PROPOSED MIXED USE DEVELOPMENT

321-331 CONDAMINE STREET, MANLY VALE

Traffic and Parking Assessment Report

19th June 2020

Ref: 20006

Prepared by

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1. INTRODUCTION

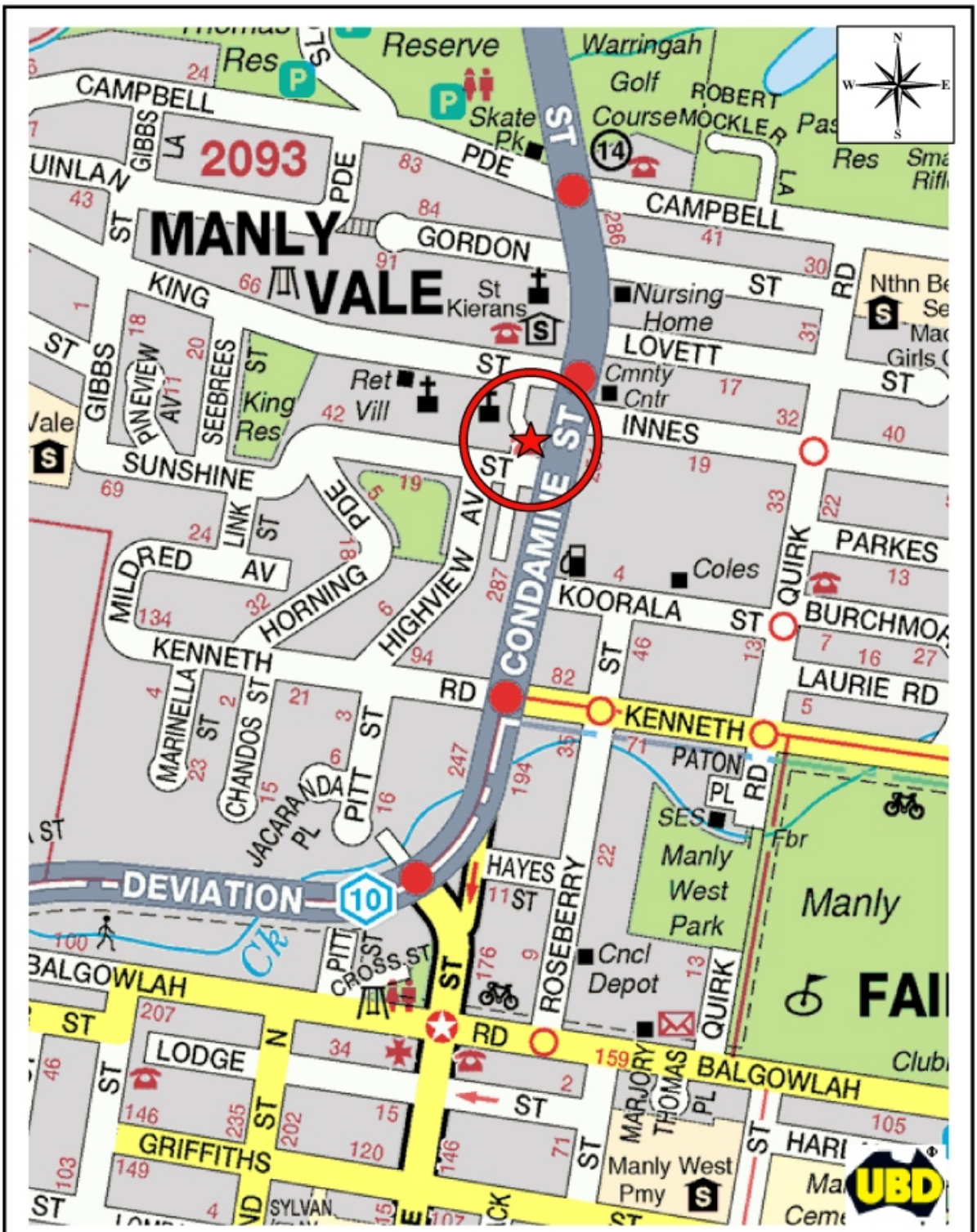
This report has been prepared to accompany a Development Application (DA) to Northern Beaches Council for a proposed mixed use development on a consolidated sate at 321-331 Condamine Street, Manly Vale (Figures 1 and 2).

The proposed development site is located on the north-western corner of the Condamine Street / Sunshine Street intersection. It has a total site area of approximately 1,274.4m^2 with frontages of approximately 35.65m to Condamine Street, 31.1m to Sunshine Street and 38.10m to Somerville Place at the rear of the site.

Existing Site Development

The existing site development comprises 4 mixed use buildings with a combined retail/commercial floor space of approximately 600m^2 and approximately 4 residential dwellings. As can be seen in the aerial photograph below, the buildings are served by at-grade carparks that gain direct access to Somerville Place.

