



PRELIMINARY CONSTRUCTION TRAFFIC MANAGEMENT PLAN

FOR

CONSTRUCTION WORKS AT

346 – 352 WHALE BEACH ROAD

PALM BEACH NSW 2108

Prepared for

Harry Seidler and Associates

By

TEF Consulting

Report Document Control

Title	Preliminary Construction Traffic Management Plan for construction works at 346 – 352 Whale Beach Road, Palm Beach NSW 2108
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1 INTRODUCTION

Report title	Preliminary Construction Traffic Management Plan for construction works at 346 – 352 Whale Beach Road, Palm Beach NSW 2108
Client	Harry Seidler and Associates
Background information used for preparation of the present report	• Technical characteristics of vehicles involved in deliveries and construction
Consultation undertaken	• Client Harry Seidler and Associates • Builder: To be appointed
Important note about this report	• This report has been prepared in response to Council requirement, to be provided as part of the Development Application documentation. • Typically, a CTMP would be prepared when the development progresses to the construction (post DA approval) stage, because it requires interaction between the traffic engineer and the builder to work out exact requirements for the proposed construction activities in terms of vehicle types, material quantities and frequency of truck movements. • The above information is not available at this stage. • The current CTMP has been prepared based on the information from approved CTMPs for developments of similar nature and size. To the best of the author's knowledge the current CTMP very closely describes the traffic management arrangements for the future construction works at the subject site.

2 PROPOSED WORKS

Work site 346 – 352 Whale Beach Road, Palm Beach NSW 2108
Refer to **Figure 1**.



Figure 1. Work site location.

Type of works subject of this CTMP	- No 346 - No construction works are proposed within this lot.	
	- Nos 348 – 352 - Demolition of the existing house - Excavation and piling - Construction of the proposed double storey residential dwelling - Five (5) bedrooms - Various facilities, including a pool and a gym - Four (4) car parking spaces on the lower ground level - Fitout and external works - The construction activities required to be included in the CTMP have been identified from consultation with the client. - The construction activities not generating external traffic and not requiring checks of vehicle manoeuvring within the work site do not form part of the present CTMP.	
Staging and duration of construction period	Approximately 24 months	
	Demolition	2 months
	Excavation	6 months
	Structure	6 months
	Fitout	10 months
	External works	4 months (concurrently with the structure and fitout phases)
	Demolition and excavation	25
	Structure	15
	Fitout	15
	External works	10

2.1 Construction activities

Hours of operation	Monday to Friday	7:00 a.m. to 5:00 p.m.
	Saturdays	7:00 a.m. to 1:00 p.m.
	Sundays and public holidays	No work
Types of vehicles	- Small rigid vehicles (SRVs), Medium rigid vehicles (MRVs) and Heavy Rigid Vehicles (HRVs) - SRVs, MRVs and HRVs are defined in AS 2890.2-2002.	
Traffic generation by project stage	- Based on the information from a similar CTMP previously completed by TEF Consulting. - Refer to Table 2.1 - Table 2.1 contains information about all truck trips, including time of trucks staying on-site.	

Table 2.1. Frequency of truck movements.

