Construction Traffic – Traffic Management

&

Pedestrian Management Plan

981 Barrenjoey Road Palm Beach NSW 2108



JULY 2020

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Type of Assessment: Construction Traffic and Pedestrian Management Plan

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TRAFFIC CONTROL AND MANAGEMENT



1. Introduction

The Traffic Controllers Pty Ltd, were engaged by Pierre Della-Putta, to prepare a Construction Traffic Management and Pedestrian Management Plan for the proposed, Demolition and construction of Lot 100 DP 509808 of 981 Barrenjoey Road, Palm Beach NSW 2108.

1.1Scope of Report

In particular, this report is prepared to address conditions contained in DA2020/0130, issued by Northern Beaches Council. In particular, notes contained in condition 8 relating to Construction Traffic, Traffic and Pedestrian Management contained therein.

The scope of this report is structured as follows:

- Review the existing transport and road network proximate to the proposed development site;
- Identify the proposed work zone areas;
- Forecast the level of construction traffic and identify the anticipated mix of construction and works vehicles;
- Outline the proposed ingress and egress of the construction vehicles to and from this site;

• Outline the required pedestrian protection measures to be implemented within and in the vicinity of this site, in particular whilst construction vehicles are loading and unloading materials.

The CTMP satisfies the Work Health and Safety Act 2017 (NSW), regarding reducing risks to the health and safety of workers and other persons near a construction site. Work Health and Safety Regulation 2017 defines high risk construction work as (amongst other definitions) work which is carried out on, in or adjacent to a road, railway, shipping lane, or other traffic corridor that is in use by traffic other than pedestrians. This CTMP satisfies these requirements. Under the Safe Work NSW Construction work code of practice, a traffic management plan is considered an administrative control measure to minimise risk. As per the hierarchy of control measures, the preferred control is to eliminate risk. This CTMP aims to provide control measures which eliminate risk where possible. Traffic control plans (TCPs) developed in association with this CTMP have been developed in accordance with the current RMS Traffic Control at Work Sites Manual, and Australian Standard AS1742.3 (Manual of uniform traffic control devices – Traffic control for works on roads).

The proposed traffic and pedestrian management measures are identified to demonstrate the feasibility of managing the potential impacts. Prior to the works proceeding, further development of the temporary measures, such as Traffic Control Plans, Pedestrian Management Plans and any associated road related licenses should be prepared by the contractor or another RMS qualified traffic control contractor.

The builder is responsible for acquiring and shall acquire the necessary certificates, licenses, consents, permits, and approvals relevant to the construction on this site.



2. Existing Conditions

2.1 Road Network

The subject site is located along Barrenjoey Road, Palm Beach NSW 2108, which is bounded by Thyra Road to the South and Iluka Road to the North. The proposed works entry will be from Barrenjoey Road. Barrenjoey Road is a RMS owned asset. Being a two-lane two-way road. Site worker parking will be available within the vicinity of the subject site.



Figure 1 - Highlights site from street view



Figure 2 - Illustrates the site configuration

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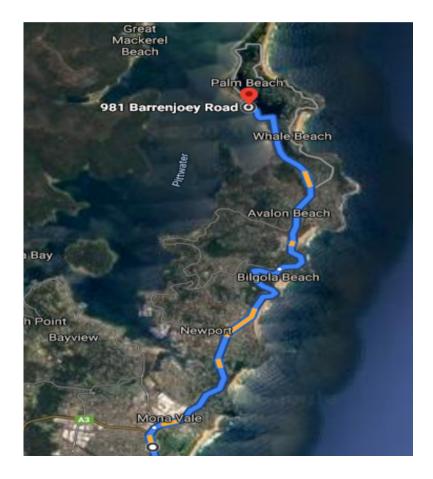


Figure 4 - Demolition, Earth Works and Construction Traffic Movements approaching site

From the south

Demolition, earthworks and construction vehicles traveling to the subject site from the South will be required to travel North along Pittwater Road, Veering Right onto Barrenjoey Road Following it all the way North with the subject site access located on their left hand side. (As marked in BLUE in **figure 4** above).