Aerial photograph of the site



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LOCATION

FIGURE 1


GORDO
N
W
E
S
LOVETT ST
KING ST
SOMERVILLE PL
CONDAMINE ST
INNES RD
SUNSHINE ST
AVE
PL
SOMERVILLE
LANE
ANE
HIGHVIEW
KOORALA ST
Terraffic Pty Ltd
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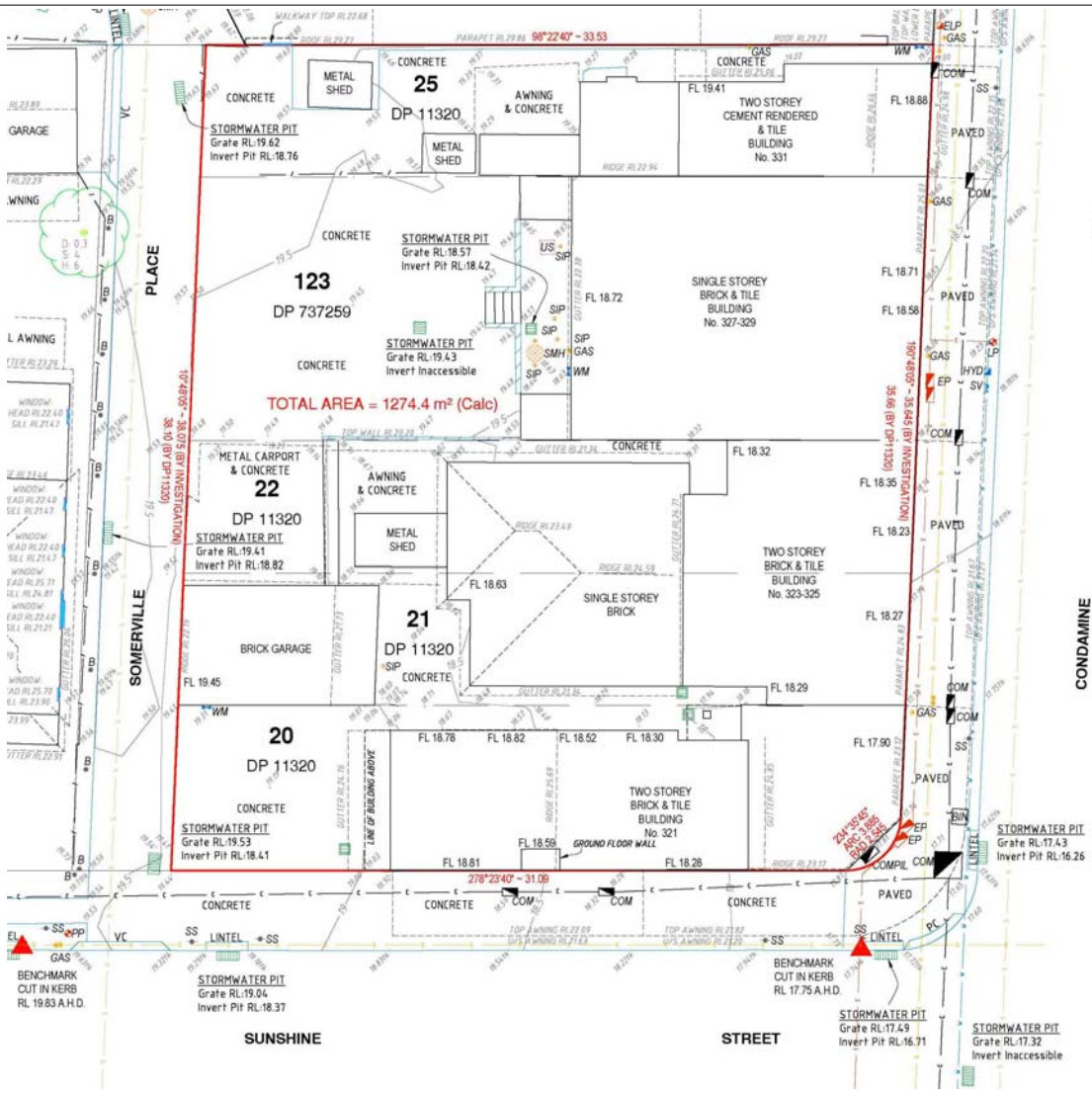
SITE
FIGURE 2



Site Survey

Proposed Development

The development proposal involves the demolition of the existing building and construction of a new mixed use building comprising 4 small retail shops with a combined floor area of 370.37m^2 and 33 residential apartments as follows:

Retail

Retail 1	58.81m^2
Retail 2	110.06m^2
Retail 3	139.25m^2
Retail 4	62.25m^2
Total Retail	**370.37m^2**

Residential	
1 bedroom units	10
2 bedroom units	23
Total Units	**33**

The proposed development is served by a total of 68 off-street car parking spaces comprising 38 resident spaces, 7 visitor and 23 retail spaces. An on-site loading space capable of accommodating a courier van is also proposed on the ground level. As per the current arrangement, larger delivery vehicles will temporarily park in the 1 HOUR PARKING zone along the Condamine Street frontage.

