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30 November 2022

P2564 Stevens 10 Young St west Gosford Assessment

Stevens Group Pty Ltd

Attn: Jason Capuano

Dear Jason,

#### Traffic Impact Statement for the proposed mixed use development, 10 Young Street, West Gosford, NSW

We have reviewed the plans for the proposed residential housing and hotel development located at 19 Young Street, West Gosford. The proposed development will provide a mixture of hotel suites (60), residential apartments (58), a car show room and a small cafe. This assessment has been prepared based upon Austroads Guidelines and the "RTA Guide to Traffic Generating Developments" published by the Roads and Maritime Services (RMS) and includes the RMS TDT 2013/04 "Updated traffic surveys August 2013".

This assessment has also taken I to account the Traffic and Parking Assessment Report prepared for the project site by Varga Traffic Planning Pty Ltd dated 14 August 2020.

The location of the subject site is shown below:



Figure 1 – Site location plan



Item	Comment	
2.1.1 Site Location	The proposed development site is located on the eastern side of Racecourse Road in	
and Access	West Gosford, with access to the site provided off Racecourse Road only. The existing	
	site access will be upgraded as part of the redevelopment of the site and shall allow for	
2.2.1 Road Hierarchy	left in and left out traffic movements only. <b>(Figure 1)</b> The main road through the locality is the <b>Central Coast Highway</b> to the south of the	
2.2.1 Road fileratury	site. This road forms part of the regional road network and provides a connection to the Pacific Highway to the west and to the Central Coast via Gosford to the east. It carries significant traffic flows and in the locality of the subject site provides three lanes of travel in both directions. It operates under the posted speed limit of 70 km/h and provides footpaths and streetlights along the length of the road. TfNSW have upgraded this road in a number of locations to maintain capacity and reduce delays / congestion especially during the commuter peak periods.  Racecourse Road connects with the Central Coast Highway via a 4-way signal controlled intersection. There are right turn lanes provided on the Central Coast Highway to increase capacity at this intersection. Racecourse Road on the northern side of the Central Coast Highway generally provides a single lane of travel in both directions and kerb side parking. It operates under a posted speed limit of 60 km/h and in the vicinity of the site does not provide any footpaths. There are street lights along its length and it provides access to a wide range of development, including light	
	industrial and residential as well as the Gosford Racecourse.  To the south of the Central Coast Highway, Racecourse Road provides access to	
	Garnet Adcock Memorial Park and a number of leisure activities.	
2.2.2 Roadworks	There are no major road works being completed within the general locality of the subject site presently. TfNSW have completed a number of road upgrades in this location to improve the road network operation in this locality.	
2.2.3 Traffic Management Works	No traffic management works occurring in the locality.	
2.2.4 Pedestrian and Cycling Facilities	There are footpaths provided along both sides of the Central Coast Highway with the various traffic signals including a pedestrian phase to ensure pedestrian movements can be accommodated safely. There are no footpaths along Racecourse Road, but there is a wide grass verge that can be used by pedestrians as required. This is not all weather nor is it safe or appropriate for people with disabilities. There are no dedicated cyclist's facilities in the locality of the site and during the site work very limited cyclist movements were observed. The high traffic volumes on the Central Coast Highway, together with the road width and lack of shoulders discourages cyclists from using this road. Racecourse Road offers an acceptable environment for cyclists, due to the wide road pavement and generally low traffic volumes.	
2.2.5 Public Transport	West Gosford is well supported by public transport with bus services provided by Busways. Route 34 provides connection along Racecourse Road between Gosford and Kariong every 30 minutes during the week and hourly of a weekend. Other services are available along the Central Coast Highway including Gosford to Ettalong (Route 55) and Gosford Hospital to Woy Woy (Route 70). Gosford in turn provides a transit hub for the majority of other routes throughout the Central Coast.	



Item	Comment						
	West Gosford Shopping Centre	West Gosford  Gosford  Gosford  Racecourse  Central Coast Hwy Addoor		Go ecour:	Se Rd  Nater Par		
	access to se	way Station is located less than rvices along the Central Coast a rate to Sydney to the south and C	nd New	castle	Line. F	reque	nt commuter
2.3 Traffic Flows  2.3.1 Daily Traffic Flows  Existing traffic volumes have been source from the traffic report prepared by V Traffic Planning and are presented below. The traffic volumes presented below based on 2014 data from TfNSW and with a 2% per annum background growth v is considered appropriate in this location.				d below are			
		Roads & Maritime Services of NSW An	nual Avei	age Dail	y Traffi	c Volume	es
	Station No.	Location	1995	1998	2001	2004	2020
	05.138 05.786	Racecourse Road, north of Pacific Hwy Pacific Hwy at Narara Creek	10,993 37,783			10,295 48,172	
	past the site and the Satu	in September 2014 show that the frontage were 950 vehicles per horday lunchtime peak. Allowing for re could be in the order of 1,100 v	ur durin 2% gro	ig the r wth pe	nid-we r annu	ek afte	rnoon period
2.3.2 Daily Traffic Flow Distribution	The daily traffic volumes are reasonably balanced in both directions, with the above data indicating a slight bias in movements westbound over the day along the Central Coast Highway. During the peak periods, the traffic flows along this road are reasonably balance, reflecting commuter trips to the Gosford CBD as well as trips out of Gosford including connection with the M1 Pacific Motorway.						
2.3.3 Vehicle Speeds	No speed surveys were completed as part of the study work. However it is considered that traffic does not speed in this location due to interaction with the various intersections etc. and the combination of high traffic volumes especially during the peak periods.						
2.3.4 Existing Site Flows	The site is currently vacant and therefore generates no traffic movements.						
2.3.5 Heavy Vehicle Flows		/ high volume of heavy vehicles estinations along the length of this					





Item	Comment
	to centres such as Gosford and the numerous centres within the Central Coast. These heavy vehicles gain access via the M1 Pacific Motorway to this location. Heavy vehicle flows along Racecourse Road are much lower, reflective of the lower through traffic movements.
2.3.6 Current Road Network Operation	Observations on site during the peak periods show that whilst the traffic movements along the Central Coast Highway suffer from delays and congestion created by a number of intersections, the majority of these are controlled by traffic signals and the queues typically dissipate each cycle. The road upgrade works at Brisbane Waters Drive completed by TfNSW in 2015 provided a significant improve in traffic flows and associated reduction in traffic delays and congestion through this location along the Central Coast Highway.
	Traffic movements in and out of Racecourse Road suffer delays, created by the operation of the traffic signals on the Central Coast Highway which provide a bias towards maintaining efficiency along this important road corridor. However the queues on Racecourse Road all clear when the green phase occurs.
2.4 Traffic Safety and Accident History	Accident data provided by TfNSW interactive crash data webpage shows that in 2017 6 accidents at the intersection of the Central Coast Highway and Racecourse Road. However, post the upgrade of this intersection in late 2017, there has been a single accident in 2018 and 2020 and 2 in 2019. The accident data indicates that the upgrade works at this intersection have improved the operation of this intersection and improved road safety.
	The intersection upgrade here allowed for a dedicated left turn slip from the Central Coast Highway into Racecourse Road as well as a dedicated left turn slip from Racecourse Road into the Central Coast Highway. Whilst road safety has improved post these upgrades, these upgrades have also increased the capacity of this intersection.
2.5.1 On-street Parking Provision	Limited on-street parking is permitted in the general locality of the site. There is no parking on the Central Coast Highway and limited parking on Racecourse Road to the immediate north of the subject site.
2.5.3 Parking Demand and Utilisation	During the site work no vehicles were observed parked along either the Central Coast Highway nor Racecourse Road.
2.5.4 Set down or pick up areas 2.6 Public Transport	There are no designated set down areas in the immediate locality of the subject site.
2.6.1 Rail Station Locations	Nearest railway station is located at Gosford, approximately 1.5 kms east of the site's location. Gosford railway station is a significant transport hub which provides access to the main northern railway line offering connections to Newcastle and south through to Sydney.
2.6.2 Bus Stops and Associated Facilities	Bus stops are located on the Central Coast Highway, both east and west bound, within 50 metres of its intersection with Racecourse Road. Along Racecourse Road a bus stop is located approximately 150 metres north of the site.
2.6.3 Pedestrians	There are no pedestrian footpaths along Racecourse Road however paths are available along both sides of the Central Coast Highway. Pedestrian crossings are also available at the signalised intersection of Racecourse Road and the Central Coast Highway providing safe movement between the site and the bus stops.
2.7 Other Proposed Developments	The locality is generally well built out with limited additional development occurring. It is noted that there have been recent construction activities associated with bulky goods retail and there are other opportunities for infill development in the general locality.





Item	Comment
3.1 The	The proposal is to provide a new multi-level development, providing a mixture of hotel
Development	suites and shop top residential apartments, with on-site parking.
201010	Element
	60 hotel rooms
	70 residential apartments
	Car sales showroom
	Reconfigure for existing car
	dealership
	All access will be via a driveway off the new access road that connects with Racecourse Road. This new access road will allow for left in movements off Racecourse Road and left out movements onto Racecourse Road only. No right turns will be permitted from this new road and a median shall be provided to physically prohibit these movements.
3.1.1 Nature of Development	Hotel and residential apartments.
3.1.2 Access and	Vehicle access will be via the new access road that connects with Racecourse Road.
Circulation	The new access road and driveway caters for 2-way movements. The design of the
Requirements	site allows vehicles to enter and exit the site in a forward direction and this driveway
•	connects through to Young Street to cater for larger vehicles such as service vehicles.
	The access road will connect with Racecourse Road via a simple giveway control and
	via an extension to Young Street. This new connect on to Racecourse Road shall allow
	for left in and left out turn movements only.
	This driveway through the site will act as a share way to cater for pedestrian, cyclists
	and vehicle movements and will operate under a slow speed zone e.g. 30 km/h.
3.2 Access	Vehicle access to the basement car park shall be via the service lane provided on the
	northern side of the site to the rear of the new buildings. The design of the new road allows for all vehicles to enter and exit in a forward manner.
3.2.1 Driveway Location	The driveway to the basement car park is located to the rear of the site off the service lane.
	The connection of the new access road is located away from the intersection of Racecourse Road and the Central Coast Highway and shall allow for left in and let out movements only. This will ensure minimal interaction with the operation of this key intersection.
3.2.2 Sight Distances	For the connection to Racecourse Road, the posted speed limit is 60 km/h and the sight distance requirements at this point are 105 metres for drivers exiting the access road. This access road is located on a straight section of road offering good visibility in both directions. The sight distance has been measured on site and to the north the distance exceeds 120 metres. As drivers cannot turn right out of the new roadway the sight distance to the south is not required to be assessed.
	The service road connection to the new roadway is located to the north of the 90 degree bend. The visibility to the right (south) for a driver exiting this service road is approximately 35 metres. Under AS2890, the sight line distance for a speed of 40 km/h is 35 metres minimum. Given the 90 degree bend on this new road, a vehicle will be travelling at less than 40 km/h at this location and hence the visibility for a driver exiting this service road is acceptable. This new roadway connects with Young Street via a straight connection to Young Street and the visibility to the left (north) from this service road exceeds 100 metres.
3.2.3 Service Vehicle Access	All service vehicles will be able to enter and exit the site in a forward direction. The subject site will have minimal servicing requirements and will typically require access for small delivery vans such as a Toyota Hi-Ace. Larger vehicles can also be





accommodated, such as a 22 seater coach e.g. Toyota Coaster which will be able to drop off and pick up passengers in the designated drop off zone outside the main entry point to the hotel. Waste refuse collection vehicles will enter the site off Racecourse Road and then enter the service road to utilise the loading dock located to the rear of the building, This waste truck will be able to reverse into the loading dock zone and then exit in a forward direction. This waste truck can then exit the site via the roadway connection to Racecourse Road or via the connection to Young Street.
No vehicle queues expected at site entry / exit point to the subject site off Racecourse Road, as this allows for left in and left out movements only. The project shall generate low overall traffic demands along this new access road.
There are parking spaces provided along this new road to both sides with these spaces being indented and therefore minimising the delay for traffic travelling along this new road. The majority of the traffic movements will be around the service lane access to the new road connection, and this is located well away from the intersection with Racecourse Road and shall therefore have no interaction with the operation of this intersection.
Existing site does not have any buildings on it and is generally used for parking only.
Bus stops are located on the Central Coast Highway, both east and west bound, within 50 metres of its intersection with Racecourse Road. Along Racecourse Road a bus stop is located approximately 150 metres north of the site. Access is available via the existing verges and footpaths in the locality of the site, as per the existing situation.
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All vehicles will be able to enter and exit the site in a forward direction. The internal site layout will be designed and constructed in accordance with Council requirements and allows for vehicles to enter and exit in a forward direction.
The new road way connecting between Young Street and Racecourse Road provides a width of 6.6 metres and allows for 2-way traffic movements. Parking is provided to both sides in indented parking bays to maintain this running width for vehicles.
The service lane provides a width of 9.0 metres to accommodate heavy vehicle movements and the internal car park is designed in accordance with AS2890.
All internal circulating aisles will be designed and constructed in accordance with Council requirements.
No bus movements will be required for the parking area within the buildings. There could be demand for 22-seater bus for the hotel and this can be accommodated on site via the new road way and there is a marked zone for hotel drop off that can accommodate this bus parking to the side of the road.
A loading dock is provided for the waste refuse collection and general servicing requirements for the hotel and the residential development with access via the rear service lane. Vehicles can enter and exit this space in a forward direction.
The total on-site parking provision is for 130 spaces, with separate parking provided for the residential apartments from the hotel parking within the basement parking area. There is on-street parking provided along the new access road within indented parking bays to both sides of this road.
Central Coast DCP 2022 requires the following parking provision:  Shop-top Housing - 1 space per dwelling  Hotel rooms – 1 space per unit plus 1 space per 2 employees  Car show room – 1 space per 2 staff





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Item	Comment	0000 OFA		
	Car Show room – 1.5 spaces per 200 m2 GFA Café - 1 space per 30 m <sup>2</sup>			
3.4.3 Parking Layout	Parking layout has been designed in accordance with Council requirements and will be fully detailed during the detailed design process. This will include providing car park dimensions in accordance with Council DCP requirements and taking into account AS2890 for the design of off-street car parks.			
3.4.4 Parking Demand	Normal parking demands can be accommodated on site. Under the DCP the following parking provision is required:			
	Element	Parking demand		
	60 hotel rooms	60		
	8 hotel staff	4		
	58 residential apartments	58		
	2 Car showroom staff	1		
	Car showroom visitors	4		
	Cafe	2		
	Public space (accessible)	1		
	TOTAL	130		
3.4.5 Service Vehicle	The above table indicates that the absolute peak parking demands associated of proposed development could be 130 spaces, based upon the requirements Council DCP.  However, due to the following it is considered that the actual normal parking do not the site will be much lower,:  The café element will primarily service the requirements of the development little external demand  The hotel rooms are typically only 80% utilised, thereby reducing the aparking demand to 48 spaces  The location of the site offers opportunity for guests associated with nesporting venues and these visitors will typically travel in groups in buse shared cars. This will again reduce the parking demands.  For future residents, the site is within walking distance of Gosford CBE the train station and there will be no demand for more than one vehicle dwelling.			
Parking	allows for waste collection for the hotel and the residential elements of the project site.  This loading bay is located off the rear service lane and shall not impact on the general traffic movements through the site.			
3.4.6 Pedestrian and Bicycle Facilities	As part of the development, pedestrians will be provided with a link to Racecourse Road to allow for local connections as well as potential access to Gosford train station. Cyclist facilities will be provided in accordance with the Council requirements.			
4.1 Traffic Generation	Traffic generation has been determined in accordance with the RTA Guide to Traffic Generating Developments. A summary of the future traffic generation associated with the development is provided in the table below:			