Activity	Material	Number of trucks per day		Truck types	Duration of truck stay on site (HOURS)	Delivery Hrs	
		Weekdays	Saturday			Weekdays	Saturday
Demolition & Excavation	Demolished material	5	4	SRV/MRV	3	7:00 am - 5:00 pm	7:00 am - 1:00 pm
	Excavated material	10	4	SRV/MRV	1.5	7:00am - 5:00pm	7:00 am - 1:00 pm
	Imported fill	2	1	SRV/MRV	1.5	7:00am - 5:00pm	7:00 am - 1:00 pm
Structure	Concrete	15	5	MRV/HRV	1	7:00am - 5:00pm	7:00 am - 1:00 pm
	Mobile crane	2*	0	SRV/MRV	1	7:00am - 5:00pm	7:00 am - 1:00 pm
	Modular wall panels	3	2	SRV/MRV	1	7:00am - 5:00pm	7:00 am - 1:00 pm
	Structural steel	4	2	SRV/MRV	4	7:00am - 5:00pm	7:00 am - 1:00 pm
	Waste removal	2	2	SRV/MRV	4	7:00am - 5:00pm	7:00 am - 1:00 pm
	Miscellaneous	2	2	SRV/MRV	4	7:00am - 5:00pm	7:00 am - 1:00 pm
Fitout	Plasterboard/FC	2	2	SRV/MRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Tiles	2	2	SRV/MRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Sand/cement	2	2	SRV/MRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Waste removal	2	2	SRV/MRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Miscellaneous	2	2	SRV/MRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
External Works	Glazing	2	2	SRV/MRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Concrete	2	2	SRV/MRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Brickwork	2	2	SRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Landscaping	2	2	SRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
	Miscellaneous	2	2	SRV	3	7:00am - 5:00pm	7:00 am - 1:00 pm
*To deliver tower crane parts and erect tower crane							

Note: Table 2.1 indicates the general duration of truck stay on site. During the works, arrival and parking of trucks will not be for every working day for the whole period, but rather for one to two weeks at a time on a need basis, with breaks for a few weeks in between.

Truck Types	SRV	Small rigid vehicle – load capacity of 4 tonnes, typically single rear axle, are 6.4 metres long
	MRV	Medium rigid vehicle – load capacity of 8 tonnes, typically single rear axle dual tyres, are 8.8 metres long
	HRV	Heavy rigid vehicle – load capacity of 12-16 tonnes, typical dual rear axle, up to 12.5 metres long

3 PROPOSED TRAFFIC MANAGEMENT

3.1 Road network and access conditions

Delivery routes	Refer to Figure 2.
	• Delivery vehicles travelling via Barrenjoey Road will turn right onto Whale Beach Road in order to reach the work site. • In order to leave, delivery vehicles will travel on Whale Beach Road and travel westbound onto Florida Road. After that, vehicles will travel northbound onto Ocean Road and then turn onto Beach Road. Vehicles will then turn onto Barrenjoey Road in order to exit.
Plant	• Concrete pump ◦ To be delivered on a Medium Rigid Vehicle (MRV) on days when they are required. ◦ Will be located within the Works Zone. ◦ A Traffic Control Plan (TCP) will be in place for each of these occasions ▪ The TCP will be provided in the final CTMP • Excavators ◦ To be delivered on a Medium Rigid Vehicle (MRV) on days when they are required. • Tower crane ◦ To be delivered on a Heavy Rigid Vehicle (HRV) and installed on site using mobile cranes. ▪ Refer to plans attached in the Appendix. • Mobile crane ◦ To be delivered on a Medium Rigid Vehicle (MRV) on days when they are required. ◦ Will be located within the Works Zone. ◦ A TCP will be in place for each of these occasions ▪ The TCP will be provided in the final CTMP



Figure 2. Proposed truck delivery routes.

Road network assessment

- Barrenjoey Road
 - State road (MR 164)
 - 2 travel lanes and parking opportunities on both sides
- Whale Beach Road
 - Local road
 - 2 travel lanes and parking opportunities on both sides
- Florida Road
 - Local road
 - 2 travel lanes and parking opportunities on alternate sides
- Ocean Road
 - State road (MR 164)
 - 2 travel lanes and parking opportunities on both sides
- Beach Road
 - State road (MR 164)
 - 2 travel lanes and parking opportunities on both sides
- All of the above roads are designed to accommodate heavy vehicles, including Heavy Rigid Vehicles (HRVs).
- Other streets in the surrounding area are local/local collector roads. Street conditions are typical for a residential area, with low to medium traffic volumes. Predominantly unrestricted parking is provided.
 - General speed limit around the area is 60 km/h on state and most regional roads and 50 km/h on regional and local roads.