Vehicular access to the proposed development is off Somerville Place via a two-way 5.5m wide combined entry/exit driveway located adjacent to the northern site boundary.

Public Transport Accessibility

The subject site has convenient access to the following bus service operated by Sydney Buses:

Route B1 B-Line Mona Vale to City Wynyard via Narrabeen, Dee Why, Brookvale, Mosman and Neutral Bay (operates daily)

Route E54 Mona Vale to Milsons Point (Express Service) via Warriewood, Narrabeen, Dee Why, Brookvale, Manly Vale, Mosman, Neutral Bay and North Sydney Station (operates daily)

Route E65 South Curl Curl to City Wynyard (Express Service) via Freshwater, Manly Vale, Cremorne and Neutral Bay (operates daily)

Route E66 Allambie to City Wynyard (Express Service) via Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route E68 Brookvale to City Wynyard (Express Service) via North Balgowlah, Seaforth, Mosman and Neutral Bay (operates weekday peaks only)

Route E75 Brookvale to City Wynyard (Express Service) via Manly Vale and Neutral Bay (operates weekday peaks only)

Route E76 Dee Why to City Wynyard (Express Service) via North Curl Curl Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route E77 Dee Why to City Wynyard (Express Service) via Wingala, North Curl Curl Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route E78 Cromer Heights to City Wynyard (Express Service) via Narraweena, Dee Why, Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route E79 Wheeler Heights to City Wynyard (Express Service) via Narraweena, Dee Why, Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route E80 Collaroy Plateau to City Wynyard (Express Service) via Dee Why, Brookvale, Manly Vale and Neutral Bay (operates weekday peaks only)

Route E83 North Narrabeen to City Wynyard (Express Service) via Narrabeen, Dee Why, Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route E85 Mona Vale to City Wynyard (Express Service) via Warriewood, Narrabeen, Dee Why, Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route E88 North Avalon to City Wynyard (Express Service) via Mona Vale, Narrabeen, Manly Vale, Mosman and Neutral Bay (operates daily)

Route E89 Avalon to City Wynyard (Express Service) via Mona Vale, Narrabeen, Mosman and Neutral Bay (operates daily)

Route L90 Palm Beach to City Wynyard (Limited Stops) via Avalon, Newport, Narrabeen, Brookvale, Mosman and Neutral Bay (operates daily)

Route 132 Warringah Mall to Manly via North Balgowlah and Seaforth (operates daily)

Route 135 North Head to Warringah Mall via Manly, Balgowlah, Manly Vale and Brookvale (operates daily)

Route 142 Pittwater Place Shopping Centre to Kamaroi Rudolf Steiner School (operates morning peak only)

Route 145	Warringah Mall to Seaforth via Manly Vale (operates weekdays only)
Route 151	Mona Vale to City QVB via Narrabeen, Dee Why, Brookvale, Mosman, Neutral Bay and North Sydney Station (operates daily)
Route 168	North Balgowlah to Milsons Point via Seaforth, Cremorne, Neutral bay and North Sydney (operates weekday peaks only)
Route 178	Cromer Heights to City Wynyard via Narraweena, Dee Why, Brookvale, Manly Vale, Cremorne and Neutral Bay (operates daily)
Route 180	Collaroy Plateau to City Wynyard via Dee Why, Brookvale, Manly Vale and Neutral Bay (operates daily)
Route 188	Mona Vale to City Wynyard (Express Service) via Narrabeen, Dee Why, Brookvale, Mosman, Neutral Bay and North Sydney Station (operates daily)

The purpose of this report is to assess the traffic, servicing and parking implications of the proposed development.

2. PARKING AND SERVICING ASSESSMENT

Parking Provision

Appendix 1 in Part H of the Warringah Development Control Plan (amendment 17) nominates the following parking requirements that are applicable to the proposed development:

Multi-dwelling housing, Residential flat buildings, Serviced apartments (including holiday flats), Shop-top housing (residential component)

- 1 space per 1 bedroom dwelling
- 1.2 spaces per 2 bedroom dwelling
- 1.5 spaces per 3 bedroom dwelling
- 1 visitor space per 5 units or part of dwellings

Shop (includes retail / business component of shop top housing, retail premises and neighbourhood shop)

- 1 space per 16.4 m^2 GLFA (6.1 spaces per 100 m^2 GLFA)

Application of those parking rates to the proposed development yields a total requirement of 68 spaces calculated as follows:

Residential	
10 x 1 bedroom units @ 1.0 space per dwelling	10.0 spaces
23 x 2 bedroom dwellings @ 1.2 spaces per dwelling	27.6 spaces
Total resident parking	*37.6 spaces (rounded to 38 spaces)*
33 dwellings @ 1 visitor space per 5 dwellings	6.6 spaces (rounded to 7 spaces)
Total	**44.2 spaces (rounded to 45 spaces)**
Retail	
370.37m^2 @ 6.1 spaces per 100m^2	22.6 spaces (rounded to 23 spaces)
Total	***66.8 spaces (rounded to 68 spaces)***

The proposed development satisfies the DCP requirement with the provision of 68 spaces comprising 38 resident spaces, 7 visitor and 23 retail spaces.

