scale will result in concurrent truck arrivals/departures. Nevertheless, it is noted that any truck queuing or marshalling of construction vehicles will not be permitted on the road network, and call-up procedures will be in place to manage arrivals, if necessary, by the nominated contractor.



Figure 4 - Truck Routes

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#### 4.2 Truck Manoeuvres & Site Access

The largest truck generally requiring access to the Loading Zone during throughout the entire process is a 10.2 m Bogie Truck. The turning path assessment details are provided in Appendix D, indicating satisfactory truck manoeuvring in and out of the Loading Zone.

#### 4.3 Truck Movements

The envisaged truck movements per day throughout the works are as follows:

Demolition	4 - 6 per day
Excavation	4 - 6 per day
Construction	2 - 4 per day
Fitout	2 - 4 per day

Trucks servicing the site are restricted to the approved construction hours only when accessing the streets in the vicinity of the site.

#### 4.4 Construction Hours

The approved hours of construction activity will be subject to DA consent and will most likely be:

Monday to Friday	7 am – 5 pm
Saturday	7 am – 3 pm
Sunday and Public Holidays	No work

Noise from construction activities shall comply with the Protection of the Environmental Operations (Noise Control Regulation 2017).

#### 4.5 Contact Details

The contact person who is to have authority without reference to other persons to comply with instructions issued by the Council's Traffic Engineer or the Police is as follows:

Name: TBC
Contact Number: TBC
Email Address: TBC
209/2024

#### 4.6 Site Induction

All workers and visitors employed on the site by the appointed contractor (including sub-contractors) will be required to undergo a formal' site induction' process, and all the inductions will be performed specifically to each trade according to Workcover OH & S requirements.

The induction will include details of approved access routes to and from the construction site for site staff and delivery vehicles, parking arrangements, as well as standard environmental, WHS, driver protocols and emergency procedures. The agreed work hours must be included as part of this induction.

#### 4.7 Traffic Guidance Scheme

The TGS presents traffic management principles, with detailed information for work site operations contained in the Roads and Maritime Services Traffic Control at Work Sites Technical Manual Version 6.1 dated 28 February 2022. The control of traffic at work sites must be undertaken with reference to WorkCover requirements and RCC Workplace Health and Safety Manuals.

The TGS is prepared by a Certified Traffic Controller (under TfNSW regulations) in accordance with Australian Standards 1742.3. The TGS includes:

- The proposed works site
- Accredited site personnel at the site access
- Loading Zone and traffic control signage

The TGSs for the construction processes are provided in Appendix E.

#### 4.8 Pedestrian Management

Pedestrians walking along the site frontage will be protected by temporary construction fencing. TfNSW accredited traffic controller shall always supervise all vehicle movements into and out of the Loading Zone and materials movements to and from the site, ensuring pedestrians have the right of way at all times.

#### 4.9 Impact on Emergency Vehicle Access

The proposed works would not affect access to the site and neighbouring sites by emergency vehicles. Emergency protocols on the site would indicate a requirement for the traffic controller to assist with emergency access on the site. All truck movements to the site and the incident point would be suspended and cleared. Consequently, any potential impacts on emergency access would be effectively managed throughout the works.

The liaison would be maintained with the ambulance, fire services, police, and other emergency services agencies throughout the construction period, and a 24-hour contact would be made available for 'out-of-hours' emergencies and access.

As such, there would be no impacts on the provision of existing emergency vehicle access to the site or other neighbouring properties as a result of the proposed construction activities.

#### 4.10 Road Serviceability

The contractor will ensure that the roads in the vicinity of the site remain in clean and serviceable states during the construction. Any damage to kerbs, signage, trees, footpaths etc. will be repaired or replaced to the satisfaction of the Council.

#### 4.11 Off-street Parking and Storage

There is limited off-street parking available for workers on site. As such, workers will be informed of the appropriate tool/equipment drop-off and storage arrangement within site sheds and amenities and encouraged to use the available public transport in the vicinity. There will be designated spots within the site for worker's parking and storage area.