Item	Comment					
Item	Element	AM Peak	Volume	PM Peak	Volume	7
	LIGITICIT	hour rate	VOIGITIE	hour rate	VOIGITIE	
	58	0.53 per	31	0.32 per	19	=
	residential	unit	31	unit	13	
	apartments	uiiit		unit		
	60 Hotel	0.4 per	24	0.4 per	24	-
	units*	unit	24	unit	24	
	Vehicle	0.7 per	4	0.7 per	4	-
	showrooms	100 m2	4	100 m2	4	
	Café	Staff only	2	Staff only	2	-
	Total	Stall Offig	61	Stall Offig	49	+
	Total		01		49	
4.1.1 Daily and	hotel units, so the The above rat number of the Hospital is wit approximately station for com or cycling (less When assessi allowed for AN	es are considered end users contained the service of the service o	rate of 0.4 trip dered to be a could work loo tres from the n the subject to Sydney or nutes).  ct of the proj of 39 vehic DA shall or PM peak.	s per unit has be a worst case s cally and wou e subject site t site and futur r Newcastle, e ect, it is noted les per hour a	en applied. scenario, as ld therefore . Similarly Gre residents either walking I that the ap and PM pea	it is considered that a walk to work. Gosford foosford train station is could access this train g (approx. 20 minutes)  proved DA for the site k was 35 vehicles per or the approved DA by
Seasonal Factors	Limited annua	i variation ex	рестеа.			
4.1.2 Pedestrian Movements	Pedestrian movements could be reasonably high, with linkages to local businesses and Gosford town centre as well as Gosford train station.  Linkages to Racecourse Road will be provided within the site as well as potential access to Young Street.					
4.2 Traffic	Traffic will acc	ess the site	via Racecou	irse Road or	via the exter	nsion of Young Street.
Distribution and	Traffic can then access The Central Coast Highway to the south or head north via					
Assignments	<del>-</del>	Young Street towards the centre of Gosford and the business options in this location.				
4.2.1 Origin /	Assumed ever	Assumed evenly split in all directions to and from the site.				
destinations assignment	Hey Street, lef will turn left ou	t into Donnisont of the new e north can	on Street we road onto R	st then left int acecourse Ro	o Young Stre oad.	way, then turn left into eet. Exiting to the west Racecourse Road and
		e east can tu	ırn right into	Racecourse F	Road then ri	ght into Faunce Street
4.3 Impact on Road Safety	of the subject Racecourse F offering good	site. The maj Road. Racec visibility in b	or safety iss ourse Road oth directior	ue will be at the in this locations for drivers	he entry of the on provides entering and	d safety in the locality ne site access road on a a straight alignment d exiting the site. This need for any right turn





Item	Comment
	For the key intersection of the Central Coast Highway and Racecourse Road, the additional traffic movements will have a minimal impact upon road safety. All traffic movements are controlled by the traffic signals as well as a pedestrian phase allowing for safe pedestrian movements.
	Access via Young Street can be accommodated in a safe and appropriate manner, with the current low traffic flows in this area not creating any safety concerns. The accident data does not show any accidents on Young Street in this location.
4.4 Impact of Generated Traffic	
4.4.1 Impact on Daily Traffic Flows	The overall impact upon daily traffic flows in the locality will be minor and within the capacity of the local roads.  TfNSW have been upgrading the road network in the locality, specifically the length of the Central Coast Highway and this ensures that the capacity has been improved to reduce delays and congestion. The network upgrades have been the subject of detailed traffic modelling and the impact of additional traffic movements along this road corridor will have been taken into account. The flows associated with the subject site will create a very low increase in background traffic growth and as such will have a negligible impact upon daily traffic flows.
4.4.2 Peak Hour Impacts on Intersections	The major peak hour impact could be at the traffic controlled intersection of the Central Coast Highway and Racecourse Road. Section 4.1 above shows that the development could generate some 61 vehicle movements during the morning peak period and less in the PM peak, with potentially 50% of these impacting upon the intersection of the Central Coast Highway and Racecourse Road. Given the current high traffic flows through this intersection, it can be seen that the additional traffic associated with the subject site will increase the traffic by a very small percentage and as such, will not have a noticeable impact upon the overall operation of the intersection during the peak periods. It is noted that the volumes identified in Section 4.1 are a worst case scenario, especially in the morning period and hence the impact could be lower than this predicted.
4.4.3 Impact of Construction Traffic	Majority of construction work contained within site so minimal impact upon external road network. There will be requirement for construction machinery to access site and traffic associated with workers. A Construction Traffic Management Plan will be required for work on site and access controls. This will be completed as part of the design process by the contractor on site. During the construction of the connection between the access road and Racecourse Road, traffic movements along Racecourse Road will need to be controlled to ensure safety for the construction activities is maintained. These issues can be resolved as part of the detailed design stage of the development.
4.4.4 Other Developments	No other developments noted in the locality of the subject site.
4.5 Public Transport	
4.5.1 Options for improving services	The current bus route along Racecourse Road offers a connection to the railway station as well as the city centre and will be attractive to future residents on the site. It is considered that this bus route is adequate for the development of the subject site.
4.5.2 Pedestrian Access to Bus Stops 4.6 Recommended	The existing bus stops in the vicinity of the site can adequately service the development with access provided along the verge or footpaths, as per the existing situation.
Works	
4.6.1 Improvements to Access and Circulation	None required. Ensure driveway crossing and internal roads / driveways are designed and constructed in accordance with Council requirements.



Item	Comment
4.6.2 Improvements to External Road Network	None required as the development will create low traffic flows and will have a minimal impact upon the operation of the road network in the general locality of the subject site.
4.6.3 Improvements to Pedestrian Facilities	As part of the development, a footpath connection to Young Street and the Central Coast Highway should be considered.
4.6.4 Effect of Recommended Works on Adjacent Developments	No impact as no external works recommended.
4.6.5 Effect of Recommended Works on Public Transport Services	Nil
4.6.6 Provision of LATM Measures	None required
4.6.7 Funding	No external road upgrades required. Site access and internal road works will be funded by the developer.

#### Conclusion

From the site work and the review of the development proposal against the requirements of the RTA's Guide to Traffic Generating Developments, it is considered that the proposed development should be approved on traffic and access grounds. The additional traffic movements generated by the development will have a minimal impact upon the local road network and a minimal impact upon the key signal controlled intersection of Racecourse Road and the Central Coast Highway. The site access via the new access road being constructed as part of this development can operate with minimal delay or congestion. The design of the connection between Racecourse Road and the access road will be in accordance with Council requirements ensuring safe traffic entry and exit movements.

The parking provision is considered appropriate for the development and meets the requirements of the Council DCP. Hotels typically run at 80% of their maximum capacity (or lower) for the vast majority of the time and are only fully occupied during organised events when travel is generally organised in groups and utilises buses. The site has been designed to cater for groups and there is a drop off zone provided to allow for a 22 seater bus to access the site.

Servicing demands are catered for on site via the service bay to the rear of the site.

Regards

Sean Morgan

Director

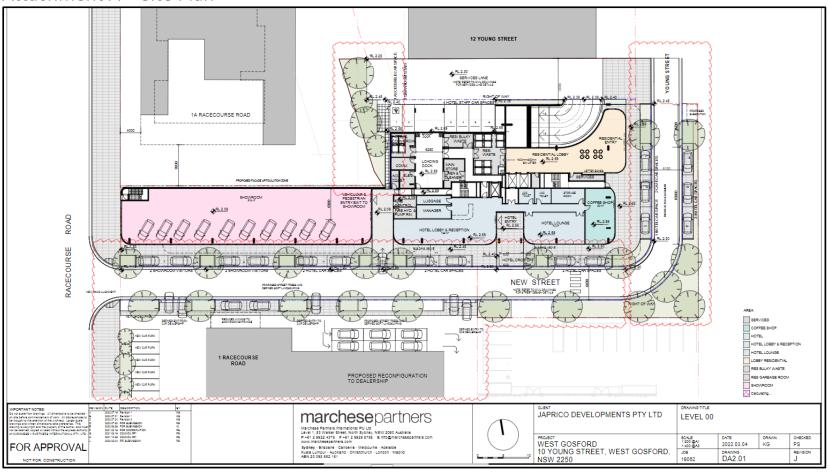
Attachments:

A – Site plans





# Attachment A – Site Plan



## Proposed Mixed Use Development

# Lot 1 DP1194024 10 Young Street, West Gosford

## TRAFFIC AND PARKING ASSESSMENT REPORT



14 August 2020

Ref 20180



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## 1. INTRODUCTION

This report has been prepared to accompany a development application to the *Department of Industry and Environment (DPIE)* for a proposed mixed use development proposal to be located at Lot 1 DP1194024, 10 Young Street, West Gosford (Figures 1 and 2).

In January 2016, Council issued a deferred commencement approval for DA43675/2014, involving the construction of a new 8-storey mixed used building on the site, comprising:

- 70 hotel suites (including 28 "dual key" rooms) with ancillary areas including gymnasium, conference facilities, reception/lobby and back-of-house areas
- 18 privately owned two bedroom apartments
- ground floor retail tenancy (66m<sup>2</sup>)
- total GFA of 6,479m<sup>2</sup>
- at-grade and first floor parking for a total of 85 cars & 6 motorcycles
- on-site waste collection area
- vehicular access via both Racecourse Road and also Young Street via a shared ROW

The consent had a validity period of two (2) years from 28 January 2016, however works were never commenced, and the consent has since lapsed.

The proposed development therefore involves the construction of a similar new development, comprising a 12-storey mixed used building as follows:

- 32 hotel suites (comprising "dual key" rooms) with ancillary areas including gymnasium, conference facilities, reception/lobby and back-of-house areas
- 58 privately owned two and three bedroom apartments
- ground floor motor vehicle showroom tenancy associated with adjoining dealership (518m<sup>2</sup>)
- total GFA of 10,225m<sup>2</sup>
- at-grade, first floor and second floor parking for a total of 103 cars, 6 motorcycles & 14 bicycles
- on-site waste collection area

 vehicular access via both Racecourse Road and also Young Street via a 7.0m wide, two-way, shared ROW

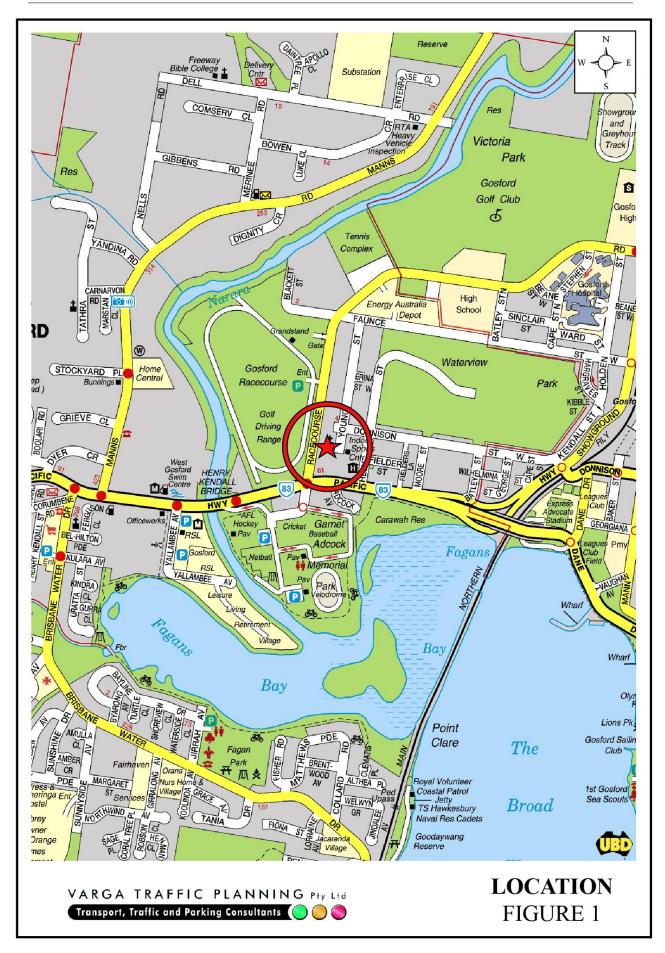
It is also worth noting that the upgrade of the Central Coast Highway and Racecourse Road intersection was completed in November 2017 which has invariably increased capacity through the intersection and reduced average vehicle delay and queue lengths. The upgrade included providing a signalised left turn lane for eastbound traffic on the Central Coast Highway turning onto Racecourse Road as well as a signalised left turn slip lane for southbound traffic on Racecourse Road turning onto the Central Coast Highway. The works also included a new central median island which extends northward along Racecourse Road and terminates midway along the site frontage.

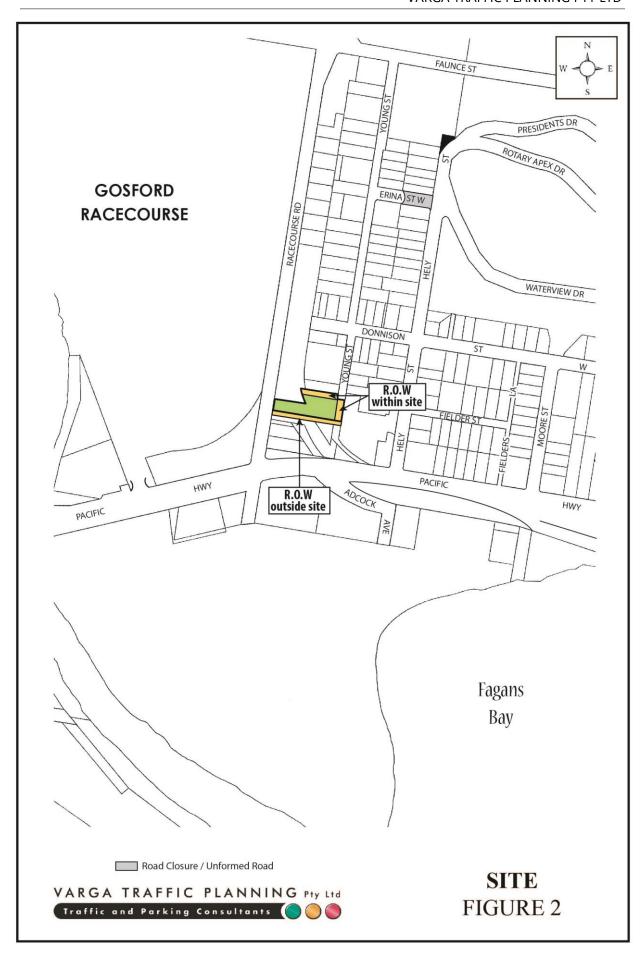
Formal pre-lodgement advice has been received from the DPIE and this report attempts to address the traffic and parking related comments contained within that written advice.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal as well as the previously approved development
- reviews the road network and traffic conditions in the vicinity of the site
- reviews the sustainable forms of transport available in the vicinity of the site
- estimates the traffic generation potential of the development proposal and compares that to the previously approved development
- assesses the traffic implications of the development proposal on the surrounding local and arterial road network in terms of road network capacity
- describes high-level construction traffic management methodology

- reviews the geometric design features of the proposed parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street parking and loading provided on the site.





## 2. PROPOSED DEVELOPMENT

#### Site

The subject site is located on the eastern side of Racecourse Road, approximately 100m north of the Central Coast Highway, and extends through to the southern end of Young Street where it terminates along the site frontage. The site has street frontages of approximately 16m in length to Racecourse Road and occupies an area of approximately 3,315m<sup>2</sup>.

The site lies on the fringe of the Gosford City Centre and is zoned *B6 Enterprise Corridor* as defined under *State Environmental Planning Policy (Gosford City Centre)* 2018.

The subject site is vacant of structure and is largely covered in bitumen. The site is currently used as an overflow car storage area for the adjoining car dealership.