All Construction vehicles will be required to enter the subject site in a forward facing direction and all Construction vehicles will be required to depart the subject site in a forward facing direction unless approval has been provided by the Northern Beached Council.

NOTE: Trades vehicles attending site, will travel from various locations then through the Palm Beach area so, the above is meant to capture vehicles as they approach the site. Trades vehicles attending site are no bigger than a family 4x4.



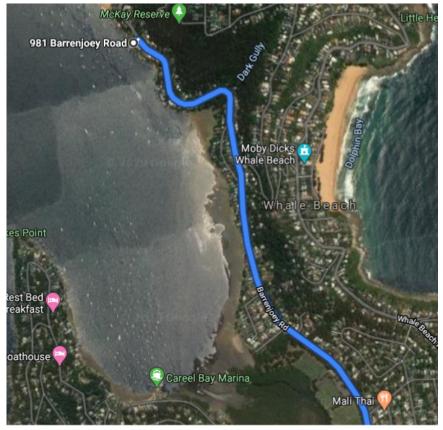


Figure 5 - Demolition, Earth Works and Construction Traffic Movements departing site

All Demolition, earthworks and construction vehicles departing the subject site access gate will be required to depart the subject site at 981 Barrenjoey Road by turning Right onto Barrenjoey Road heading in a southerly direction. (As marked in **figure 5** above).

2.2 Pedestrian Access

There is no footpath located on both the Western and Eastern side of Barrenjoey Road at the front of the subject site. However, there is minimal pedestrian activity along Barrenjoey Road and any pedestrians needing to pass through the site entry access point, while any activity is occurring, would not be not need assistance to cross the driveway as No Pedestrians or Cyclists will be affected by Construction moments and cyclists will be subjected to normal road rules and shall be required to follow the normal rules.

It can be assumed that the commercial pedestrians will have an increased awareness of the existing, prevailing development conditions and the use of other pedestrian routes for bypassing any site activities. This knowledge would then greatly reduce any foot traffic.

Given this, it is deemed that pedestrian activity at the immediate frontage of the subject site, would able to be suitably managed by RMS Accredited Traffic Controllers.







Figure 6– Illustrates No Footpath located along both sides of Barrenjoey Road

3. Details of Proposed Construction Related Activities

3.1 Proposed Works

The development involves alterations and additions to a dwelling house 981 Barrenjoey Road Palm Beach.

All work shall comply with the provisions of the Australian Standard AS2601:2001. Building materials, plant, equipment and the like shall not be stored or placed at any time on Council footpath, roadway, or any other public place. All roads adjoining the site shall be kept clean and free of materials.

Details of the demolition, preparation, construction and their respective durations will be clarified and informed to Council at respective stages of this project.

3.2 Anticipated Construction Vehicle Traffic Generation

Stage 1

- Site Establishment
- Preparation of the main works site
- Excavations associated with building foundations and slabs

Proposed truck types to be used during stage 1 of the works include material, spoil and excavation removal trucks, various small delivery and service trucks, concrete trucks, and semi-trailers for large equipment and plant. Table 1 below indicates the expected frequency and type of establishment vehicles that will be on-site.

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Work Phase	Vehicle	Vehicle	Size	Frequency
		Length (m)	(tonnes)	(per day)
	Rigid Truck	8	-	2-4
Site Establishment	Mobile Crane	8	20	-
Ancillary Works	Rigid Truck	8	-	2-4
Excavation	Rigid Truck	8	12	2-4
Concrete Pour	Concrete Truck	8.5-10.5	-	8-10

Table 1: Site Establishment & Excavation Vehicles

Stage 2

- Civil stormwater works
- Superstructure
- Concrete Pours
- Construction
- Fit out / Façade
- · Landscaping external works
- Completion

Proposed truck types to be used during stage 2 of the works include, various delivery and service trucks, mobile crane and concrete trucks. The table below indicates the frequency and type of construction vehicles that will be on-site