On-Site Loading Facilities

Part C2 of the Warringah Development Control Plan notes the following with regard to on-site loading facilities:

> **On-site loading and unloading**
>
> 6. Facilities for the loading and unloading of service, delivery and emergency vehicles are to be:
>
> - appropriate to the size and nature of the development;
> - screened from public view; and
> - designed so that vehicles may enter and leave in a forward direction.

Table 5.1 of the RMS's *"Guide to Traffic Generating Developments"* (October 2002) specifies the following requirement for delivery and service vehicles:

Restaurants/Shops <2,000m^2 GFA	1 space per 400m^2 GFA

Based on the RMS Guidelines, the proposed development requires 1 loading space as follows:

370.37m^2 Retail floorspace @ 1 loading bay per 400m^2 GFA	0.93 loading bay

The proposed development is served by a 6.75m x 4.5m loading bay on the ground level capable of accommodating a typical courier van similar in size to the B99 vehicle specified in the Australian Standard AS/NZS2890.1:2004. The B99 vehicle is similar to the Ford Transit Medium Wheelbase Van and measures 5.2m x 1.94m. This vehicle will adequately serve the 4 small retail shops.

Carpark and Access Compliance

The basement carpark and access ramps have been designed to generally satisfy the following requirements of the Australian Standard AS/NZS2890.1-2004 – *"Off-Street Car Parking"*:

- Long-term (Class 1) parking spaces are a minimum 5.4m long and 2.4m wide
- Short term (Class 3) parking spaces are a minimum 5.4m long and 2.6m wide
- Small car spaces are a minimum 5.0m long and 2.3m wide
- An additional 0.3m has been provided for spaces adjacent to a wall or obstruction

- Dead-end aisle extensions 1.0m wide have been provided as per Figure 2.3 of the Standard
- The access/manoeuvring aisle ranges in width from 5.8m to 6.2m
- Pavement cross-falls at parking spaces do not exceed 5% (1 in 20)
- Maximum ramp grades do not exceed 20% (1 in 5)
- Ramp transitions do not exceed 12.5% (1 in 8) over a distance of 2.0m
- The two-way access driveways are 6.1m wide wall to wall comprising a 5.5m roadway and 2 x 300mm wide kerbs
- A minimum headroom clearance of 2.2m has been provided throughout the basement carpark

The disabled parking spaces have also been designed in accordance with the Australian Standard AS/NZS2890.6:2009 – *"Off-street parking for people with disabilities"* as follows:

- A 5.4m long x 2.4m wide dedicated *(non-shared)* parking space
- An adjacent *shared* area that is also 5.4m long x 2.4m wide
- A minimum headroom of 2.5m above the disabled spaces
- Pavement cross-falls in disabled spaces do not exceed 2.5% (1 in 40) in any direction

Clause 3.3(a) of the Australian Standard requires the first 6m into a carpark from the property boundary to have a maximum gradient of 5% (1 in 20). The objective of this requirement is to optimise sight lines to pedestrians walking along the footpath. As the site has direct access to Somerville Place, meeting this requirement is considered unnecessary as pedestrian activity in the rear lane is virtually non-existent.

In the circumstances, it can be concluded that the proposed development has no unacceptable parking, loading or safety implications.

3. TRAFFIC ASSESSMENT

Existing Road Network

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3 and comprises the following:

State Roads
Burnt Bridge Creek Deviation – Condamine Street

Regional Roads
Kenneth Road (east of Condamine Street)
Condamine Street (between Burnt Bridge Creek Deviation and Sydney Road)

Condamine Street is a classified *State Road* performing an arterial road function. It forms part of the Metroad 10 system that links the northern suburbs to the lower north shore and ultimately the Sydney CBD. Condamine Street carries 6 lanes of traffic with the kerbside lanes reserved as Bus Lanes during peak periods.

King Street is an unclassified Local Road performing a collector road function. The intersection of Condamine Street and King Street is traffic signal controlled with all turns permitted at the intersection. It has a pavement width of approximately 13m and is restricted to a speed limit of 50km/h.