Vehicular access to the site is provided via a right-of-carriageway (ROW) that runs along the southern boundary of the site, extending eastward from Racecourse Road, before turning 90° and extending northward through the site, connecting to Young Street. The site itself does not have direct access to Racecourse Road. The ROW is shared with the adjoining properties to the south which front the Central Coast Highway, including the car dealership and vacant lot.

A recent aerial image of the site and its surroundings, including the upgraded Central Coast Highway & Racecourse Road intersection, is reproduced below.



#### Previously Approved Development – DA43675/2014

In January 2016, Council issued a deferred commencement approval for the construction of a new 8-storey mixed use building, comprising a small ground floor retail tenancy, a hotel with ancillary facilities on the lower levels and residential apartments on the upper levels.

Key development statistics of the approved development are detailed in the table below.

Use	Approved Yield
Retail	66m²
Hotel	70 apartments (28 x studio, 30 x 1b & 12 x 2b)
Residential apartments	18 apartments (18 x 2b)
Parking	85 car spaces & 6 motorcycles

Off-street parking was approved to be provided within the ground floor and first floor levels of the new building, including an external at-grade car park fronting Racecourse Road.

Vehicular access to the site was approved via the ROW along the southern and eastern boundaries of the site, linking Racecourse Road and Young Street, including separate driveway access points along the ROW for hotel valet drop-offs/pick-ups as well as access to the apartment/hotel patron parking areas.

The consent had a validity period of two (2) years from 28 January 2016, however works were never commenced, and the consent has since lapsed.

Plans of the previously approved development are reproduced in Appendix A.

#### **Proposed Development**

The proposed development again involves the construction of a new mixed use development on the site, now comprising a motor vehicle showroom tenancy (associated with adjoining dealership) on the ground floor level, a hotel with ancillary facilities on the lower levels and residential apartments on the upper levels.

Key development statistics of the proposed development are detailed in the table below.

Use	Proposed Yield
Car showroom	518m²
Hotel	32 apartments
Residential apartments	58 apartments (52 x 2b & 6 x 3b)
Parking	103 car spaces, 6 motorcycles & 14 bicycles

The proposed car showroom is intended to be an addition of the existing *Jaguar & Land Rover* dealership located directly opposite the ROW, fronting the Central Coast Highway. As such, the proposed showroom is not expected to generate any appreciable traffic and parking demands. Notwithstanding, the space could also be converted to general commercial or retail space in the future.

The proposed hotel is expected to cater for the needs of business travellers, key workers, tourists and other visitors to the Gosford CBD who require short-term accommodation.

The hotel accommodation component of the proposed building comprises typical features including a reception area, small gymnasium (for guests only), amenities and other back-of-house areas such as offices and storage.

The hotel also includes a 90m<sup>2</sup> conference room located on the ground floor level that can be booked by guests. Notwithstanding, the room has the ability for a range of uses for when there are no conference bookings such as a lounge room or a display room.

Operational experience at other similar hotel developments indicates that the hotel's target market is expected to be approximately 75% corporate / 25% leisure. The corporate guests would often stay for a whole working week whilst working either in the greater Central Coast area or the Gosford CBD.

Leisure guests would typically stay for one or two nights, usually over the weekend, and comprise family groups visiting friends for weddings, family events/gatherings etc. Families will often occupy one or more "twin-key" apartments.

The potential also exists for tourist groups to stay at the hotel. Upon placing any booking for a tourist group, the booking agent will be informed by hotel staff that the maximum sized "bus" that can be accommodated is a typical 22-seater which is in the order of 7m in length (such as a Toyota Coaster).

Off-street parking is proposed for a total of 103 cars in accordance with Council's *DCP 2018* requirements, with all but 13 spaces to be provided above ground within the first and second levels of the building's podium. The remaining 13 spaces are provided at-grade comprising 1 hotel staff space, 1 car showroom staff space, 4 car showroom visitor spaces and 7 dedicated on-street spaces in indented parallel parking bays along the ROW. These indented parallel parking bays along the ROW will benefit the general public and will be subject to signposted restrictions deemed appropriate by Council.

Vehicular access to the upper parking facilities is to be provided via the new ROW located directly off the Young Street site frontage.

A drop-off area is proposed on the ground floor level directly outside the hotel lobby entrance, fronting the ROW, and has been designed to allow vehicles to pass whilst another vehicle is dropping-off or picking-up passengers.

Loading/servicing for the proposed development is expected to be undertaken via a range of commercial vehicles, from vans, utilities and the like, up to and including 11m long rigid trucks.

In this regard, a dedicated shared loading bay is to be provided on the ground floor level, at the rear of the building. Vehicular access to the loading bay is to be provided via another ROW that runs along the northern boundary of the site, alongside No.12 Young Street, such that the truck will reverse off the ROW into the bay. Once loaded, the truck will exit the site in a forward direction.

Experience with deliveries and servicing at similar hotel facilities has found that almost all deliveries are undertaken by light commercial vehicles such as white vans, utilities and the like, up to and including small rigid trucks.

Garbage collection is expected to be undertaken from within the shared loading bay using a rear-loading truck up to a maximum length of 11m. Both the residential and non-residential waste rooms are to be located adjacent to the loading bay, in close proximity to the rear of the truck, their 11m long rigid truck.

Plans of the proposed development have been prepared by *Marchese Partners Architects Pty Ltd* and are reproduced in Appendix B.

## 3. TRAFFIC & TRANSPORT ASSESSMENT

#### **Road Hierarchy**

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.

The Central Coast Highway is classified by the RMS as a *State Road* and provides the key east-west road link in the area, linking Kariong and Doyalson. It typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island. Kerbside parking is available at selected locations, subject to signposted restrictions.

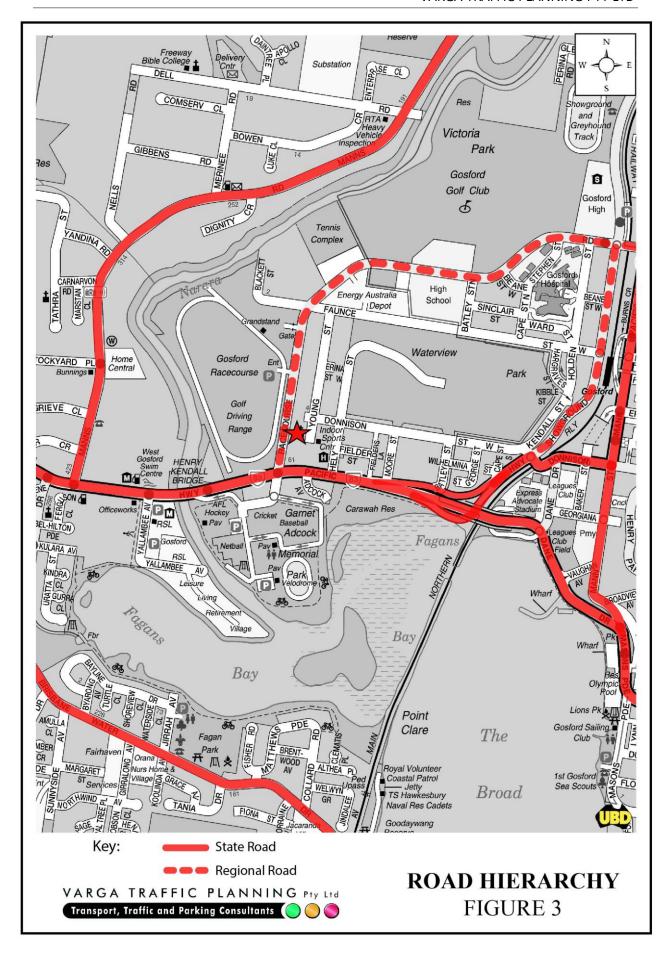
Racecourse Road is classified by the RMS as a *Regional Road* and functions as a *collector route* in the local area, linking Showground Road and the Central Coast Highway. It typically carries one traffic lane in each direction in the vicinity of the site. Kerbside parking is generally permitted along both sides of the road.

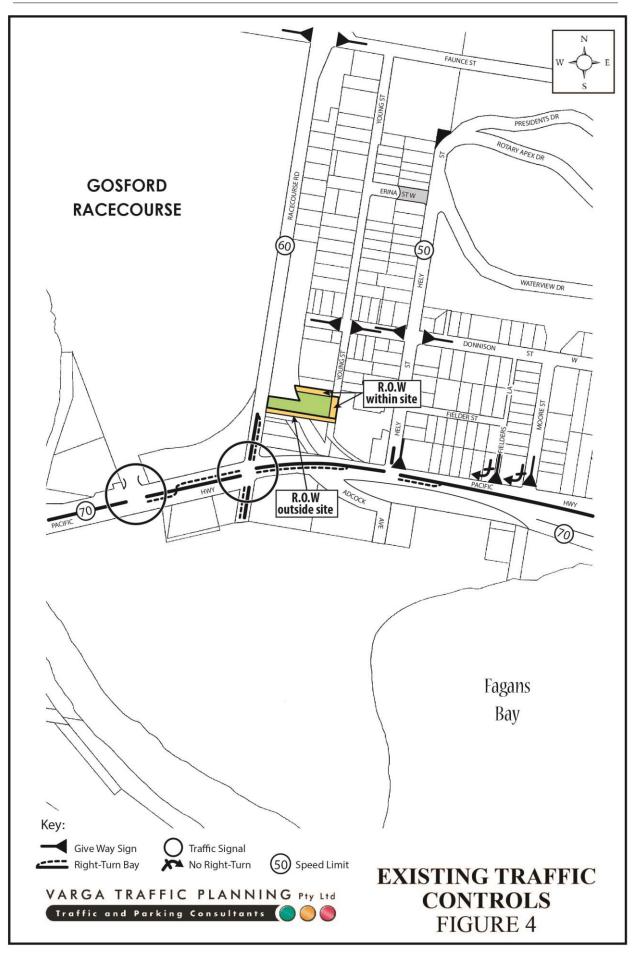
Young Street is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted along both sides of the road.

#### **Existing Traffic Controls**

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 70 km/h SPEED LIMIT which applies to the Central Coast Highway
- a 60 km/h SPEED LIMIT which applies to Racecourse Road
- a 50 km/h SPEED LIMIT which applies to Young Street and all other local roads in the area





- TRAFFIC SIGNALS in the Central Coast Highway where it intersects with Racecourse Road, and also at its intersection with McDonald's Gosford West
- a CENTRAL MEDIAN ISLAND in the Central Coast Highway which precludes right turn movements into and out of Moore Street
- a CENTRAL MEDIAN ISLAND in Racecourse Road which precludes right turn movements into and out of the shared ROW adjoining the site
- RIGHT-TURN HOLDING BAYS in the Central Coast Highway for westbound approaching traffic turning into Racecourse Road and also Hely Street.

## **Recent Intersection Upgrades**

As mentioned in the foregoing, the RMS has upgraded the Central Coast Highway and Racecourse Road intersection which was completed in November 2017. Details of the upgrade works are listed below:

- constructing a new dedicated left turn signalised slip lane for eastbound traffic on the Central Coast Highway turning onto Racecourse Road
- providing three eastbound through lanes on the Central Coast Highway *plus* a bus priority lane
- removing the eastbound Bus Lane on the Central Coast Highway, east of Racecourse Road
- constructing a new dedicated left turn signalised slip lane for southbound traffic on Racecourse Road turning onto the Central Coast Highway
- constructing a raised central median island in Racecourse Road, extending from the traffic signals approximately 90m to the north to midway along the subject site's frontage, thereby restricting all turning movements into/out of the ROW to left-in/left-out only.

Photographs of the former and current intersection layouts are reproduced on the following page. The subject site can be seen in the top-right of the images, including the shared ROW. The raised central median island can also be seen in the *Streetview* image.



November 2015



April 2020



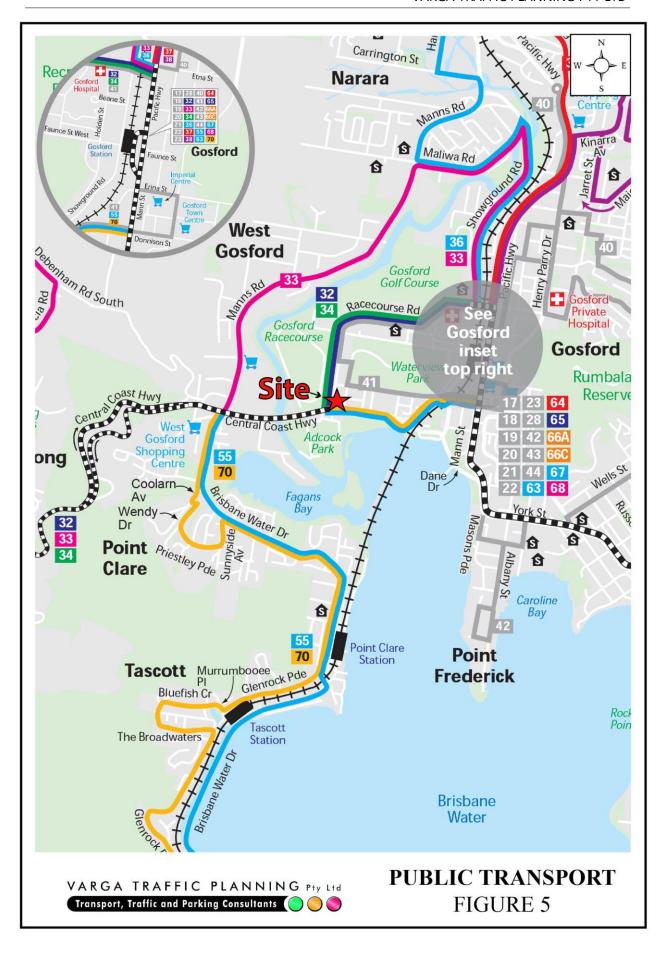
September 2019

#### **Existing Public Transport Services**

The existing public transport services available in the vicinity of the site are illustrated on Figure 5.

There are currently 6 bus services that operate within 400m walking distance of the site, as follows:

- route 32 service between Spencer and Gosford which operates Monday to Friday only
- route 33 service between Somersby and Gosford via Industrial Estate and West Gosford which operates Monday to Friday only
- route 34 service between Gosford and Kariong (loop service), operating 7 days per week
- route 41 service between West Gosford and Gosford (loop service), operating 7 days per week
- route 55 service between Ettalong Beach and Gosford via Woy Woy and Umina Beach, operating 7 days per week
- route 70 service between Ettalong Beach and Gosford via Point Clare, Tascott and Woy Woy, operating 7 days per week.



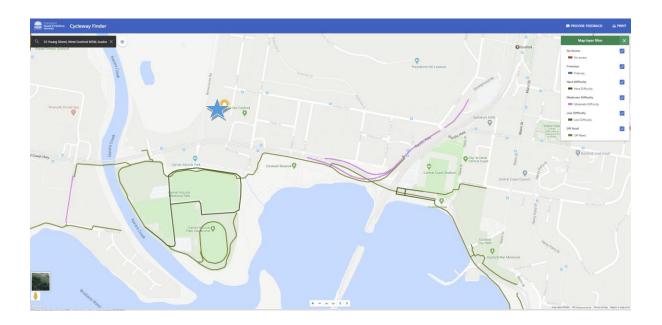
Gosford Railway Station & Bus Interchange is also located approximately 1.5km walking distance east of the site (15-18 minute walk). Whilst it is acknowledged that this distance is outside the typical 800m walking zone for many people, it would be reasonable to expect a portion of future residents and employees within the development will use Gosford Railway Station for their work commute, and some may prefer the longer walk for the physical and mental health benefits walking brings.

Gosford Railway Station is situated on the CCN Central Coast & Newcastle Line, operating between Central and Newcastle via Strathfield, Hornsby, Gosford and Wyong. It is a major station on the CCN line, with services every 5-15 minutes during peak periods and every 30 minutes during off-peak periods.