Work Phase	Vehicle	Vehicle	Size	Frequency
		Length (m)	(tonnes)	(per day)
Construction	Flat-bed truck	6.4	-	2-4
Concrete Pour	Concrete Truck	8.5-10.5	-	3-4
Heavy Lifting	Mobile Crane	8	20	-
Fit out / Facade	Flat-bed truck	6.4	-	4-5
Completion	Smaller Truck	6.4	-	2-4
Landscaping Works	Smaller Truck	6.4	-	1-2

Table Q. Construction Vahialas

Any work zone parking for material delivery and works vehicles will be within the site or any work zone granted to the contractor. No kerbside queuing of vehicles would be permitted. For vehicles entering and exiting from the work zone, vehicle movements will be need to be adequately managed by and made under the guidance of RMS accredited traffic controllers. This will incur infrequent trips, and these are not anticipated to interrupt regular traffic conditions.

When considering the above traffic generations, it was predicted that the associated works would generate multiple but infrequent construction traffic.

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All vehicles shall enter and exit the site in a forward facing direction, all vehicles shall be wholly contained on the site before being required to stop.

All work shall comply with the provisions of the Australian standards AS2601:2001 Building materials, plant, equipment and the like shall not be stored or placed at any time on council footpath, roadway or any other public place. All roads adjoining the site shall be kept clean and free of materials.

Traffic Controls:

All work shall be confined to and within any work zone granted to the contractor. Traffic associated with these works will be infrequent in volume and will be able to be accommodated by the local roads (along the prescribed route as in **figure 4-5** above). As Traffic Control is required throughout site works, advance notification shall be given to Council along with a detailed traffic control plan (prepared by the contractor or another RMS qualified contractor). This plan would include all information as required by Council, including a public information campaign to notify residents, (letterbox drop) and motorist (advance warning signs) of these operations.

SPECIAL NOTE: If at any time it was necessary for Emergency Vehicles to access Barrenjoey Road Priority to these vehicles will be given at ALL times.

Traffic volume counts are not available for Barrenjoey Road (as illustrated in figure 7 below)

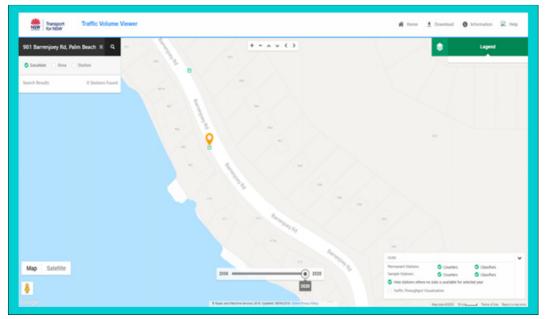


Figure 7- RMS Traffic volume viewer

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Barrenjoey Road, is an approved heavy vehicle route (as illustrated in **Figure 8** below) however the impact those heavy vehicles may have on the works will not need to be taken into consideration as all vehicles shall be wholly contained on the site.

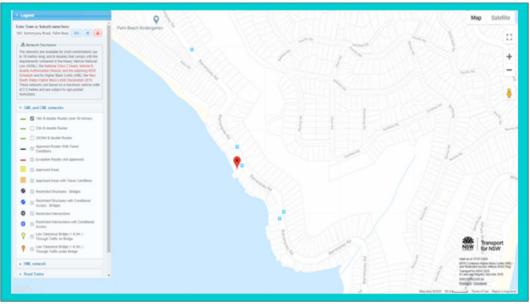


Figure 8- RMS Heavy vehicle Routes

The subject site is located on a bus route (as illustrated in **figure 9** below), effects to bus routes have been considered and it has been determined that busses will not be affected by the proposed works.

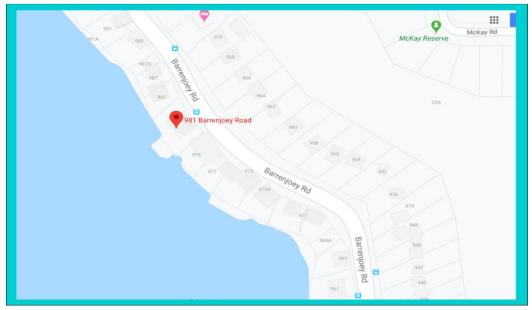


Figure 9– Bus routes

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3.3 Work Zone Area

The primary construction zone is proposed wholly within the boundaries of the subject site (as illustrated below in **figure 10**)



Figure 10- Shows the construction zone

The above identified work zone area, should be considered for provision of worksite vehicles and on-site loading and unloading of materials by the contractor, prior to undertaking any construction activities.