3.2 Traffic management details

Works Zone	- Demolition and excavation will occur within the site. - One (1) Works Zone on the western side of Whale Beach Road is proposed for a length of 13 metres. It will be proposed for 16 months. - Refer to the Appendix. - Will be used for loading and unloading activities. - The Works Zone will be paid for by the principal contractor if approved. - To be erected by the Council prior to any construction activities. - Most loading and unload activities will be contained within the work site, with only some loading/unloading activities being made from the Works Zone.
Site access	- The site will be accessed from Whale Beach Road. - The Works Zone and proposed driveway (when constructed) will be the only access points for any vehicles. - Workers' access will be through a temporary scaffold stairs when required.
Pedestrian management	- Pedestrians will be managed, if necessary, when trucks enter and leave the Works Zone or proposed driveway (when constructed). - Traffic controllers will be present when there are truck movements in and out of the Works Zone or proposed driveway (when constructed). - This is to ensure pedestrians' and cyclists' safety when trucks are loading/unloading in the Works Zone. - Access to the neighbouring properties will not be affected.
Internal traffic management	No specific internal traffic management on the site will be required. The site is of sufficient size to accommodate necessary material stockpiling.
Traffic control on street	- Traffic controllers will be required to ensure the safety of both oncoming vehicles and cyclists when construction vehicles are loading/unloading on the western side of Whale Beach Road. - Traffic cones will be placed to stop oncoming vehicles and alert them about the temporary one lane road (when delivery vehicles are using the Works Zone).
Traffic impacts on the street network	- The maximum expected combined number of truck movements will be in the order of 15 trips in and 15 trips out per day during the structural phase. - The likely impact of 30 truck movements per day will not have a negative impact on traffic conditions in the surrounding streets. - Access to the neighbouring properties will not be affected. - To minimise impacts on the surrounding road network, trucks are to arrive in a staggered manner, in order to decrease congestion. - All construction vehicles must follow the routes designated in the Construction Traffic Management Plan.

Cranes	• Mobile cranes will be entering and exiting the proposed Works Zone in a forward direction when required. • A tower crane will be established within the site.
Vehicle manoeuvring	• The proposed arrangements for vehicles movements (mostly through traffic, entering at one end of the Works Zone and leaving through the other end) provide for a simple solution, negating the need for truck manoeuvring on site. ◦ The existing street widths provide sufficient room for the manoeuvring of the largest delivery vehicles (HRVs). ▪ Refer to the Appendix. ◦ Concrete pumps and mobile cranes will enter/leave the Works Zone in the same manner as other delivery vehicles. • After the construction of the proposed driveway and garage, SRVs can manoeuvre in front of the garage in order to enter/leave the site in a forward direction.
Parking	• There is no parking on site. However, most construction personnel can park on the northern side of Whale Beach Road, approximately 90 m east of the site. Other construction personnel will be encouraged to car pool or use public transport.
Public information campaign	• No road changes are proposed that would require the public to be notified. It is recommended that residents and businesses along Whale Beach Road be notified about the proposed works by a letterbox drop 14 days prior to the beginning of works.
Temporary road closures	• Not proposed

4 ADDITIONAL REQUIREMENTS

Parking restrictions	All existing parking restrictions are to be maintained and protected.
Pedestrian and bicycle access points and links	To be maintained and protected.
All TCPs shall comply with the provisions of	• Australian Standard 1742.3-2002 Manual of uniform traffic control devices – Traffic control devices for works on roads, • RMS Manual “Traffic control at work sites” (TCWS), • RMS Specification G10 – Control of Traffic, • RMS Road Safety Audit Guide, • RMS Interim Guide to Signs & Markings, • RMS Regulatory Signs Guide, • RMS Road Occupancy Manual, • AUSTROADS Road Safety Audit Guide, • AUSTROADS Guide to Traffic Engineering Practice, Parts 1 to 15, (as required), • Australian Standard AS1742 Manual of uniform traffic control devices, Parts 1, 2 and 4 to 14, (as required), • Australian / New Zealand Standard – AS/NZS3845 Road Safety Barriers Systems.
Qualifications	All TCPs are to be prepared by qualified persons only. Suitable qualifications: • an engineering degree in traffic engineering or related discipline; or • an RMS certificate at an appropriate level.