The site is therefore considered to be well serviced by public transport options for future staff, residents and guests of the development.

#### **Bicycle & Footpath Network**

The bicycle network in the vicinity of the site is shown in the map below which is from Transport for NSW's website. Cycling can often save travel time as well as being an ideal way to save money, stay active and protect the environment.



In addition, sealed footpaths are provided along the Central Coast Highway and selected streets throughout the local area. At present, the public footpath in Racecourse Road terminates at the ROW.

#### **Green Travel Plan**

A Green Travel Plan is a package of actions designed to encourage safe, healthy and sustainable travel options. The objectives of a Green Travel Plan are to remove barriers to active travel for all users of developments and to maximize the number of people who walk, cycle or take public transport to and from a development.

A key feature of a Green Travel Plan includes a plan detailing the location of all public transport services, footpath walking routes and cycle routes located within a 5 minute and 10 minute walking radius of the site, as well as contact details and websites for local bus companies, taxi companies and the like.

A Green Travel Plan would be available for new residents, staff and hotel guests, advising them of the alternate transport options available and their benefits. This information could also be provided in the foyer's notice board as well as on the hotel website.

The use of sustainable modes of transport will provide a range of public benefits including:

- improved health
- improved community connectivity
- reduced competition for road space and congestion
- reduced competition for car parking
- reduced noise and air pollution
- potential cost savings.

Furthermore, a functional and attractive sustainable transport system will ensure:

- development within the walking and cycling catchments of local centres will improve access to local services and public transport that links to major centres, with seamless interchange opportunities
- Gosford city will become more liveable by improving the design of buildings and public areas, development mixed-use spaces where people work and live, and creating more opportunities for people to walk and cycle to work and major service centres
- central to these outcomes will be an integrated and efficient transport system that is closely aligned with land use planning
- improved public transport networks will increase productivity and global competitiveness
- better transport hubs and improved connections will support revitalisation of neighbourhoods and the success of urban centres
- public transport services will link people to places of employment up and down the Central Coast
- with an integrated and more effective transport system, a future Gosford will be more sustainable, more liveable and will be a strong regional city.

#### **Car Share Locations**

The use of car share vehicles is ideally suited to the needs of people who do not own a car and do not need a car for regular trips such as the journey to work, but may occasionally need a car for a special purpose trip, such as dinner at a restaurant.

Car sharing is a crucial compliment to a sustainable transport system in any city. The availability of shared cars provides the peace-of-mind and flexibility needed for employees who do not own cars and have chosen to base their travel predominantly on public transport, walking and cycling.

Car share programs allow members to book a nearby vehicle for a short time, unlock it with a membership card, and later return the vehicle at the end of the booking. Cost is calculated on time and trip distance. A variety of cars are available including hatchbacks, wagons, hybrids, vans and utes.

The use of car share vehicles is ideally suited to the needs of residents or even hotel guests who do not own a car and do not need a car for regular trips such as the journey to work, but may occasionally need a car for a special purpose trip. According to the "GoGet" website each car share space is shared by approximately 23 members and replaces the need for up to 9 off-street parking spaces.

Notwithstanding, at present, there is no real presence of car share services available in the Gosford area. The proposed development could however be seen as a "trailblazer" in this area, by providing a car share service on site for future residents, employees and hotel guests on the site as well as others nearby.

#### **Existing Traffic Conditions**

An indication of the existing *daily* traffic volumes on the road network in the vicinity of the site is provided by reference to the RMS's *Annual Average Daily Traffic* data. The relevant count stations nearest to the subject site are summarised on the following page, noting that the most recent data available is from 2004 and earlier. A 2% p.a. growth rate has also been applied to the average of the 1995-2004 volumes in order to obtain indicative 2020 volumes.

	Roads & Maritime Services of NSW Annual Average Daily Traffic Volumes						
Station No.	Location	1995	1998	2001	2004	2020	
05.138	Racecourse Road, north of Pacific Hwy	10,993	9,741	10,125	10,295	14,124	
05.786	Pacific Hwy at Narara Creek	37,783	42,425	44,879	48,172	59,462	

An indication of the existing *peak period* traffic volumes on the road network in the vicinity of the site is provided by traffic surveys undertaken as part of a 2014 traffic study for the vacant lot located on the southern side of the ROW, fronting the Central Coast Highway.

The traffic surveys were undertaken at the Central Coast Highway & Racecourse Road intersection on Friday 12<sup>th</sup> September and Saturday 13<sup>th</sup> September, 2014, *prior* to the upgrade of the intersection. The results of the traffic surveys are reproduced in full in Appendix C and reveal that:

VARGA TRAFFIC PLANNING PTY LTD

• in 2014, two-way traffic flow along the Central Coast Highway, east of Racecourse

Road, was in the order of 3,700 vehicles per hour (vph) during both the weekday

evening peak period and the Saturday lunchtime peak period. Applying a 2% p.a.

growth rate, 2020 volumes could be in the order of 4,150 vph

• in 2014, two-way traffic flow along the Central Coast Highway, west of Racecourse

Road, was in the order of 4,500 vph during both the weekday evening peak period and

the Saturday *lunchtime* peak period. Applying a 2% p.a. growth rate, 2020 volumes

could be in the order of 5,050 vph

in 2014, two-way traffic flow along Racecourse Road, past the site frontage and ROW,

were much lower, typically in the order of 950 vph during both the weekday evening

peak period and the Saturday lunchtime peak period. Applying a 2% p.a. growth rate,

2020 volumes could be in the order of 1,050 vph.

**Projected Traffic Generation Potential** 

The traffic implications of the development proposal primarily concern the effects of the

additional traffic flows generated as a result of the development and its impact on the

operational performance of the surrounding road network, particularly during peak periods.

An indication of the traffic generation potential of the development proposal is provided by

reference to the Roads and Maritime Services' publication Guide to Traffic Generating

Developments, Section 3 - Landuse Traffic Generation (October 2002) and the updated traffic

generation rates in the RMS Technical Direction (TDT 2013/04a) document.

The RMS Guidelines and the updated TDT 2013/04a are based on extensive surveys of a

wide range of land uses and nominate the following traffic generation rates which are

applicable to the residential apartment component of the development proposal:

**High Density Residential Flat Buildings (Regional Average)** 

AM:

0.53 peak hour vehicle trips per dwelling

PM:

0.32 peak hour vehicle trips per dwelling

22

The RMS Guidelines also make the following observation in respect of high density residential flat buildings:

#### **Definition**

A high density residential flat building refers to a building containing 20 or more dwellings. This does not include aged or disabled persons housing. High density residential flat buildings are usually more than 5 levels, have basement level car parking and are located in close proximity to public transport services. The building may contain a component of commercial use.

#### **Factors**

The above rates include visitors, staff, service/delivery and on-street movements such as taxis and pick-up/set-down activities.

The RMS *Guidelines* also nominates the following traffic generation rate which is applicable to the motor showroom component of the development proposal:

#### **Motor Showrooms**

0.7 peak hour vehicle trips per 100m<sup>2</sup> of Site Area

The proposed car showroom tenancy, however, is intended to be ancillary to the adjoining *Jaguar & Land Rover* dealership rather than a standalone dealership. For the purposes of this assessment, the floor area of the proposed showroom has therefore been applied in lieu of the site area.

The RMS Guidelines nominates the following traffic generation rate which is the most closely applicable to the hotel component of the development proposal:

#### **Motels:**

0.4 peak hour vehicle trips per unit

It is readily acknowledged however, that "motels" primarily cater for the needs of car travellers who usually only require overnight accommodation before continuing their journey.

By contrast, "hotels" cater for the needs of business travellers, staff and visitors who may require accommodation for several days or several weeks.

As such, the proposed hotel development is expected to generate less traffic activity than a similar sized "motel". Notwithstanding, for the purposes of this assessment, the "motel" traffic generation has been adopted.

Application of the above traffic generation rates to the various components of the development proposal yields a traffic generation potential of approximately 48 vph during the weekday *morning* peak period and approximately 36 vph during the weekday *afternoon* peak period, as set out below.

#### **Projected Future Traffic Generation Potential**

	AM	PM
Residential (58 apartments):	31 vph	19 vph
Hotel (32 rooms):	13 vph	13 vph
Motor Showroom (518m²):	4 vph	4 vph
TOTAL TRAFFIC GENERATION POTENTIAL:	48 vph	36 vph

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the previously approved uses of the site, in order to determine the *nett increase* (or decrease) in traffic generation potential expected to occur as a consequence of the current development proposal.

Application of the above traffic generation rates to the various components of the previously approved development yields a traffic generation potential of approximately 39 vph during the weekday *morning* network peak period and approximately 35 vph during the weekday *afternoon* network peak period as set out below:

#### **Previously Approved Development Traffic Generation Potential**

	AM	PM
Residential (18 apartments):	10 vph	6 vph
Hotel (70 rooms):	28 vph	28 vph
Retail (66m²):	1 vph	1 vph
TOTAL TRAFFIC GENERATION POTENTIAL:	39 vph	35 vph

Accordingly, it is likely that the proposed development will result in a *negligible increase* in the traffic generation potential of the site of approximately 9 vph during the weekday *morning* peak period and approximately 1 vph during the weekday *afternoon* peak period, as set out below:

# Projected Nett Change in Peak Hour Traffic Generation Potential of the Site as a consequence of the Development Proposal

	AM	PM
Projected Future Traffic Generation Potential:	48 vph	36 vph
Less Previously Approved Traffic Generation Potential:	-39 vph	-35 vph
NETT CHANGE IN TRAFFIC GENERATION POTENTIAL:	+9 vph	+1 vph

That projected *nett increase* in the traffic generation potential of the site as a consequence of the development proposal is *statistically insignificant* and will clearly not have any unacceptable traffic implications in terms of road network capacity, nor will any road or infrastructure upgrades be required.

#### **Traffic Implications - Road Network Capacity**

The traffic implications of development proposals primarily concern the effects that any *additional* traffic flows may have on the operational performance of the nearby road network. Those effects can be assessed using the SIDRA program which is widely used by the RMS and many LGA's for this purpose. Criteria for evaluating the results of SIDRA analysis are reproduced in the following pages.

The results of the SIDRA analysis of the Central Coast Highway & Racecourse Road intersection, based on the 2014 traffic surveys and the previous intersection layout (i.e. *prior to* the upgrade) are summarised on Table 3.1 below, revealing that in 2014, the intersection was operating at *Level of Service "C"* under the existing weekday *evening* and Saturday *lunchtime* traffic demands, with total average vehicle delays in the order of 29-36 seconds/vehicle.

#### TABLE 3.1 - RESULTS OF SIDRA ANALYSIS OF CENTRAL COAST HIGHWAY & RACECOURSE ROAD (2014 VOLUMES & PREVIOUS DESIGN LAYOUT)

	Existing 2014	Traffic Demand
Existing 2014 Traffic DemandKey IndicatorsAMPMLevel of ServiceCCDegree of Saturation0.9100.814Average Vehicle Delay (secs/veh)36.328.8	PM	
Level of Service	С	С
Degree of Saturation	0.910	0.814
Average Vehicle Delay (secs/veh)	36.3	28.8

Even considering 2020 volumes, it is likely that the upgraded intersection is currently operating at *Level of Service* "B" during peak periods. On average, the proposed development is expected to generate one vehicle movement approximately every 73-100 seconds which will result in a negligible impact to the operational performance of the intersection.

In the circumstances, it is clear that the proposed development will not have any unacceptable traffic implications in terms of road network capacity, nor will any further road or infrastructure upgrades be required.

# Criteria for Interpreting Results of Sidra Analysis

#### 1. Level of Service (LOS)

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good operation.	Good operation.
'B'	Good with acceptable delays and spare capacity.	Acceptable delays and spare capacity.
'C'	Satisfactory.	Satisfactory but accident study required.
'D'	Operating near capacity.	Near capacity and accident study required.
'E'	At capacity; at signals incidents will cause excessive	At capacity and requires other control mode.
	delays. Roundabouts require other control mode.	
'F'	Unsatisfactory and requires additional capacity.	Unsatisfactory and requires other control mode.

#### 2. Average Vehicle Delay (AVD)

The AVD provides a measure of the operational performance of an intersection as indicated on the table below which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (ie inner city conditions) and on some roads (ie minor side street intersecting with a major arterial route).

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

#### 3. Degree of Saturation (DS)

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by traffic signals¹ both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a roundabout or GIVE WAY or STOP signs, satisfactory intersection operation is indicated by a DS of 0.8 or less.

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The values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs.

#### 4. CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Whilst a detailed Construction Traffic Management Plan will likely be prepared at construction stage, an indicative Construction Traffic Management Plan is detailed below.

#### **Construction Schedule**

The construction activities are expected to be undertaken over a duration of approximately 15 months as set out below.

Working hours will be limited to between 7:00am to 5:00pm Monday to Saturday, as per Council's standard construction working hours. No construction or demolition works associated with the development are permitted to be carried out on Sundays or public holidays.

	CONSTRUCTION PROGRAM – APPROXI	MATE DURATIONS
Stage	Work	Duration
1	Demolition & Site Establishment	2 weeks
2	Footing Excavation	2 weeks
3	Construction & Fitout	14 months

#### **Loading and Unloading Arrangements**

All demolition and excavated spoil material will be loaded wholly within the site, likely by bogey trucks. Trucks will access the site via the shared ROW off Racecourse Road in a forward direction. Similarly, trucks will exit the site back onto the ROW and left onto Racecourse Road in a forward direction.

#### **Construction Truck Routes**

All heavy vehicles involved in the demolition and construction activities would approach and depart the site via Racecourse Road in a left-in/left-out fashion via the ROW, as indicated on Figure 6.

Light traffic roads and those subject to load or height limits will be avoided as well as minimising heavy vehicle movements during school peak periods.

#### **Works Zone**

Given that all loading and delivery handling will occur on site, a Works Zone is unlikely to be required. In any event, it is unlikely that a formally signposted Works Zone would be permitted by the RMS along the Racecourse Road site frontage given the No Stopping restrictions in place and the proximity to the Central Coast Highway traffic signals.

#### **Truck Movements**

The proposed development is expected to generate the following truck movements during demolition, excavation and construction:

- 1. Demolition removal of existing bitumen surface would involve approximately 2 to 3 loads per day. This would not be every day as they would not be loading out every day of the demolition period.
- 2. Excavation excavation of building footings would also involve approximately 2 to 2 loads per day. This also would not be every day as they would not be loading out every day of the excavation period.
- 3. Large Concrete Pours there are approximately 14 major concrete pours and a similar number of minor pours. Major pours would take approximately 8 hours to pour, with 6 trucks per hour or 40 to 50 truck movements per day. Smaller pours would have a similar amount of truck movements per hour however the duration would be a lot shorter say 3 to 4 hours maximum.
- 4. General Deliveries these would occur intermittently throughout the project with the major deliveries being reinforcing steel, plasterboard and bricks. The remainder would generally comprise smaller truck deliveries. On average there will be in the order of 5 deliveries per day during early construction, reducing as the project goes on.

#### **Neighbouring Properties**

All neighbouring properties are to have their access maintained <u>at all times</u>. All nearby residents and businesses will be updated on a regular basis and at key construction stages with respect to the construction process, particularly in relation to construction vehicles movements, and be provided with a phone number to contact the site manager.

#### **Sediment Control**

All practicable measures must be taken, including the use of "truck scrubbers", to ensure that vehicles leaving the site do not deposit mud or debris on the road. Any mud or debris deposited on the road must be cleaned up immediately in a manner that does not pollute waters (i.e. by sweeping or vacuuming).

#### **Authorised Traffic Controllers**

Authorised traffic controllers may be required to supervise the movement of all heavy vehicles across the public footpath to ensure the safety of pedestrians in the vicinity of the site access driveway and along the shared ROW.