Sunshine Street is an unclassified Local Road with a primary function of providing access to properties to the west of Condamine Street. It has a pavement width of approximately 13m and is restricted to a speed limit of 50km/h. Due to the median island on Condamine Street, all traffic accessing Sunshine Street is restricted to left-in/left-out only.

Somerville Place is a local laneway with a primary function of providing vehicular access to properties fronting Condamine Street. On the 5th March 2019, Northern Beaches Council's Local Traffic Committee approved the introduction of ONE WAY southbound traffic flow on Somerville Place between King Street and Sunshine Street. Council however is in the process of widening Somerville Place to 6.0m by requiring land dedications when sites develop along

its length. It is anticipated that traffic flows will revert back to TWO WAY once all land dedications are complete and the roadway constructed to accommodate these flows.

The existing traffic and parking controls on the road network serving the site are illustrated on Figure 4 and include:

- The TRAFFIC SIGNALS at the intersection of Condamine Street and King Street
- The MEDIAN ISLAND on Condamine Street
- The BUS ZONES and peak period BUS LANES on Condamine Street
- The 1 HOUR PARKING zone along the Condamine Street frontage of the site

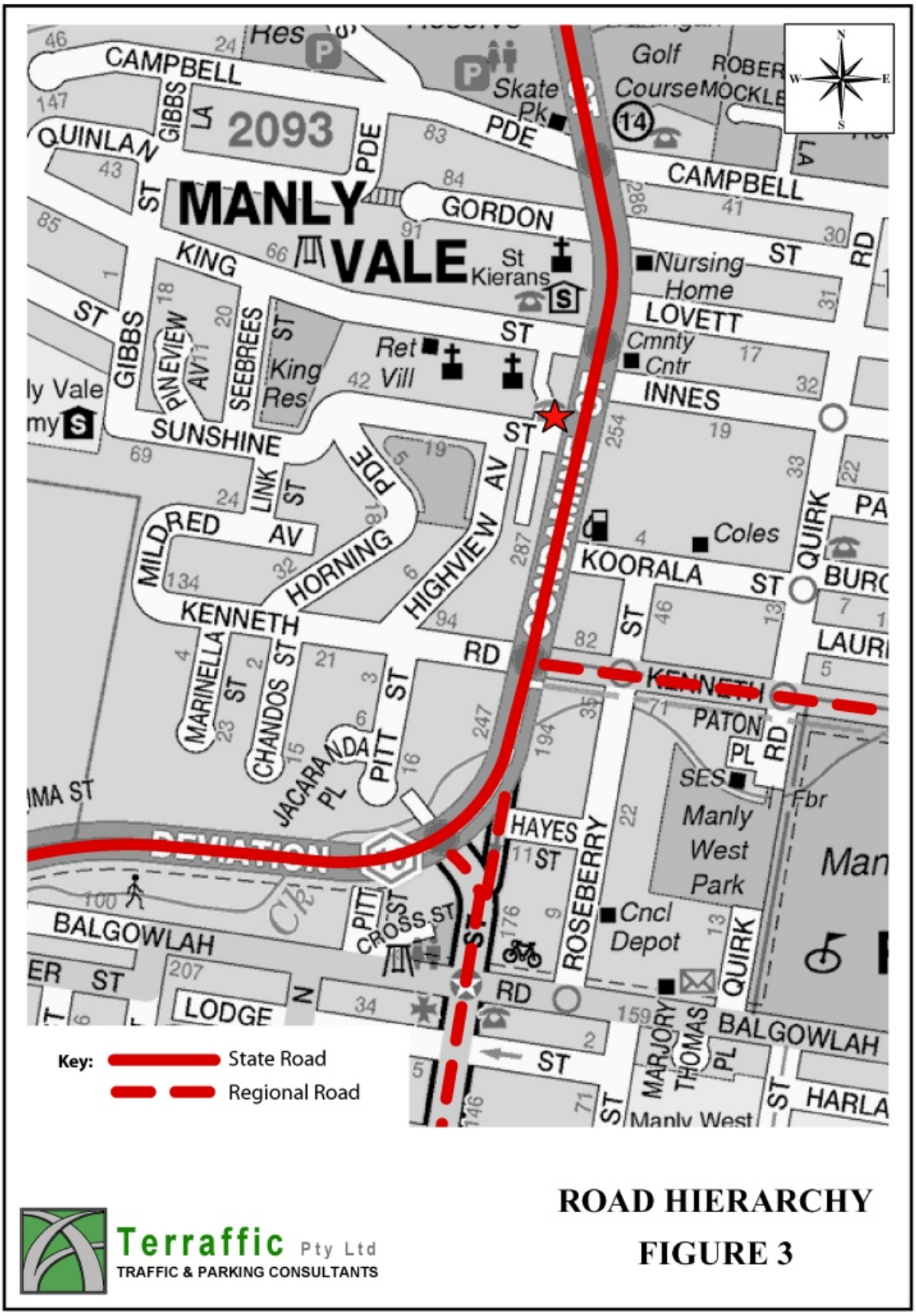
Existing Traffic Conditions

An indication of existing traffic conditions on the road network serving the site is provided from a count of traffic activity at the King Street/Somerville Place and Sunshine Street/Somerville Place intersections conducted between 7.00am - 9.00am and 4.00pm - 6.00pm on Monday 17th February 2020. The results of these counts of traffic activity are reproduced in Appendix A revealing that:

- the AM peak period occurred between 8.00 – 9.00am. At that time, 25 vehicles per hour (vph) entered Somerville Road from King Street and 18vph exited onto Sunshine Street.

- the PM peak period occurred between 4.30 – 5.30pm. At that time, 29vph entered Somerville Road from King Street and 31vph exited onto Sunshine Street.

It should be noted that the majority of vehicles entering Somerville Place turn left from King Street while the majority of vehicles exiting onto Sunshine Street turn right. These predominant flows indicate that Somerville Place is used as a “rat-run” for traffic heading south on Condamine Street with a destination to the west of the site off Sunshine Street.



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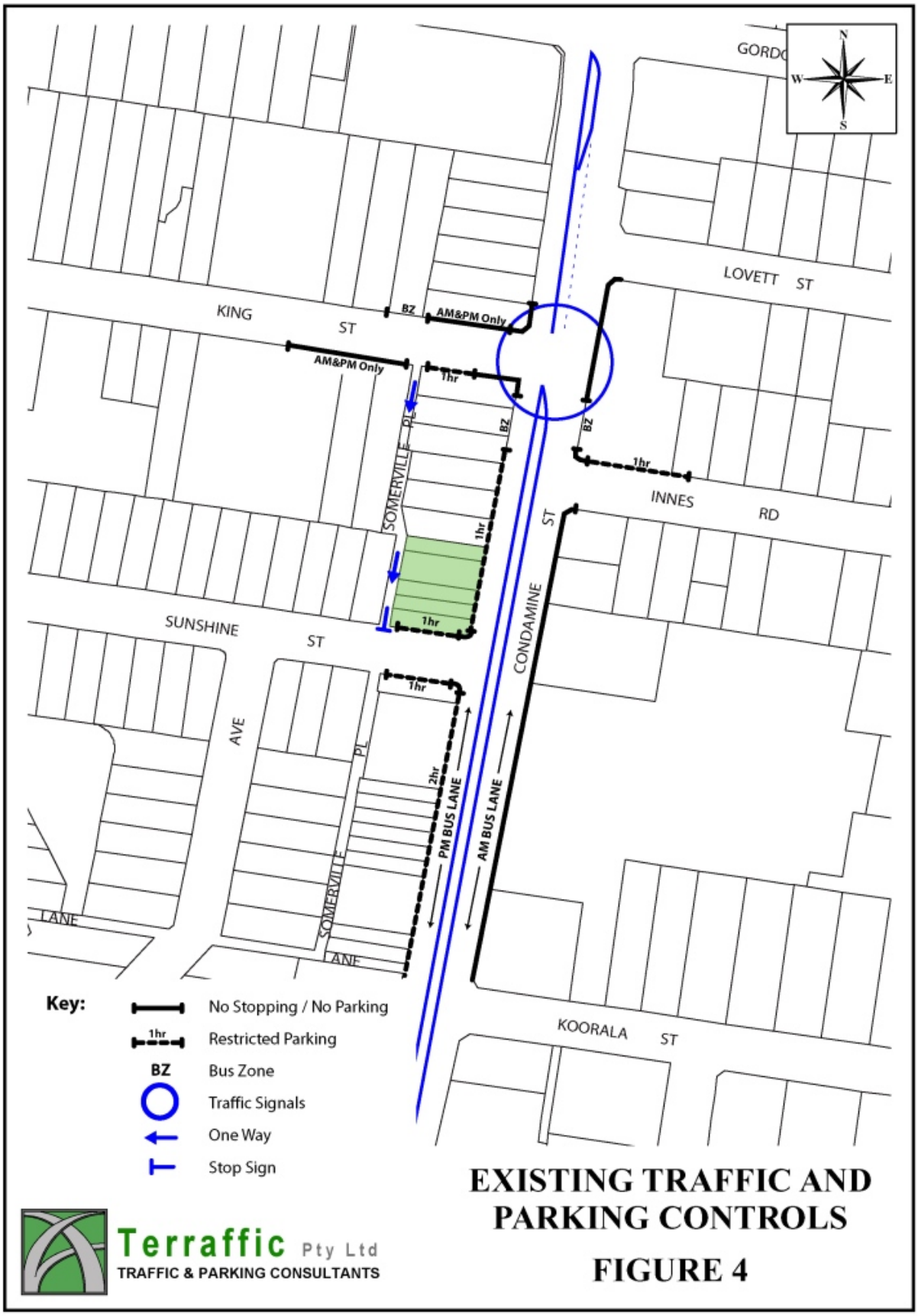
ROAD HIERARCHY