3.4 Access and vehicle standing

Construction vehicles accessing and egressing from the proposed work zone, on Barrenjoey Road, shall only make use of the allocated work zone parking provided inside the work zone. No queuing will be allowed on any surrounding roadways.

All vehicles shall enter and exit the site in a forward facing direction, all vehicles shall be wholly contained on the site before being required to stop.

3.5 Protection of Pedestrians, Vehicles and Public Assets

The numbers (frequency) of vehicular movements are likely to be minor. Given the location of the proposed work zone parking, pedestrian activity is minimal. As such, the associated construction traffic is not expected to cause any significant hazards to adjacent properties, pedestrians, cyclists, parked vehicles or public assets.



Construction Hours 3.6

All work, including Construction work/civil work, including the delivery of materials, is only permitted on the site between the hours of 7:00am to 5:00pm Monday to Friday and 8:00am to 1:00pm Saturday. No work will be permitted on Sundays or Public Holidays, unless otherwise approved by Council. Demolition and excavation works are restricted to 8:00am - 5:00pm Monday - Friday Only.

Site Safety 3.7

Prior to the commencement of any building work a fence shall be erected along the property boundaries of the development site, except where an existing 1.8m high boundary fence is in good condition and is capable of securing the site. Any new fencing shall be temporary (such as cyclone wire) and at least 1.8m high, complying with Workover Guidelines, located hard against existing site boundary to prevent unauthorised public access. pedestrian protection and in particular to prevent access outside of work hours. All fencing is to be maintained for the duration of the construction to ensure that the site is secured and privacy of the adjoining properties is not compromised. Where the development site is located within 3.6m of a public place then a Class A or Class B hoarding shall be constructed appropriate to the works proposed. A Works Permit for such hoardings shall be submitted to Council for approval prior to the issue of any, Construction Certificate. Toilets, site sheds, building material storage and waste storage areas will be contained within the site.

The public way must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances. Non-compliance with this requirement will result in the issue of a notice by Council to stop all work on site.

Primary Contact 3.8

The developer has nominated as the primary contact:

rchitects Ink

Pierre Della-Putta Director Architect reg.5492 pierre@architectsink.com.au Telephone +61 2 9363 0977 Mobile +01 414 305007

Studio 6, 21 William Street (enter via driveway) Double Bay NSW 2028 PO Box 823 Double Bay NSW 1380

architectsink.com.au

This person has authority to comply with any instructions issued by Council or Police.

Item A2 of the Council approved states; A sign must be erected and maintained in a prominent position on the site for the duration of the works, which contains the following details:

 name, address, contractor licence number and telephone number of the principal contractor, including a telephone number at which the person may be contacted outside working hours, or owner-builder permit details (as applicable)

name, address and telephone number of the Principal Certifying Authority,

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• a statement stating that "unauthorised entry to the work site is prohibited".

Any such sign is to be maintained while the building work, subdivision work, or demolition work is being carried out but, must be removed when the work has been completed.

4. Traffic and Pedestrian Management Measures

4.1 Keeping Pedestrians and Vehicles Apart

The following actions will help keep site pedestrians, pedestrians and vehicles apart both on site and when vehicles enter or exit the Work Zone;

- Secure areas where vehicles and powered mobile plant are being used, for example pedestrian barriers or traffic control barricades.
- Provide separate clearly marked pedestrian walkways that take a direct route where possible.
- Do not block walkways so that site pedestrians have to step onto the vehicle route.
- Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT you must NOT stop pedestrians in anticipation i.e. <u>at all times the pedestrians have right-of-way</u> on the footpath not the trucks
- When exiting the site, make sure drivers driving out onto public roads can see both ways along the footpath before they move onto it.
- The Roads Act does not give any special treatment to trucks leaving a construction site <u>the vehicles</u> <u>already on the road have right-of-way</u>
- Designate specific parking areas for workers and visitor's vehicles outside of the work zone.