#### **Traffic Control Plan**

A Traffic Control Plan may be required at construction stage which would detail the traffic arrangements, signage etc, that would be implemented during the construction works.

The Traffic Control Plans have been prepared generally in accordance with the RMS's publication *Traffic Control at Works Sites* (2018), version 5.0 and the Standards Australia publication AS1742.3: Traffic Control Devices for Work Sites on Road.

#### **Tradesmen and Contractor Car Parking**

The site manager will ensure that there is adequate on-site parking available for employee, tradesperson and construction vehicles, where practical. Parking shall be provided in the ground and upper floor parking areas as soon as is practicable.

In addition, staff will be encouraged to utilise public transport and carpooling which will minimise traffic and parking implications as a consequence of the construction process.

As noted in the foregoing, there are 6 existing bus services which operate within 400m walking distance of the site, many of which connect to Gosford Railway Station.

### 5. PARKING & SERVICING REQUIREMENTS

#### **Existing Kerbside Parking Restrictions**

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 6 and comprise:

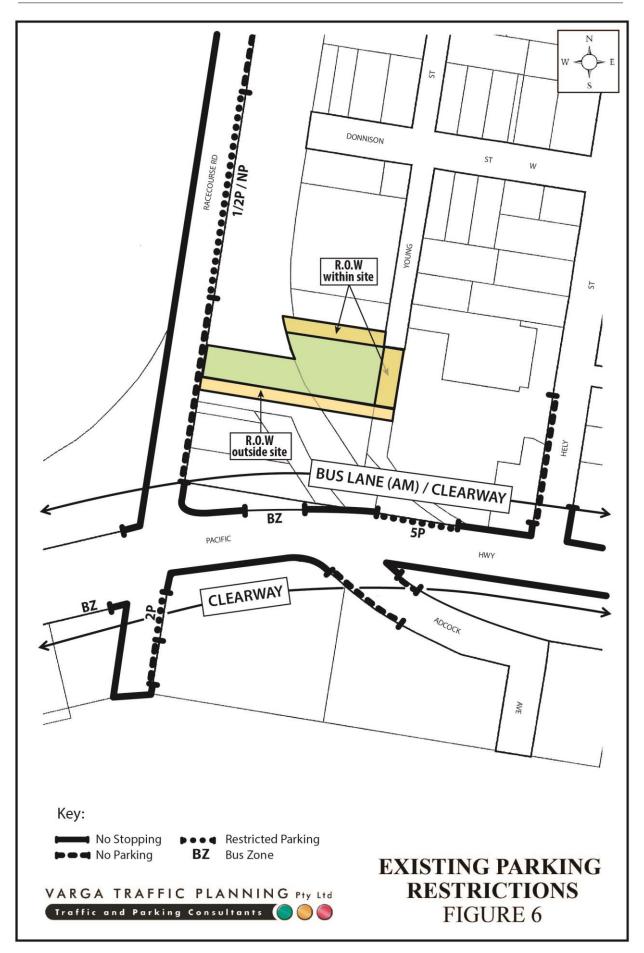
- NO STOPPING restrictions along both sides of the Racecourse Road in the vicinity of the site, including along the site frontage
- generally UNRESTRICTED kerbside parking along both sides of Young Street, including along the site frontage, and throughout the local area
- BUS ZONES located at regular intervals along both sides of the Central Coast Highway, Racecourse Road and also Donnison Street West.

#### **Off-Street Parking Requirements**

The off-street parking requirements applicable to the development proposal are specified in Table 2 of Council's *Draft Development Control Plan 2018*, *Chapter 7 – Access and Parking* document in the following terms:

Table 2. Car parking requirements

Land -Use	Parking Requirement
Residential	
Shop Top Housing	Car parking: 1 space / dwelling
Multi Dwelling Housing, Residential Flat Buildings	Resident car parking: 1 Bedroom dwelling - 1 car space/dwelling 2 Bedroom dwelling - 1.2 car spaces/dwelling 3 or more bedroom dwellings - 1.5 car spaces/dwelling
	Visitor car parking: 0.2 spaces/dwelling, provided on site and clearly marked for use by visitors only
	Disability accessible car parking: Not less than 10% of the required resident and visitor spaces
	Motorcycle parking: 1 space/15 dwellings (or part thereof)
	Bicycle parking: 1 resident's space/3 dwellings + 1 visitor space/12 dwellings (or part thereof)



Land -Use	Parking Requirement
Tourism	
Hotel	Car Parking:
Motel Units, Too Units (including serviced apartn	Tourism  Hotel Car Parking: 1 space per accommodation unit, plus 1 space for every 2 persons employed connection with the development and on duty at any one time. Restaurants, for rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. associated with the development and open to the general public rooms etc. assoc
not strata titled;	Motorcycle parking:
Commercial & Retail	i space/25 car spaces or part mereor
ehicle Sales or Hire	Car parking:
remises	
	6 spaces/service bay or 1 space/2 persons employed in connection with the use
	Motorcycle parking: 1 space/25 car spaces or part thereof

Application of the above parking requirements to the various components of the development proposal yields an off-street parking requirement of 96 car parking spaces, as set out below.

Shop-top housing (58 units): 58 spaces
Hotel guests (32 rooms): 32 spaces
Hotel staff (2 employees): 1 space
Motor showroom (518m²): 4 spaces
Showroom staff (2 employees): 1 spaces
TOTAL REQUIRMENT: 96 Spaces

The proposed development makes provision for a total of 96 off-street parking spaces, comprising 58 residential spaces, 32 hotel spaces, 1 hotel staff space, 4 motor showroom spaces and 1 showroom staff space, thereby satisfying Council's *Draft DCP 2018* requirements.

In addition to the above, 7 dedicated parking spaces have also been provided in indented parallel parking bays along the ROW. These spaces will benefit the general public and will be subject to signposted restrictions deemed appropriate by Council.

The geometric design layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication Parking Facilities Part 1 - Off-Street Car Parking AS2890.1 and Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6 in respect of parking bay dimensions, ramp grades, overhead clearances and aisle widths.

Further to the above, the vehicular access arrangements have been designed to accommodate the swept turning path requirements of the B99 design vehicle as specified in *AS2890.1:2004*, allowing them to circulate the internal ramps without difficulty, and to enter and exit the site in a forward direction at all times.

In addition, the proposed development also provides at total of 14 bicycle and 6 motorcycle spaces. Notwithstanding, it is noted that the DCP *does not* specify a parking provision rate for these bicycle and motorcycle spaces for shop-top housing developments.

#### **Loading/Servicing Provisions**

The proposed new hotel is expected to be serviced by a variety of light commercial vehicles ranging in size from courier vans up to and including 11m long large rigid trucks. A shared loading area is to be located on the ground floor level of the building, adjacent the garbage holding rooms, such that the truck will reverse off the ROW into the site. Once loaded, the truck will exit the site in a forward direction.

The geometric design layout of the proposed loading facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2:2018* in respect of loading bay dimensions, overhead clearances and service area requirements.

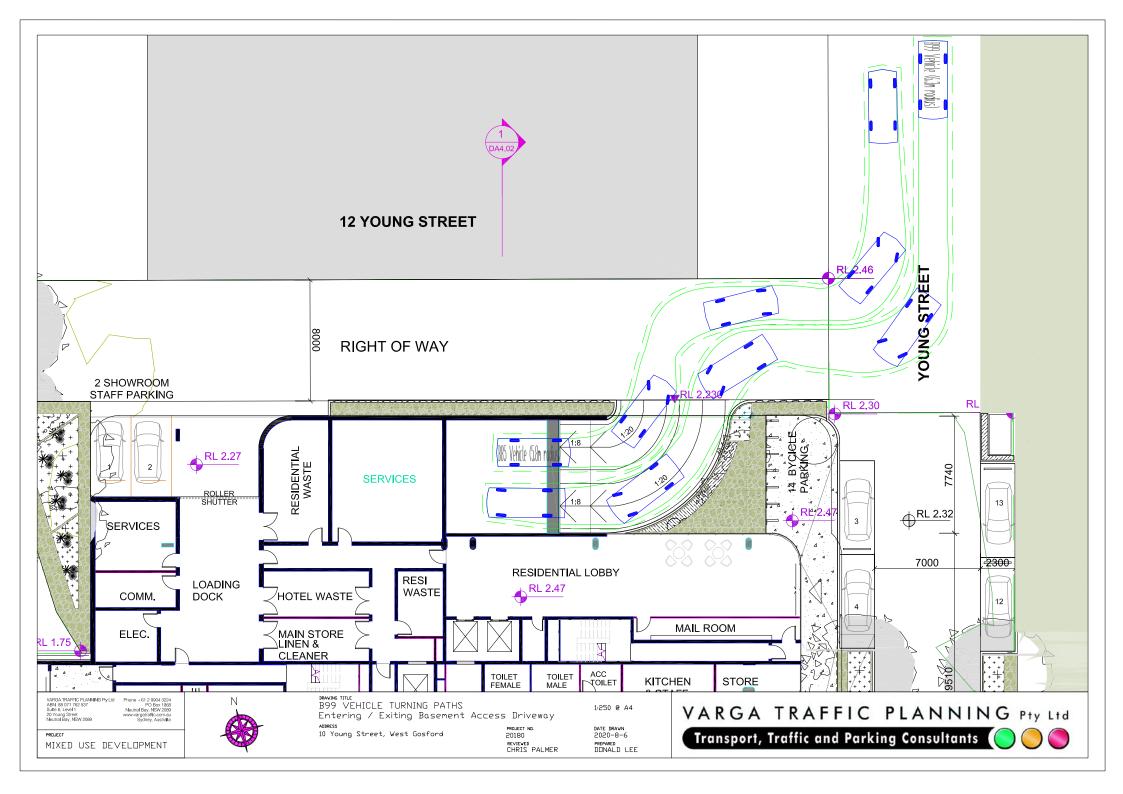
#### Conclusion

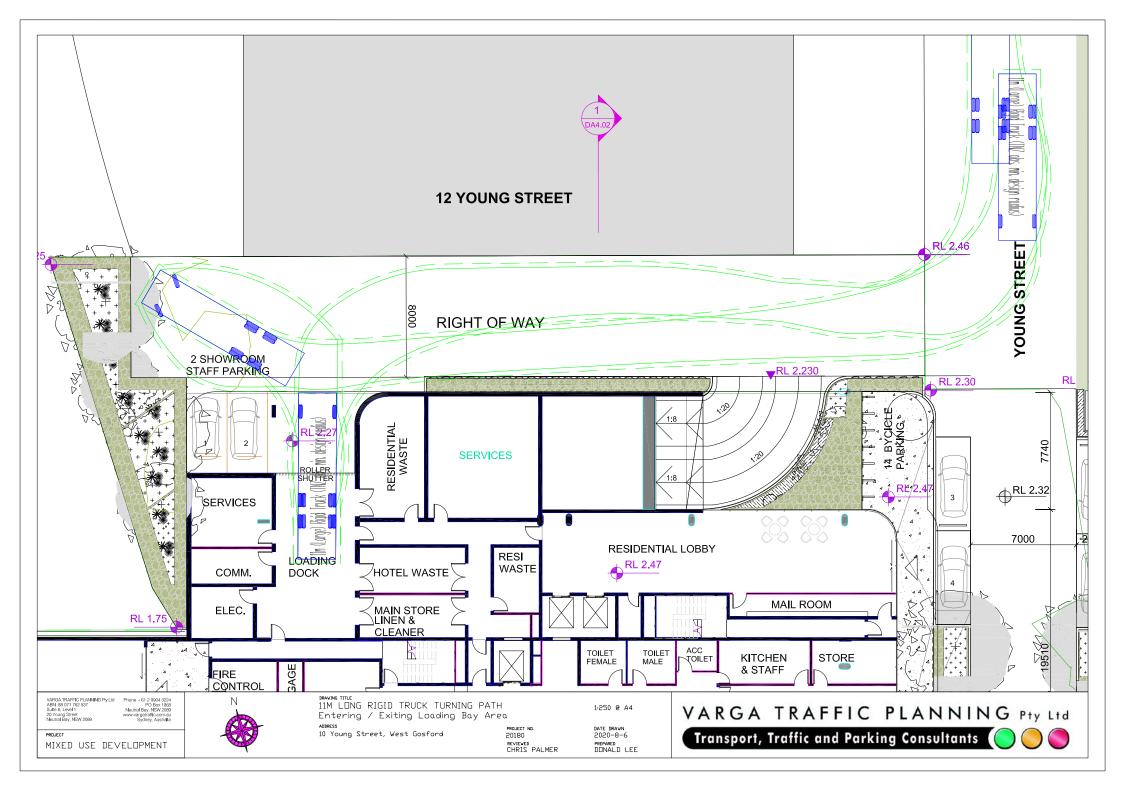
Based on the analysis and discussions presented within this report, the following conclusions are made:

- the site is located in close proximity to 6 bus services, many of which connect to Gosford Railway Station
- the proposed development comprising 58 residential apartments, 32 hotel suites and an ancillary motor showroom hotel is expected to generate a modest volume of traffic and largely consistent with the previously approved scheme on the site

- the proposed development is not expected to result in any unacceptable traffic implications in terms of road network capacity, nor will any road or infrastructure upgrades be required
- the off-street parking provision complies with the requirements specified in Council's Draft DCP 2018 and is expected to comfortably cater for the expected parking demand
- the vehicular access and parking arrangements comply with the relevant aspects of AS2890.1:2004, AS2890.2:2018, AS2890.3:2015 and AS2890.6:2009
- tourist buses will be limited to 22-seater mini-buses which are approximately 7m in length
- garbage collection and deliveries will all be undertaken on-site and outside of peak periods to ensure safety and minimise disruption

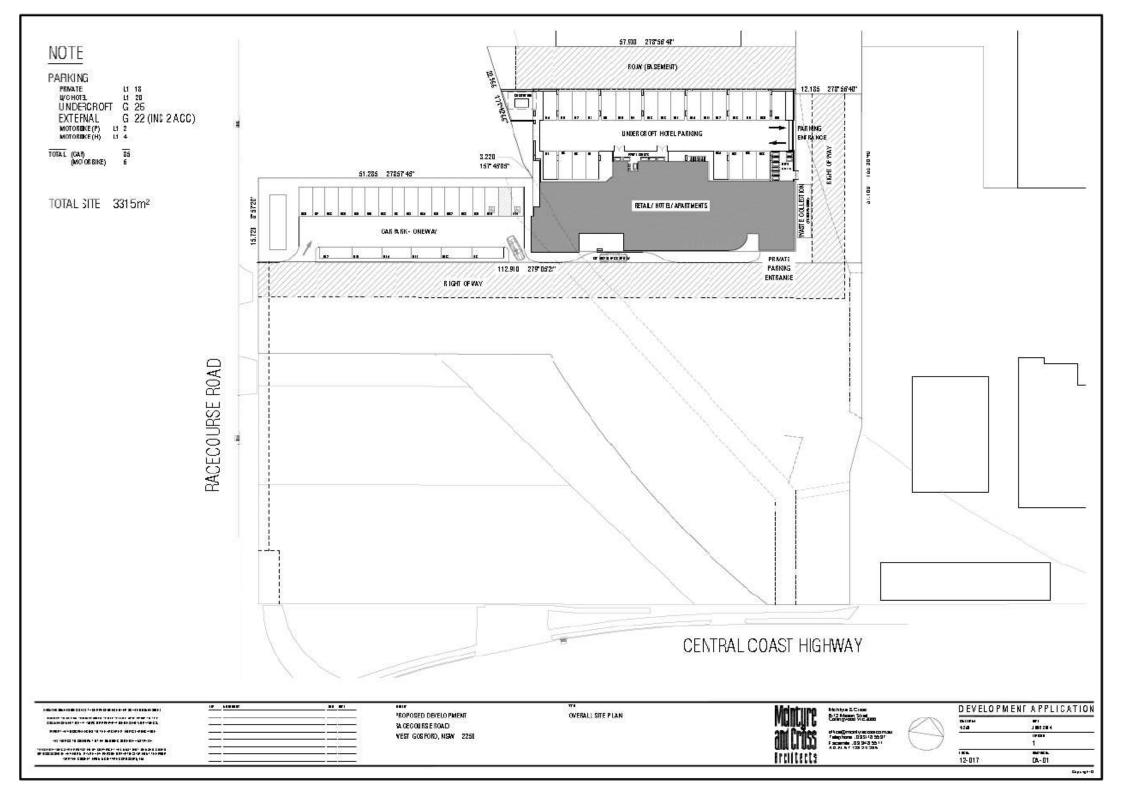
In the circumstances it is therefore concluded that the proposed development will not have any unacceptable traffic, parking, access or servicing implications.