FIGURE 3


GORDO
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AM BUS LANE
SOMERVILLE
LANE
LANE
KOORALA ST
Key:
No Stopping / No Parking
1hr
Restricted Parking
BZ
Bus Zone
Traffic Signals
One Way
Stop Sign
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EXISTING TRAFFIC AND PARKING CONTROLS
FIGURE 4

Projected Traffic Generation Potential

An indication of the traffic generation potential of the existing and proposed development is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002).* The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the existing and proposed development:

Specialty Shops / Secondary Retail	5.6 peak hour trips per 100m^2 GLFA
High Density Residential Flat Buildings	
Metropolitan Sub-Regional Centres	0.29 peak hour vehicle trips per unit

Traffic Generation of <u>EXISTING SITE</u> Development

Application of the RMS's traffic generation rates to the existing retail floor space yields a traffic generation potential in the order of 34vtph during the weekday peak periods as follows:

600m^2 retail @ 5.6vtph per 100m^2	34vtph

Traffic Generation of <u>PROPOSED</u> Development

Application of the RMS's traffic generation rates to the proposed development also yields a traffic generation potential in the order of 31vtph during the weekday peak periods calculated as follows:

370m^2 retail @ 5.6vtph per 100m^2	21vtph
33 units @ 0.29vtph per unit	10vtph
Total	***31vtph***

Therefore based on the RMS Guidelines, the proposed development will generate 3 less vehicle movement during peak periods as follows:

Existing Development	34vtph
Proposed Development	31vtph
Reduction in Traffic	***3vph***

In circumstances where an existing development generates more traffic than a proposed development, it can be readily appreciated that the proposal will not have any noticeable or unacceptable effect on the road network serving the site in terms of road network capacity or traffic-related environmental effect.

Furthermore, the development site has almost direct vehicular access to the higher order road network which alleviates the need to travel on local residential streets.

In the circumstances, the proposed development will not have any unacceptable traffic implications.

APPENDIX A

TRAFFIC COUNT DATA

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Mob.0418-239019

Client : Terraffic Pty. Ltd.

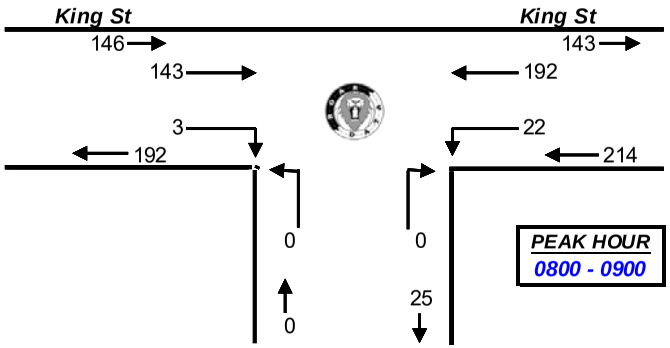
Job No/Name : 7282 MANLY VALE Somerville Pl

Day/Date : Monday 17th February 2020

All Vehicles

	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
0700 - 0715	14	1	0	0	2	20	**37**
0715 - 0730	11	0	0	0	3	19	**33**
0730 - 0745	12	1	0	0	2	16	**31**
0745 - 0800	19	0	0	0	2	21	**42**
0800 - 0815	17	1	0	0	7	22	**47**
0815 - 0830	28	2	0	0	2	40	**72**
0830 - 0845	40	0	0	0	3	64	**107**
0845 - 0900	58	0	0	0	10	66	**134**
Period End	**199**	**5**	**0**	**0**	**31**	**268**	**503**

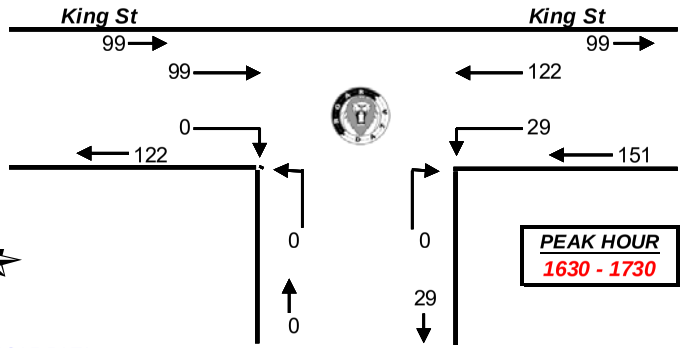
	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
0700 - 0800	56	2	0	0	9	76	**143**
0715 - 0815	59	2	0	0	14	78	**153**
0730 - 0830	76	4	0	0	13	99	**192**
0745 - 0845	104	3	0	0	14	147	**268**
0800 - 0900	143	3	0	0	22	192	**360**
PEAK HR	**143**	**3**	**0**	**0**	**22**	**192**	**360**