#### 4.12 Materials Handling

All materials are to be stored within the site boundary at all times. Loading/unloading of materials will occur from within the site by hand or with the assistance of the site crane. No materials shall be placed dumbed or left on any council road or footpath area at any time.

It is anticipated that a stand plant permit will be required during the initial excavation for the north wall to provide for the set down area for materials loading/unloading. In the event that a Works Zone or another stand plant permit is required, a separate application will be submitted to the Council.

#### 4.13 Public Notification

The nominated contractor would prepare notification letters, under the approval of Council, that would be delivered to nearby properties, to advise of the construction works and timing thereof.

# Appendix A Proposed Plans







	PROPOSED	
89.66m <sup>2</sup>	GARAGE FLOOR - GROSS FLOOR AREA	23.63m <sup>2</sup>
89.66m <sup>2</sup>	SERVICES FLOOR - GROSS FLOOR AREA	58.37m <sup>2</sup>
	GR. FLOOR - GROSS FLOOR AREA	139.16m <sup>2</sup>
	FIRST FLOOR - GROSS FLOOR AREA	126.48m <sup>2</sup>
	SECOND FLOOR - GROSS FLOOR AREA	117.36m <sup>2</sup>
	TOTAL - GROSS FLOOR AREA	465m <sup>2</sup>
0m <sup>2</sup>	GARAGE AND STORAGE - AREA	124.72m <sup>2</sup>
99.64m <sup>2</sup>	ROOF - AREA	199.38m <sup>2</sup>
16m <sup>2</sup>	DECK AND TERRACE - TOTAL AREA	124.7m <sup>2</sup>
19m²/14.76%	HARD SURFACE - AREA	286.3m²/38.7%
61m²/85.24%	SOFT LANDSCAPE - AREA	405.4m²/54.8%
	OUTDOOR RECREATIONAL AREA	48.1m²/6.5%
0m <sup>3</sup>	POOL - VOLUME	46.82m <sup>3</sup>

IE: ICATION	<b>DATE OF ISSUE:</b> 5/11/24	rama	
E: DN: SITE PLAN	DRAWING NO. DA-001	nominated architect Thomas Marin new reg. #1038 6 / 20 ANALON PRAPOIE AVAILON BEACH, NSW 2107 www.armater/Miteds.com	
	REVISION: 01	<ul> <li>e. info@ramaarchitects.com</li> <li>ABN 612 713 425</li> <li>COPYRIGHT OF RAMA ARCHITECTS PTY, LTD.</li> <li>THIS DRAWING IS NOT TO BE USED OR REPRODUCED IN ANY FORM WITHOUT CONSENT.</li> <li>DO NOT SCALE FROM THIS DRAWING</li> </ul>	



7	NOTE: THESE DRAWINGS ARE NOT FOR CONSTRUCTION, FOR DA APPROVAL ONLY	DENOTES AREA OF SWIMMING POOL	
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**DATE OF ISSUE:** 5/11/24

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# Appendix B Site Access Plan









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# Appendix C Transport Service Maps



#### Routes B1, BN1, 154x, 181x, 190x, 199





transportnsw.info

# Appendix D Swept Path Assessment







# Appendix E Traffic Guidance Scheme



#### NOTES:

ALL SIGNS SHALL BE MINIMUM SIZE A.

ALL SIGNS SHALL BE CLASS 1 RETROREFLECTIVE. LOCATION OF SIGNS SHALL BE CONFIRMED ON-SITE TO ENSURE APPROPRIATE VISIBILITY.

ALL SIGNAGE SHALL BE CLEAN, CLEARLY VISIBLE AND NOT OBSCURED.

ALL TRAFFIC CONTROL PLANS SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE TFNSW "TRAFFIC CONTROL AT WORK SITES" MANUAL, VER 6.1 (TfNSW 2022) AND AUSTRALIAN STANDARDS AS1742.3:2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 3: TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS.

THIS TRAFFIC GUIDANCE SCHEME SHALL BE SET UP BY A PERSON HOLDING AN "IMPLEMENT TRAFFIC MANAGEMENT PLAN" TICKET AND THE TFNSW TRAFFIC CONTROL AT WORK SITES CHECKLIST SHALL BE COMPLETED PRIOR TO IMPLEMENTATION.