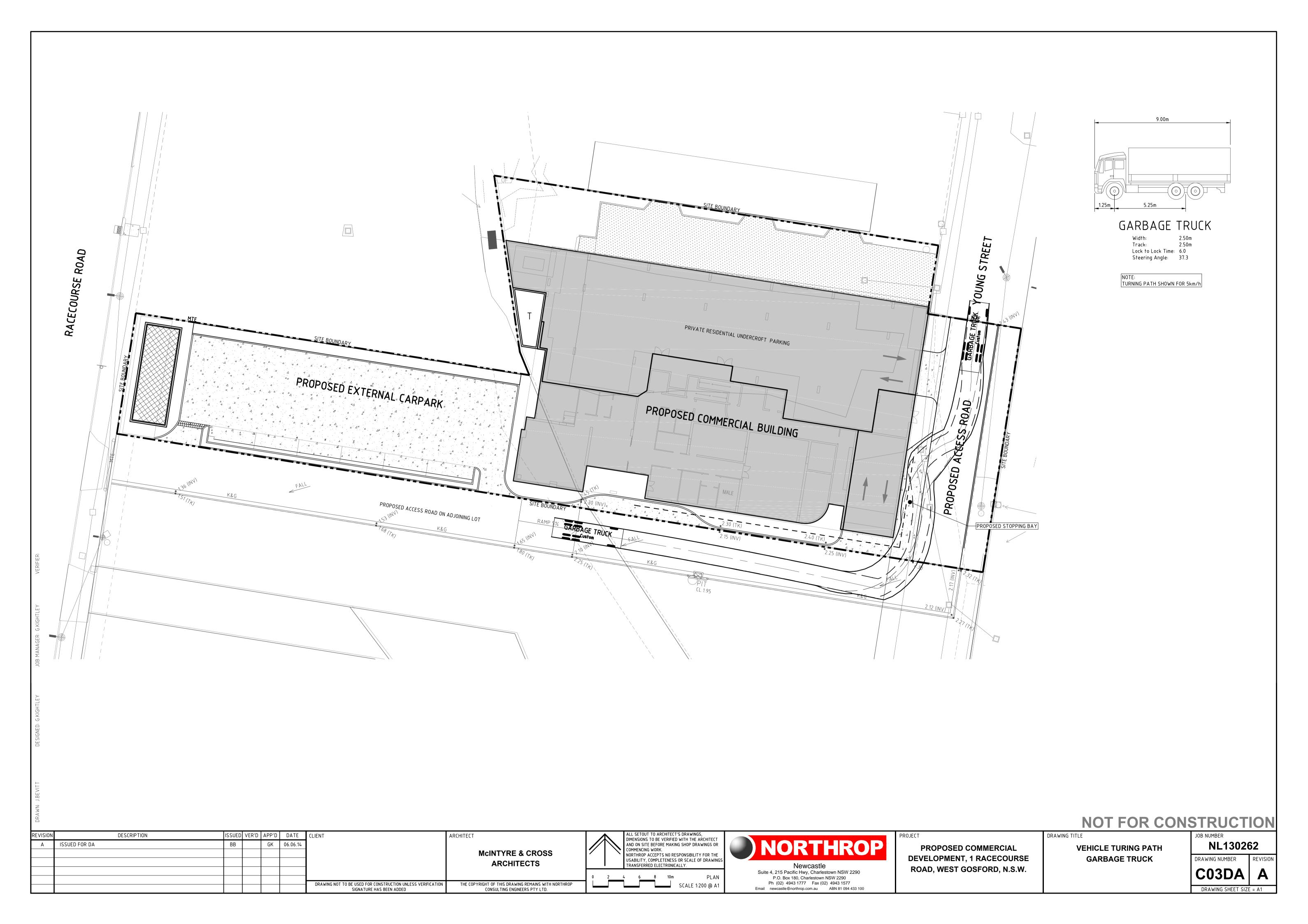




# APPENDIX A

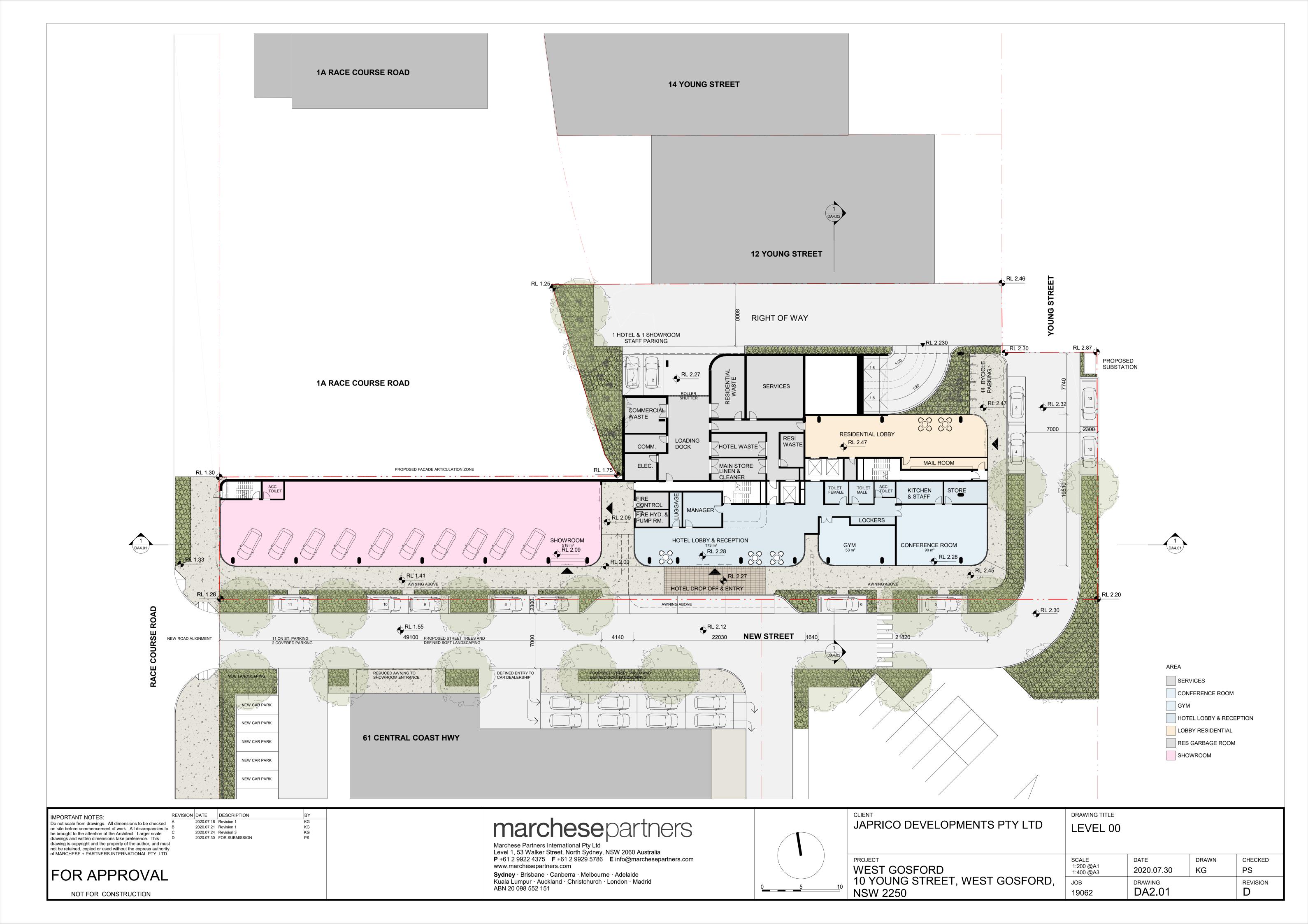
# PREVIOUSLY APPROVED PLANS

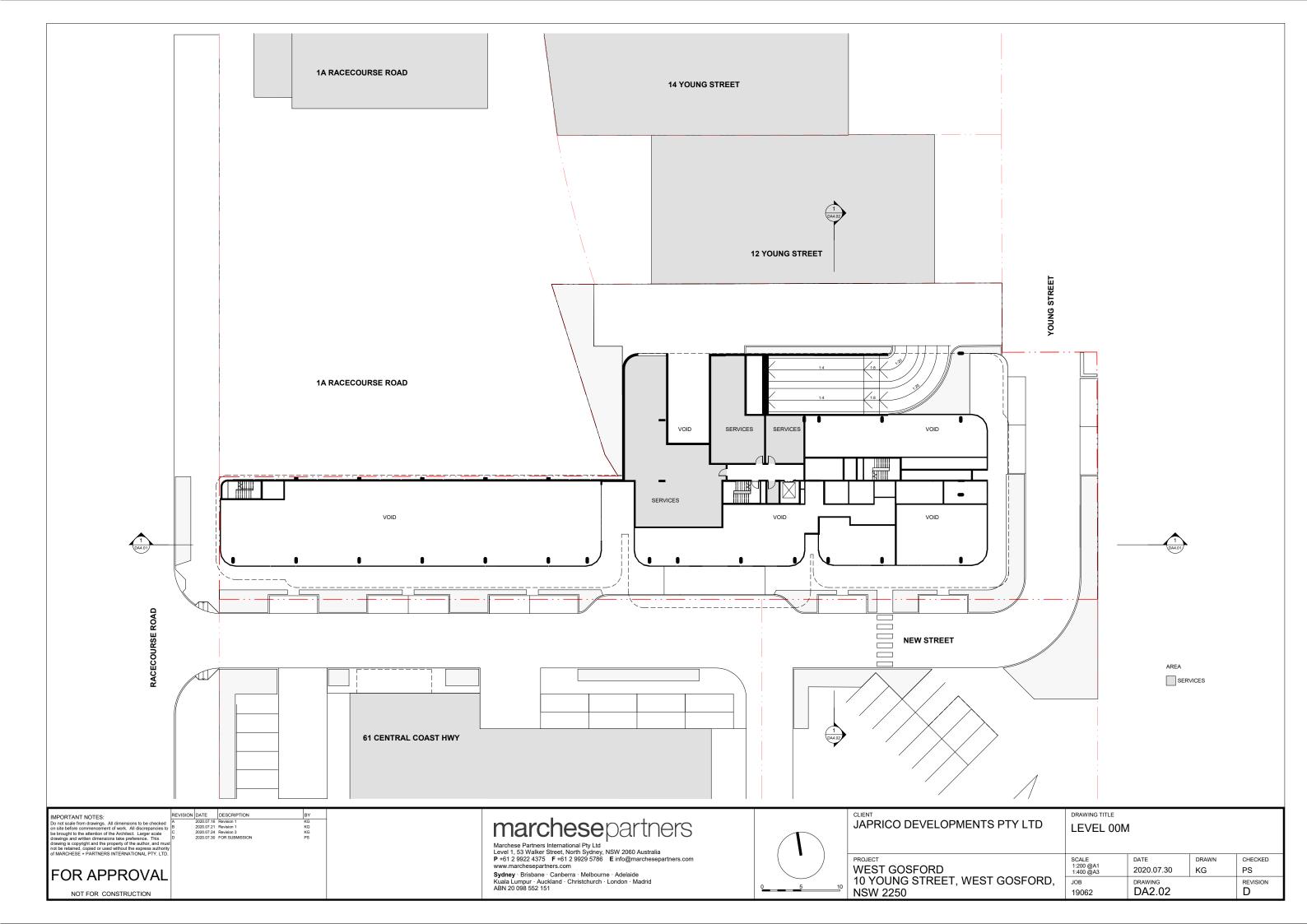


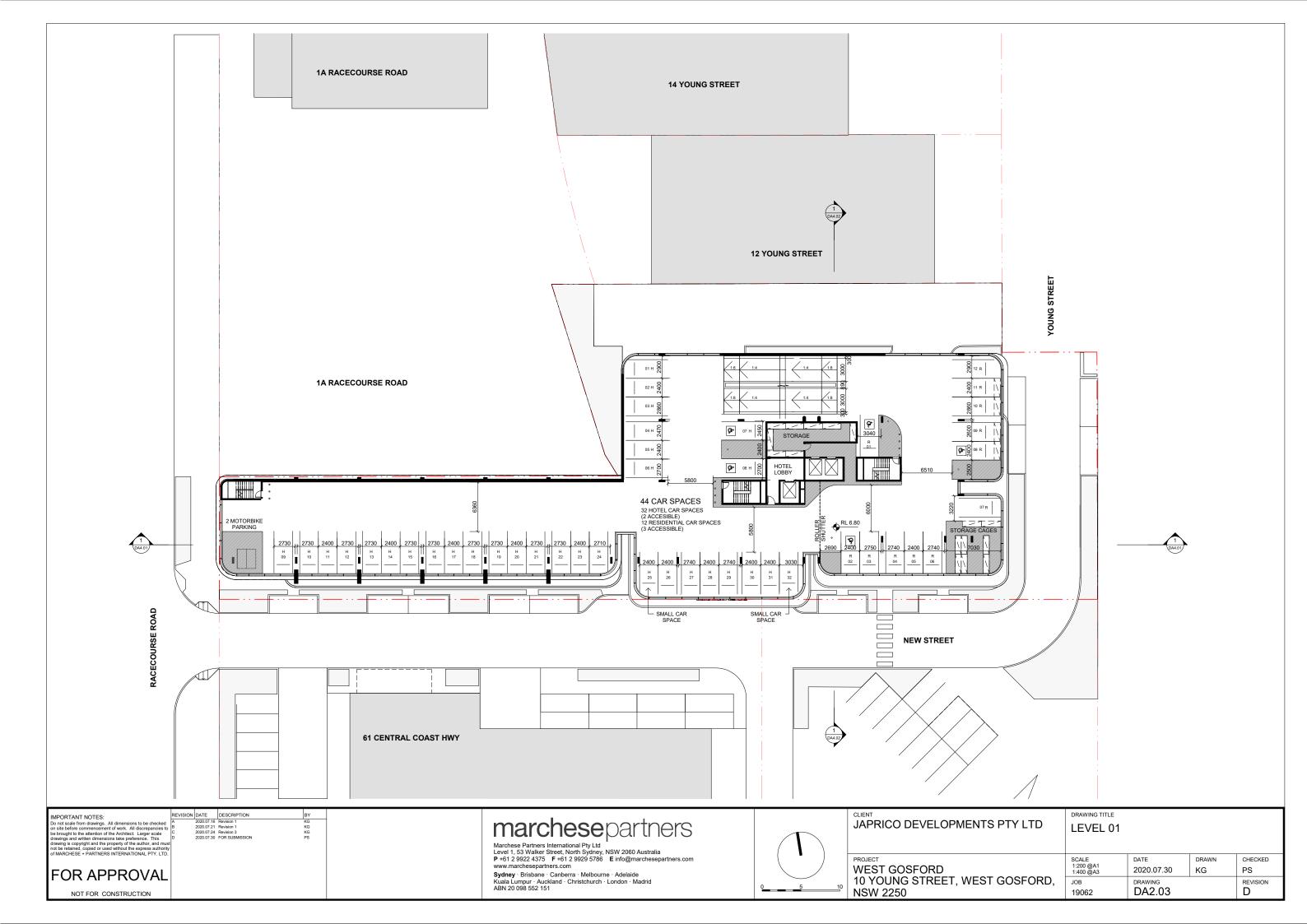


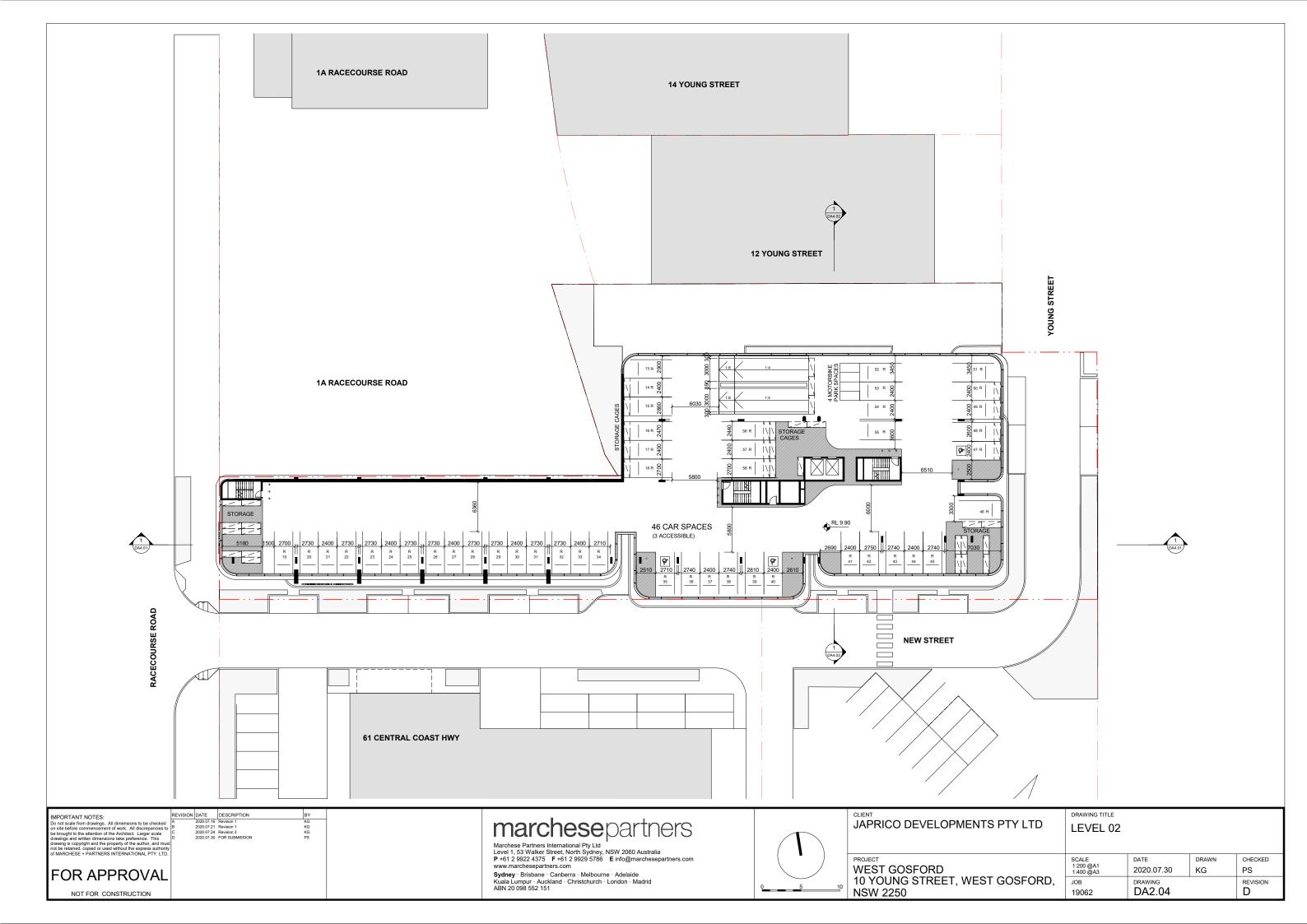
### **APPENDIX B**

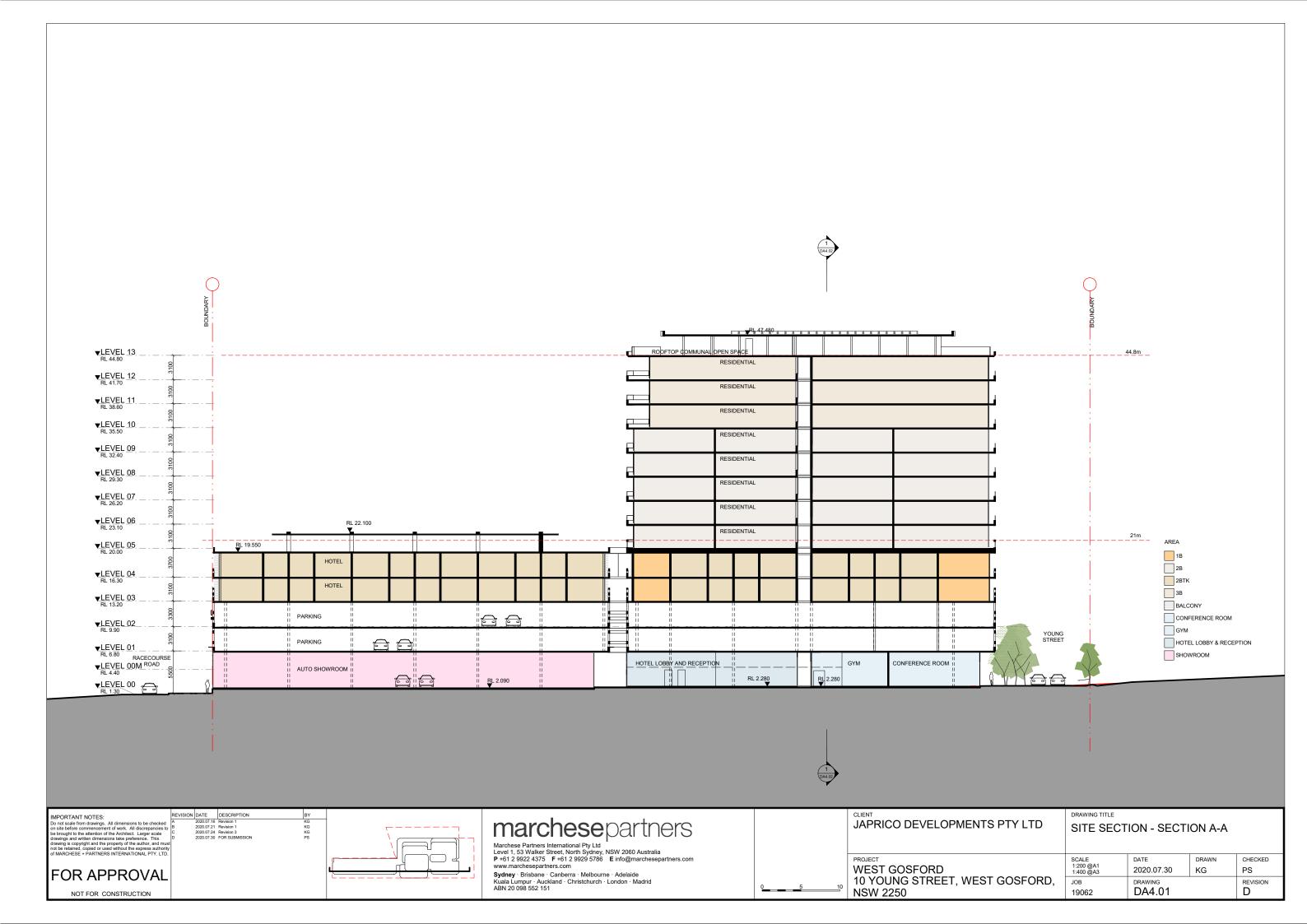
# PROPOSED ARCHITECTURAL PLANS

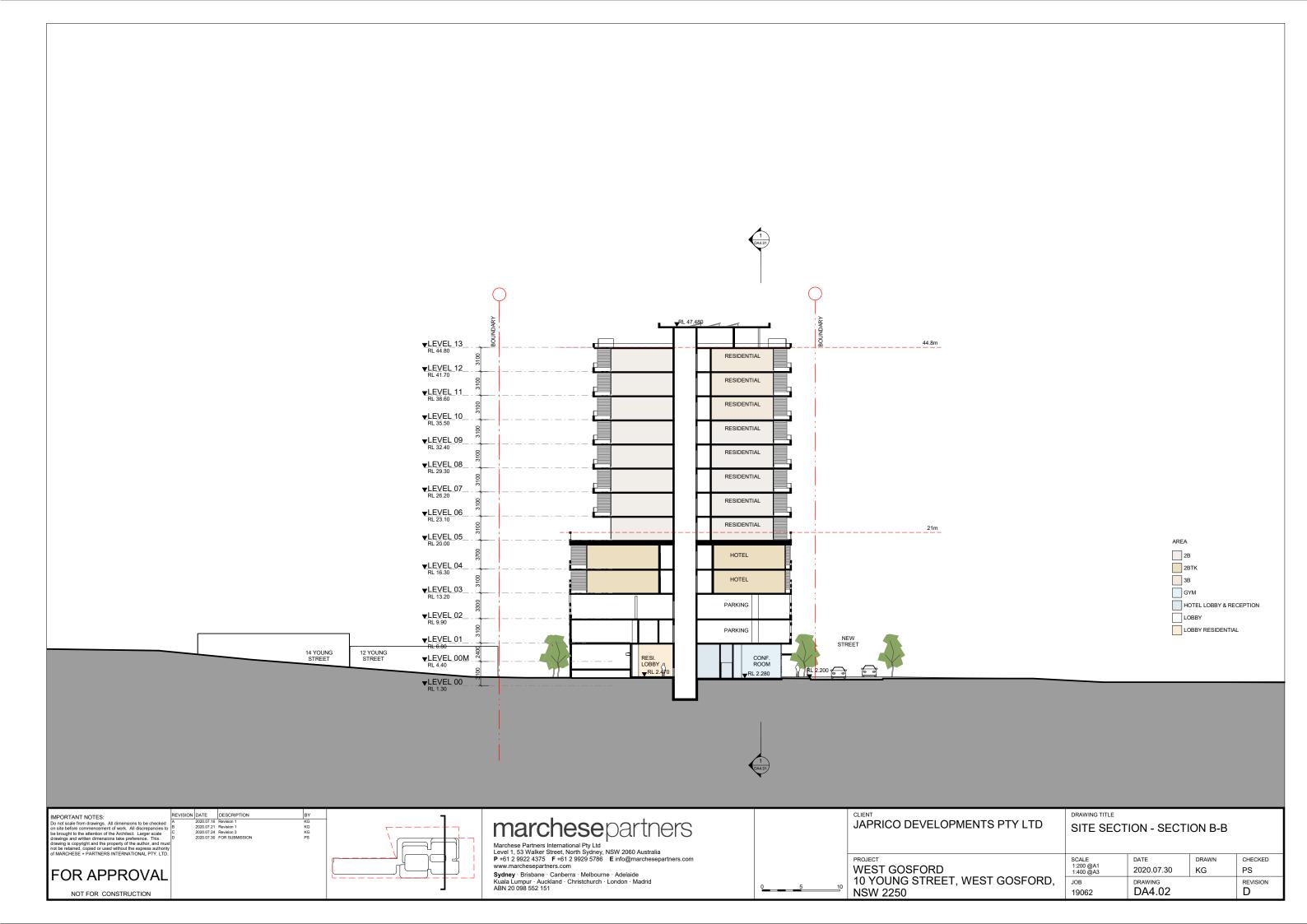












# APPENDIX C

# TRAFFIC SURVEY DATA



Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

Client Job No/Name : Varga Traffic Planning

: 5322 WEST GOSFORD Racecourse Rd

Day/Date : Friday 12th September 2014

<u>Lights</u>	N	IORT	Н		WEST	•	;	SOUTI	1		EAST	•		<u>Lights</u>	1	NORTH	1	,	WEST	-	5	SOUTI	Н				
	Race	cours	e Rd	Centra	al Coas	st Hwy	Sp	orts Pa	ark	Central Coast Hwy				Racecourse Rd			Central Coast Hwy			Sp	orts Pa	ark	Centra				
Time Period	<u>L</u>	I	<u>R</u>	<u>L</u>	I	<u>R</u>	L	I	<u>R</u>	L	I	<u>R</u>	тот	Peak Period	L	I	<u>R</u>	<u>L</u>	I	<u>R</u>	L	I	<u>R</u>	L	I	<u>R</u>	ТОТ
1600 - 1615	14	3	129	87	463	6	4	0	3	7	436	9	1161	1600 - 1700	33	8	518	338	2041	23	19	8	30	27	1529	21	4595