4.2 Minimising Vehicle Movements and Vehicles Reversing

A key component of traffic and pedestrian conflict management involves Minimising vehicle movements. Vehicles will be prohibited from reversing, as reversing is a major cause of accidents.

Whilst vehicles are moving, the following applies;

- Traffic controllers to control site pedestrians.
- Use mirrors and warning devices such as horn, flashing beacon and indicators.
- Ensure drivers have another person to direct him or her. The driver should maintain visual contact with the person directing them and signalers should wear high visibility clothing.
- Truck and vehicles are to be positioned wholly within the granted construction parking zones.



5. Training, Inspection, Monitoring and Auditing

The construction contractor shall implement appropriate training and induction in the requirements of this pedestrian management plan. All employees and contractors working on site will undergo site induction training which includes Environmental due diligence training. The induction will include the following issues;

- This pedestrian management plan
- The existence of traffic restrictions and what this means for the project
- Delivery hours and locations
- Reporting and recording Environmental incidents related to traffic, and
- Traffic Control measures and the development and implementation of Traffic Control plans

Records will be kept of all personnel undertaking the site induction and training.

5.1 Inspections

The requirement to inspect traffic control is stipulated in Section 6 of the RMS Traffic Control at Worksites manual and Appendix A of the Australian Standards 1742.3. The traffic control and pedestrian management in this project will be primarily short-term control and therefore the pre-start and closedown inspections should be undertaken. The traffic control contractor has the responsibility of conducting the inspections, which are;

- Daily observational monitoring before work starts; and
- Regularly through the shift and prior to closing down

5.2 Monitoring

Traffic and pedestrian monitoring during the site establishment and construction phases will be undertaken generally and will include daily pre-start visual inspections.

5.3 Reporting and Auditing

The traffic control contractor, on a needs basis, shall conduct reporting and auditing. Given the time span of the demolition and construction works comprehensive reporting and auditing is deemed as being required.

5.4 Summary of Contractor Responsibilities

The following summarises the anticipated contractor responsibilities throughout the period of construction. **General-**

- Site Induction; (including environmental due diligence training) to include driver training on approved routes and code of conduct for the project site.
- Traffic to the Site; will obey curfew times and driver instructions.
- Vehicles; will not park or queue other than in designated areas.

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Inspections-

- **Daily**, the approved Traffic Control contractor will complete daily; pre-start and pre-closedown inspections of short-term traffic control using the checklist.
- Weekly, the approved Traffic Control contractor will complete inspections of longer-term traffic control using the checklist.

Traffic Control Plans-

• All TCP's; used during the construction activities will be developed by an authorised person for this activity, in accordance with AS 1742.3 – 2002 Manual of uniform traffic control devices Part 3 and the current RMS guide to Traffic Control at Worksites.

5.5 Nature of Loads

Civil works vehicles shall have covered loads, the nature of which comprises of ENM/VENM, Sandstone, Stormwater pipes and construction supplies, etc. Mud and soil form vehicular movements to and from the site shall not be deposited on the road.

5.6 Permanent & Portable Variable Message Signs

There shall be no portable variable message signs as there is no road closure. There shall be no Permanent Variable message signs in the vicinity of the woks zone.





Contact "Dial Before You Dig" before commencing any building activity on the site.