THE ACCREDITTED PERSONNEL SHALL IMPLEMENT THE APPROVED TCP BEFORE ANY PHYSICAL WORK COMMENCES. ENSURE A COPY OF THE TCP IS KEPT ON-SITE. THE ACCREDITTED PERSONNEL SHALL DRIVE THROUGH THE SITE BEFORE WORKS BEGIN TO ENSURE THAT THE TCP HAS BEEN IMPLEMENTED CORRECTLY AND THAT IT WILL WARN, INSTRUCT AND GUIDE ROAD USERS AS DESIGNED. ANY AMENDMENTS MADE TO THE PLAN MUST BE MARKED ON THE PLAN AND INITIALLED BY THE ACCREDITTED PERSONNEL.

IT IS THE RESPONSIBILITY OF AN ACCREDITTED PERSONNEL WITH A PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN' TICKET TO ENSURE THE FOLLOWING:

- THE INTEGRITY OF ALL TRAFFIC CONTROL MEASURES THROUGH TO THE FINAL REMOVAL. THIS INCLUDES DAILY CHECKS OF ALL SIGNS AND DEVICES. THE CORRESPONDING RECORDS OF CHECKS SHALL BE KEPT ON FILE FOR AUDITING PURPOSES.

- VEHICULAR ACCESS AND SERVICING REQUIREMENTS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES AFFECTED BY TRAFFIC CONTROL MEASURES.

- AT ALL TIMES AN UP-TO-DATE COPY OF "TRAFFIC CONTROL AT WORK SITES" SHALL BE AVAILABLE FOR REFERENCE AND IMPLEMENTATION AS REQUIRED ON-SITE.

ALL WORKERS WILL BE CONFINED TO THE DEDICATED WORKS AREA SHOWN ON THE PLAN.

10. IT IS THE CONTRACTOR'S DUTY TO ENSURE THAT THE APPROPRIATE MEASURES ARE TAKEN TO PROVIDE A SAFE ENVIRONMENT FOR VEHICLES AND PEDESTRIANS TO RELEVANT AUSTRALIAN STANDARDS WHEN THE WORKSITE IS LEFT UNATTENDED.

11. WHEN TRAFFIC CONTROLLER/S ARE NOT ON SITE, TRAFFIC CONTROLLER (T1-34) AND PREPARE TO STOP (T1-18) SIGNS SHALL BE COVERED OR REMOVED .

12. ROADWORK SIGNS SHALL BE COVERED OR REMOVED WHEN WORKERS ARE NOT ON SITE.

13. NOT ALL DIMENSIONS SHOWN ARE TO SCALE.

14. ALL WORKERS MUST ADHERE TO THE APPLICABLE SAFE WORK DISTANCE AS DESCRIBED IN AS1742.3:2009.

15. ALL DISTANCES BETWEEN SIGNS SHALL BE IN ACCORDANCE WITH SECTION 2.5.2 OF AS1742.3:2009. HOWEVER, MODIFICATIONS CAN BE MADE TO SUIT SITE CONDITIONS.

#### 1164 BARRENJOEY ROAD **INITIAL DEMOLITION & EXCAVATION WORKS ON THE GARAGE FLOOR** TRAFFIC GUIDANCE SCHEME

DRAWING REF NO. 209M2024-V1.1-TGS SHEET NO. 01 OF 02 ISSUE DATE 11 October 2024



CERTIFICATION THE DESIGNER AND THE REVIEWER ARE CURRENT CARDHOLDER OF TRAFFIC CONTROL WORK: PREPARE WORKS ZONE

DESIGNER ΝΔΜΕ· CARD NO .: CLASS:

1 licolar

REVIEWER CARD NO.

NAME:

CLASS:

BARRENJOEY ROAD

AIDAN GARDNER TCT1053356 PREPARE WORK ZONE

EHICLE MOVEMENTS USING ONE WAY TAGGERED FLOW DURING INITIAL

DEMOLITON & EXCAVATION AT SITE ACCES

LACHLAN ELLSON TCT0041903 PREPARE WORK ZONE





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