1615 - 1630	6	2	121	95	516	3	6	1	6	4	368	5	1133	1615 - 1715	23	8	505	330	2058	19	18	12	36	22	1432	16	4479
1630 - 1645	3	2	132	68	497	5	3	3	3	5	329	3	1053	1630 - 1730	21	7	531	327	2001	20	13	11	37	22	1472	12	4474
1645 - 1700	10	1	136	88	565	9	6	4	18	11	396	4	1248	1645 - 1745	25	9	514	357	1979	19	14	10	37	22	1527	13	4526
1700 - 1715	4	3	116	79	480	2	3	4	9	2	339	4	1045	1700 - 1800	16	9	482	350	1837	13	11	9	23	15	1459	15	4239
1715 - 1730	4	1	147	92	459	4	1	0	7	4	408	1	1128	1715 - 1815	13	10	444	374	1761	15	9	7	26	20	1418	13	4110
1730 - 1745	7	4	115	98	475	4	4	2	3	5	384	4	1105	1730 - 1830	16	9	359	381	1677	15	12	7	24	22	1262	19	3803
1745 - 1800	1	1	104	81	423	3	3	3	4	4	328	6	961	1745 - 1845	13	6	312	346	1528	21	10	6	26	20	1056	15	3359
1800 - 1815	1	4	78	103	404	4	1	2	12	7	298	2	916	1800 - 1900	15	5	273	352	1504	21	11	6	27	18	937	11	3180
1815 - 1830	7	0	62	99	375	4	4	0	5	6	252	7	821														
1830 - 1845	4	1	68	63	326	10	2	1	5	3	178	0	661	PEAK HOUR	33	8	518	338	2041	23	19	8	30	27	1529	21	4595
1845 - 1900	3	0	65	87	399	3	4	3	5	2	209	2	782														
Period End	64	22	1273	1040	5382	57	41	23	80	60	3925	47	####														