All Vehicles

	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
1600 - 1615	20	2	0	0	5	18	**45**
1615 - 1630	20	0	0	0	5	24	**49**
1630 - 1645	29	0	0	0	11	29	**69**
1645 - 1700	27	0	0	0	6	34	**67**
1700 - 1715	21	0	0	0	5	23	**49**
1715 - 1730	22	0	0	0	7	36	**65**
1730 - 1745	24	0	0	0	7	27	**58**
1745 - 1800	26	1	0	0	12	24	**63**
Period End	**189**	**3**	**0**	**0**	**58**	**215**	**465**

	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
1600 - 1700	96	2	0	0	27	105	**230**
1615 - 1715	97	0	0	0	27	110	**234**
1630 - 1730	99	0	0	0	29	122	**250**
1645 - 1745	94	0	0	0	25	120	**239**
1700 - 1800	93	1	0	0	31	110	**235**
PEAK HR	**99**	**0**	**0**	**0**	**29**	**122**	**250**



TERRAFFIC PTY LTD

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Mob.0418-239019

Client : Terraffic Pty. Ltd.

Job No/Name : 7282 MANLY VALE Somerville Pl

Day/Date : Monday 17th February 202

All Vehicles	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Time Per	L	T	R	L	T	R	L	T	R	L	T	R	TOT
0700 - 0715	0	1	2	0	3	0	0	0	2	0	13	0	**21**
0715 - 0730	0	1	2	0	5	0	0	0	2	1	5	0	**16**
0730 - 0745	0	0	0	0	3	0	0	0	2	0	10	0	**15**
0745 - 0800	0	1	1	0	0	0	2	0	1	0	6	0	**11**
0800 - 0815	1	1	2	0	5	0	0	0	1	0	5	0	**15**
0815 - 0830	1	1	0	0	12	2	0	0	0	1	7	0	**24**
0830 - 0845	0	0	5	0	10	0	2	0	2	1	6	0	**26**
0845 - 0900	3	0	4	0	11	0	1	0	0	0	13	0	**32**
Period End	**5**	**5**	**16**	**0**	**49**	**2**	**5**	**0**	**10**	**3**	**65**	**0**	**160**

All Vehicles	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Time Per	L	T	R	L	T	R	L	T	R	L	T	R	TOT
1600 - 1615	2	0	4	0	13	0	0	0	0	0	6	0	**25**
1615 - 1630	2	1	5	0	9	1	0	0	1	0	11	0	**30**
1630 - 1645	2	1	5	0	9	1	1	0	0	1	10	0	**30**
1645 - 1700	2	0	8	0	7	1	1	0	1	0	13	0	**33**
1700 - 1715	0	1	4	0	9	0	1	0	0	1	10	0	**26**
1715 - 1730	3	0	5	0	12	3	0	0	1	3	7	0	**34**
1730 - 1745	0	1	7	0	6	1	2	0	2	0	9	0	**28**
1745 - 1800	4	2	6	0	7	0	1	0	0	2	14	0	**36**
Period End	**15**	**6**	**44**	**0**	**72**	**7**	**6**	**0**	**5**	**7**	**80**	**0**	**242**

	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Peak Time	L	T	R	L	T	R	L	T	R	L	T	R	TOT
0700 - 0800	0	3	5	0	11	0	2	0	7	1	34	0	**63**
0715 - 0815	1	3	5	0	13	0	2	0	6	1	26	0	**57**
0730 - 0830	2	3	3	0	20	2	2	0	4	1	28	0	**65**
0745 - 0845	2	3	8	0	27	2	4	0	4	2	24	0	**76**
0800 - 0900	5	2	11	0	38	2	3	0	3	2	31	0	**97**
PEAK HOUR	**5**	**2**	**11**	**0**	**38**	**2**	**3**	**0**	**3**	**2**	**31**	**0**	**97**

	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Peak Time	L	T	R	L	T	R	L	T	R	L	T	R	TOT
1600 - 1700	8	2	22	0	38	3	2	0	2	1	40	0	**118**
1615 - 1715	6	3	22	0	34	3	3	0	2	2	44	0	**119**
1630 - 1730	7	2	22	0	37	5	3	0	2	5	40	0	**123**
1645 - 1745	5	2	24	0	34	5	4	0	4	4	39	0	**121**
1700 - 1800	7	4	22	0	34	4	4	0	3	6	40	0	**124**
PEAK HOUR	**7**	**4**	**22**	**0**	**34**	**4**	**4**	**0**	**3**	**6**	**40**	**0**	**124**