Some useful Contacts;

•	Department of Fair Trading	13 32 20 <u>fairtrading.nsw.gov.au</u> Enquiries relating to Owner Builder Permits and Home Warranty Insurance.	Enquiries
٠	Dial Before You Dig	1100 <u>dialbeforeyoudig.com.au</u>	1100
•	Long Service Payments	131 441 lspc.nsw.gov.au	131 441
•	NSW Government	nsw.au/fibro diysafe.nsw.gov.au Information on asbestos and safe work practices	diysafe.n
•	NSW Office of Environment and Heritage	131 566 <u>environment.nsw.gov.au</u>	131 566
•	Sydney Water	13 20 92 sydneywater.com.au	13 20 92

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APPENDIX A

Standard Requirements for Construction Traffic Management Plans

The Applicant or contractor undertakes to follow and abide by the following requirements at all times during site demolition, excavation and construction works at Barrenjoey Road Palm Beach NSW 2108

1. Details of routes to and from site and entry and exit points from site - site specific

2. Details of roads that may be excluded from use by construction traffic i.e. roads with load limits, quiet residential streets or access/turn restricted streets – site specific

3. The approved truck route plan shall form part of the contract and must be distributed to all truck drivers.

4. All vehicles must enter and exit the site in a forward direction (unless specific approval for a one-off occasion is obtained from the City's Construction Regulation Unit).

5. Trucks are not allowed to reverse into the site from the road (unless specific approval for a one-off occasion is obtained from the City's Construction Regulation Unit).

6. The Applicant must provide the City with details of the largest truck that will be used during the demolition, excavation and construction.

NOTE: No dog trailers or articulated vehicles (AV) to be used (unless specific approval for a one-off occasion is obtained from the City's Construction Regulation Unit).

7. Oversize and over-mass vehicles are not allowed to travel on Local Roads (unless approval for a one-off occasion is obtained from the City's Traffic Operations Unit). Requests to use these vehicles must be submitted to the City 28 days prior to the vehicle's scheduled travel date. For more information please contact the National Heavy Vehicle Regulator (NHVR) on 1300 696 487 or www.nhvr.gov.au.

8. No queuing or marshalling of trucks is permitted on any public road.

9. Any temporary adjustment to Bus Stops or Traffic Signals will require the Applicant to obtain approval from the STA and RMS respectively prior to commencement of works.

10.All vehicles associated with the development shall be parked wholly within the site. All site staff related with the works are to park in a designated off street area or be encouraged to use public transport and not park on the public road.

11.All loading and unloading must be within the development site or at an approved "Works Zone".

12. The Applicant must apply to the City's Traffic Works coordinator to organise appropriate approvals for Work Zones and road closures.

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13. The Applicant must apply to the City's Construction Regulations Unit to organise appropriate approvals for partial road closures.

14.The Applicant must apply to the Transport for NSW's Transport Management Centre for approval of any road works on State Roads or within 100m of Traffic Signals and receive an approved Road Occupancy License (ROL). A copy of the ROL must be provided to the City.

15. The Applicant must apply to the City's Construction Regulations Unit to organise appropriate approvals for temporary driveways, cranes and barricades etc.

16. The Applicant must comply with development consent for hours of construction.

17.All Traffic Control Plans associated with the CTMP must comply with the Australian Standards and Roads and Maritime Services (RMS) Traffic Control at Work Sites Guidelines.

18.Traffic Controllers are NOT to stop traffic on the public street(s) to allow trucks to enter or leave the site. They MUST wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site - the vehicles already on the road have right-of-way.

19.Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT you must NOT stop pedestrians in anticipation i.e. at all times the pedestrians have right-of-way on the footpath not the trucks.

20.Physical barriers to control pedestrian or traffic movements need to be determined by the City's Construction Regulations Unit prior to commencement of work.

21. The Applicant must obtain a permit from the City's Construction Regulation Unit regarding the placing of any plant/equipment on public ways.

22. The Applicant must apply to the City's Building Approvals Unit to organise appropriate approvals for hoarding prior to commencement of works.

23.The CTMP is for the demolition, demolition and construction of building works, not for road works (if required) associated with the development. Any road works will require the Applicant or the contractor to separately seek approval from the City and/or RMS for consideration. Also Work Cover requires that Traffic Control Plans must comply with Australian Standards 1742.3 and must be prepared by a Certified Traffic Controller (under RMS regulations).

24.Please note that the provision of any information in this CTMP will not exempt the Applicant from correctly fulfilling all other conditions relevant to the development consent for the above site.



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