Signposting and line marking	There shall be no conflicting messages between existing and temporary signs.
Policies in addition to traffic management and control	All construction personnel, including subcontractors, will be made aware of • OH&S Policy, • Environmental Policy, • Quality Policy, • Drug and Alcohol Policy; and • Other policies as required by the construction manager and the builder
Approvals	Contractors shall obtain the necessary approvals from Council and RMS for all works within the road reserve and/or any changes to existing infrastructure, installation and/or changes of any regulatory traffic control device.
Access to properties	• maintain existing property access points, • maintain access to community facilities.
Traffic control devices	Shall be • installed in accordance with warrants and relevant guidelines, • regularly maintained and • controlled by appropriately trained traffic control staff.
Unplanned incident management – road network	• inform RMS Traffic Management Centre (TMC), Police and emergency services as required, • if resources are available, provide initial response to unplanned incidents with the aim to make the incident scene safe, and prevent further harm to persons or property, • provide support to emergency services, including traffic control in the vicinity of the incident, • during major incidents, provide a senior construction representative on-site to liaise with the RMS and emergency service agencies; and • reschedule planned works that will interfere with the incident, or create additional delays to those road users already affected by the incident.

5 REFERENCES

RMS (2010) Traffic Control at Work Sites Manual version 6.0

Australian/New Zealand Standard 2890.1:2004 Off-street car parking

Australian Standard 2890.2-2002 Parking facilities. Part 2: Off-street commercial vehicle facilities

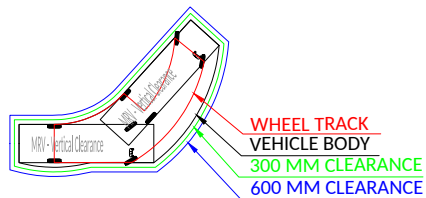
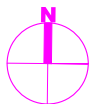
Austrorads (1995) Guide to Traffic Engineering Practice Part 13 – Pedestrians

Appendix

Vehicle manoeuvring and traffic management diagrams



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Dwg No 21011/01 | Rev. A | 12/11/2018

Client:
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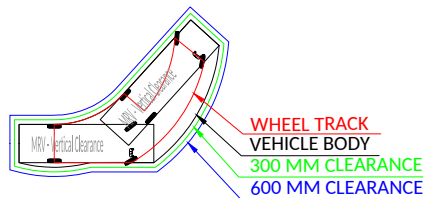
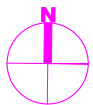
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Proposed traffic management

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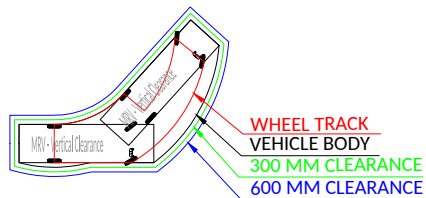
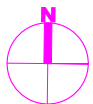
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Proposed traffic management - Heavy Rigid Vehicle (HRV) entering/exiting the Works Zone

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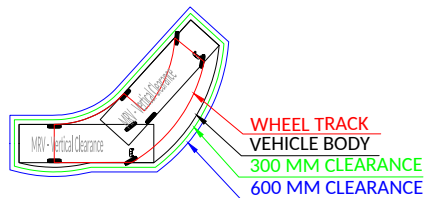
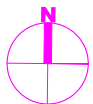
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Proposed traffic management - Medium Rigid Vehicle (MRV) entering/exiting the Works Zone

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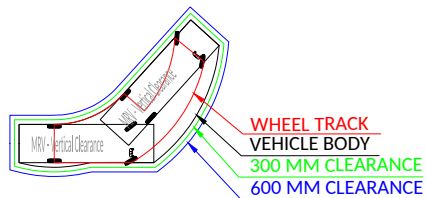
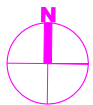
SCALE 1:700@A4

Proposed traffic management - Traffic passing on the one lane road (while construction vehicles are using the Works Zone)

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SCALE 1:700@A4

Proposed traffic management - SRV conducting a 3-point turn in front of the proposed garage (after its construction)

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