<u>Heavies</u>		NORTI	H		WES	Γ	,	SOUTI	1		EAST			<u>Heavies</u>	ı	NORT	1		WEST			SOUTI	1				
	Race	ecours	e Rd	Centra	al Coa	st Hwy	Sp	orts Pa	ark	Centra	al Coas	st Hwy			Rac	ecours	e Rd	Centra	l Coas	t Hwy	Sp	orts Pa	ark	Centra	al Coas	st Hwy	
Time Period	<u>L</u>	<u>T</u>	<u>R</u>	L	I	<u>R</u>	L	<u>T</u>	<u>R</u>	L	I	<u>R</u>	TOT	Peak Period	L	<u>T</u>	<u>R</u>	<u>L</u>	I	<u>R</u>	L	I	<u>R</u>	<u>L</u>	I	<u>R</u>	TOT
1600 - 1615	0	0	5	0	1	0	0	0	0	0	3	0	9	1600 - 1700	0	0	9	6	15	0	0	0	0	0	7	0	37
1615 - 1630	0	0	2	2	5	0	0	0	0	0	1	0	10	1615 - 1715	0	0	8	6	14	0	0	0	0	0	5	0	33
1630 - 1645	0	0	1	3	5	0	0	0	0	0	1	0	10	1630 - 1730	0	0	8	5	12	0	0	0	0	0	7	0	32
1645 - 1700	0	0	1	1	4	0	0	0	0	0	2	0	8	1645 - 1745	0	0	7	2	12	0	0	0	0	0	8	0	29
1700 - 1715	0	0	4	0	0	0	0	0	0	0	1	0	5	1700 - 1800	0	0	7	1	9	0	0	0	0	0	7	0	24
1715 - 1730	0	0	2	1	3	0	0	0	0	0	3	0	9	1715 - 1815	0	0	3	2	13	0	0	0	0	0	7	0	25
1730 - 1745	0	0	0	0	5	0	0	0	0	0	2	0	7	1730 - 1830	0	0	2	3	11	0	0	0	0	0	6	1	23
1745 - 1800	0	0	1	0	1	0	0	0	0	0	1	0	3	1745 - 1845	0	0	4	3	8	0	0	0	0	0	5	1	21
1800 - 1815	0	0	0	1	4	0	0	0	0	0	1	0	6	1800 - 1900	0	0	4	4	8	0	0	0	0	0	6	1	23
1815 - 1830	0	0	1	2	1	0	0	0	0	0	2	1	7														
1830 - 1845	0	0	2	0	2	0	0	0	0	0	1	0	5	PEAK HOUR	0	0	9	6	15	0	0	0	0	0	7	0	37
1845 - 1900	0	0	1	1	1	0	0	0	0	0	2	0	5														
Period End	0	0	20	11	32	0	0	0	0	0	20	1	84														



Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

Client : Varga Traffic Planning

Job No/Name : 5322 WEST GOSFORD Racecourse Rd

Day/Date : Friday 12th September 2014

	IORTH		,	WEST		ç	OUTH			EAST												_				
Race							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			EASI				r	IORTI	1	· '	WEST		٤	HUOS	1		<b>EAST</b>		
, wo	course	e Rd	Centra	al Coas	t Hwy	Sp	orts Pa	ark	Centra	al Coas	t Hwy		COMBINED	Race	cours	e Rd	Centra	l Coas	t Hwy	Sp	orts Pa	ark	Centra	l Coas	t Hwy	
L	<u>T</u>	<u>R</u>	L	I	<u>R</u>	<u>L</u>	<u>T</u>	<u>R</u>	<u>L</u>	<u>T</u>	<u>R</u>	TOT	Peak Period	L	<u>T</u>	<u>R</u>	L	<u>T</u>	<u>R</u>	Ŀ	<u>T</u>	<u>R</u>	L	I	<u>R</u>	TOT
14	3	134	87	464	6	4	0	3	7	439	9	1170	1600 - 1700	33	8	527	344	2056	23	19	8	30	27	1536	21	4632
6	2	123	97	521	3	6	1	6	4	369	5	1143	1615 - 1715	23	8	513	336	2072	19	18	12	36	22	1437	16	4512
3	2	133	71	502	5	3	3	3	5	330	3	1063	1630 - 1730	21	7	539	332	2013	20	13	11	37	22	1479	12	4506
10	1	137	89	569	9	6	4	18	11	398	4	1256	1645 - 1745	25	9	521	359	1991	19	14	10	37	22	1535	13	4555
4	3	120	79	480	2	3	4	9	2	340	4	1050	1700 - 1800	16	9	489	351	1846	13	11	9	23	15	1466	15	4263
4	1	149	93	462	4	1	0	7	4	411	1	1137	1715 - 1815	13	10	447	376	1774	15	9	7	26	20	1425	13	4135
7	4	115	98	480	4	4	2	3	5	386	4	1112	1730 - 1830	16	9	361	384	1688	15	12	7	24	22	1268	20	3826
1	1	105	81	424	3	3	3	4	4	329	6	964	1745 - 1845	13	6	316	349	1536	21	10	6	26	20	1061	16	3380
1	4	78	104	408	4	1	2	12	7	299	2	922	1800 - 1900	15	5	277	356	1512	21	11	6	27	18	943	12	3203
7	0	63	101	376	4	4	0	5	6	254	8	828														
4	1	70	63	328	10	2	1	5	3	179	0	666	PEAK HOUR	33	8	527	344	2056	23	19	8	30	27	1536	21	4632
3	0	66	88	400	3	4	3	5	2	211	2	787														
64	22	1293	1051	5414	57	41	23	80	60	3945	48	####						Race	cours	e Rd						
													N				<b>A</b>						PE	AK HO	<u>UR</u>	
				Race	cours	e Rd																	160	0 - 17	700	
																	373									
T	OTAL												Y				367	9	0	0	9					
VO	LUME	S		<b></b>													6	518	8	33	559					
				I		20												527	8	33	568					
P	ERIO	)																								
						1379													$\downarrow$		•					
				12														<b>—</b> '	_	I <b>→</b>						
													21	2402	2423	→ /	<b>.</b>						15	2104	2119	<b>→</b>
													6	338	344								. 21	21	0	
	43	6479	6522				32	5526	5558									6		4						
					╫								15	2041	2056	<b>→</b>		F				•	1536	1529	7	
				/						<b>V</b>									D							
•	5279	5239	40			←	4053	4032	21								Ĺ					Ļ	27	27	_	
				<b></b>														_	<b>A</b>		· ·		<b>←</b>	1584	1577	7
													Central Co	oast H	wy											
				144		0											<b></b>		ı							
				144														19	8	30						
				0		139											57	19	8		-					
																		0	0							
						•											0				58					
	14 6 3 10 4 4 7 1 1 7 4 3 64	14 3 6 2 3 2 10 1 4 3 4 1 7 4 1 1 1 1 4 7 0 4 1 1 3 0 64 22 TOTAL VOLUME FOR COUPERIOR	14 3 134 6 2 123 3 2 133 10 1 137 4 3 120 4 1 149 7 4 115 1 1 105 1 4 78 7 0 63 4 1 70 3 0 66 64 22 1293  TOTAL  VOLUMES  FOR COUNT  PERIOD  Central Coas	14 3 134 87 6 2 123 97 3 2 133 71 10 1 137 89 4 3 120 79 4 1 149 93 7 4 115 98 1 1 105 81 1 4 78 104 7 0 63 101 4 1 70 63 3 0 66 88 64 22 1293 1051  TOTAL  VOLUMES  FOR COUNT  PERIOD	14	14	14	14	14	14	14	14	14	14	14	14 3 134 87 464 6 4 0 3 7 439 9 1170 6 2 123 97 521 3 6 1 6 4 369 5 1143 3 2 133 71 502 5 3 3 3 5 330 3 1063 1630-1700 21 7 10 1 137 89 569 9 6 4 18 11 398 4 1256 1645-1745 25 9 4 3 120 79 480 2 3 4 9 2 340 4 1050 1700-1800 16 9 1 14 105 81 424 3 3 3 3 4 4 11 1 112 1 1 105 81 424 3 3 3 3 4 4 1256 1 1 4 78 104 408 4 1 2 12 7 299 2 922 7 0 63 301 376 4 4 0 5 5 6 254 8 828 4 1 70 63 328 10 2 1 5 5 3 179 0 666 4 1 70 63 328 10 2 1 5 3 3 179 0 666 64 22 1293 1051 5414 57 41 23 80 60 3945 48 ####  **Racecourse Rd**  **Racecourse Rd**  **Racecourse Rd**  **Central Coast Hwy**  **A 1339 139 1 139	14 3 134 87 464 6 4 0 3 7 439 9 1170 1600-1700 33 8 527 62 123 97 521 3 6 1 6 4 369 5 1143 1615-1715 23 8 513 3 2 133 71 502 5 3 3 3 3 5 330 3 1063 1630-1730 21 7 539 10 1 137 89 569 9 6 4 18 11 398 4 1256 1630-1730 21 7 539 10 1 149 93 462 4 1 0 0 7 4 411 1 1137 1137 1150 13 10 447 7 4 115 98 480 4 4 2 3 3 5 386 4 1112 1730-1830 16 9 361 1 1 1 105 81 424 3 3 3 3 4 4 329 6 964 1745-1845 13 6 316 1 4 78 104 408 4 1 2 12 7 299 2 92 92 92 92 92 92 92 92 92 92 92	14	14	14	14	14   3   134   87   464   6   4   0   3   7   439   9   1170   1170   133   8   527   344   2056   23   19   8   8   6   2   123   97   521   3   6   1   6   4   369   5   1143   1615   1715   23   8   513   336   2072   19   18   12   12   13   17   133   17   10   1   137   89   569   9   6   4   18   11   398   4   1256   1645   1745   25   9   521   359   1991   19   14   10   10   1   137   89   569   9   6   4   18   11   398   4   1256   1645   1745   25   9   521   359   1991   19   14   10   10   14   11   1137   170   180   18   18   18   18   18   18	14 3 134 87 464 6 4 0 3 7 439 9 1170 6 2 123 97 521 3 6 1 6 4 369 5 1143 3 2 133 71 502 5 3 3 3 5 530 3 1663 1 1 137 89 569 9 6 4 18 11 398 4 1256 1 1 1 137 89 480 2 3 4 9 2 340 4 150 1 1 1 15 81 424 3 3 3 4 9 2 340 4 32 12 7 299 2 922 1 1 1 1 70 63 328 10 2 1 5 6 254 8 282 1 1 70 63 328 10 2 1 5 5 3 179 0 666 1 1 70 63 328 10 2 1 5 5 3 179 0 666 1 2 1293 1051 5414 57 41 23 80 60 3945 48 ####  TOTAL  **Race-ourse Rd**  **Central Coast Hwy**  **Total**  **To	14 3 134 87 464 6 4 0 3 7 439 9 1170 1600-1700 33 8 527 344 2056 23 19 8 30 27 652 133 97 521 33 6 11 66 4 369 5 1143 1615-1715 23 7 539 332 2013 20 13 11 37 22 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14 3 134 87 464 6 4 0 3 3 7, 439 9 1170  3 2 133 97 521 3 6 1 1 6 4 389 5 1143 3 2 133 71 502 5 3 3 3 3 5 330 5 330 3 1063 183 - 173 78 89 569 9 6 4 18 11 398 4 1256 4 3 1 1 44 78 10 7 7 44 411 1 1137 1 10 1 1 137 88 569 9 6 6 4 1 8 11 398 4 1050 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14 3 194 87 464 6 4 0 3 3 7 439 9 1170 6 2 123 97 521 3 6 1 6 4 389 5 1143 3 12 133 71 502 5 3 3 3 3 5 330 3 1663 3 2 133 71 502 5 3 3 3 3 5 330 3 1663 10 1 137 88 569 9 6 4 18 11 398 4 1256 4 1 149 93 462 4 1 0 7 7 4 411 1 1 137 7 4 115 98 480 4 4 2 3 5 386 4 112 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



**Reliable, Original & Authentic Results**Ph.88196847, Fax 88196849, Mob.0418-239019

: Varga Traffic Planning Client

Job No/Name : 5322 WEST GOSFORD Racecourse Rd

Day/Date : Friday 12th September 2014

<u>Pedestrians</u>	NORTH	WEST Central Coast Hwy	SOUTH	EAST Central Coast Hwy		<u>Pedestrians</u>	NORTH Racecourse Rd	WEST Central Coast Hwy	SOUTH Sports Park	EAST Central Coast Hwy	
	Racecourse Rd	1	Sports Park	ļ				·	•	·	_
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT	Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1600 - 1615	0	0	1	2	3	1600 - 1700	5	0	6	7	18
1615 - 1630	1	0	2	2	5	1615 - 1715	5	0	5	6	16
1630 - 1645	1	0	1	1	3	1630 - 1730	4	0	3	4	11
1645 - 1700	3	0	2	2	7	1645 - 1745	3	0	2	3	8
1700 - 1715	0	0	0	1	1	1700 - 1800	1	0	1	3	5
1715 - 1730	0	0	0	0	0	1715 - 1815	1	0	4	5	10
1730 - 1745	0	0	0	0	0	1730 - 1830	1	0	5	5	11
1745 - 1800	1	0	1	2	4	1745 - 1845	2	0	5	5	12
1800 - 1815	0	0	3	3	6	1800 - 1900	2	0	4	6	12
1815 - 1830	0	0	1	0	1						
1830 - 1845	1	0	0	0	1	PEAK HOUR	5	0	8	7	18
1845 - 1900	1	0	0	3	4						
Period End	8	0	11	16	35						



Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

Client
Job No/Name
Day/Date

: Varga Traffic Planning

: 5322 WEST GOSFORD Racecourse Rd

y/Date : Saturday 13th September 2014

<u>Lights</u>	I	NORT	Н		WEST	•	•	SOUTI	1		EAST			<u>Lights</u>	1	NORTI	Н		WEST	•	S	SOUTI	1		EAST		
	Rac	ecours	e Rd	Centra	al Coas	t Hwy	Sp	orts Pa	ark	Centr	al Coas	t Hwy			Race	cours	e Rd	Centra	al Coas	st Hwy	Sp	orts Pa	ark	Centra	al Coas	t Hwy	
Time Period	<u>L</u>	I	<u>R</u>	<u>L</u>	<u>T</u>	<u>R</u>	<u>L</u>	I	<u>R</u>	<u>L</u>	<u>T</u>	<u>R</u>	TOT	Peak Period	<u>L</u>	I	<u>R</u>	<u>L</u>	I	<u>R</u>	<u>L</u>	<u>T</u>	<u>R</u>	<u>L</u>	I	<u>R</u>	TOT
1100 - 1115	7	0	87	113	405	4	2	0	4	7	488	<u>5</u>	1122	1100 - 1200	15	4	346	421	1703	13	9	11	18	24	1766	19	4349
1115 - 1130	3	2	95	100	417	2	3	5	7	5	409	<u>5</u>	1053	1115 - 1215	17	5	380	427	1734	15	11	16	19	21	1701	21	4367
1130 - 1145	4	1	96	118	476	2	0	1	3	5	449	<u>6</u>	1161	1130 - 1230	20	6	392	426	1774	17	15	13	14	18	1708	23	4426
1145 - 1200	1	1	68	90	405	5	4	5	4	7	420	<u>3</u>	1013	1145 - 1245	19	7	388	427	1808	22	16	14	17	21	1731	25	4495
1200 - 1215	9	1	121	119	436	6	4	5	5	4	423	7	1140	1200 - 1300	25	8	429	452	1850	18	15	13	16	19	1764	30	4639
1215 - 1230	6	3	107	99	457	4	7	2	2	2	416	7	1112	1215 - 1315	23	8	424	453	1840	16	17	13	17	24	1810	31	4676
1230 - 1245	3	2	92	119	510	7	1	2	6	8	472	8	1230	1230 - 1330	25	5	391	435	1699	14	14	15	24	26	1700	28	4376
1245 - 1300	7	2	109	115	447	1	3	4	3	5	453	8	1157	1245 - 1345	27	5	369	432	1656	14	15	14	23	19	1606	27	4207
1300 - 1315	7	1	116	120	426	4	6	5	6	9	469	8	1177	1300 - 1400	28	4	325	399	1608	19	16	16	22	17	1571	24	4049
1315 - 1330	8	0	74	81	316	2	4	4	9	4	306	4	812	1315 - 1415	29	4	293	436	1547	21	12	14	21	12	1536	23	3948
1330 - 1345	5	2	70	116	467	7	2	1	5	1	378	7	1061	1330 - 1430	29	6	289	472	1569	26	18	10	17	17	1578	25	4056
1345 - 1400	8	1	65	82	399	6	4	6	2	3	418	5	999	1345 - 1445	26	5	279	446	1486	21	18	12	16	20	1647	26	4002
1400 - 1415	8	1	84	157	365	6	2	3	5	4	434	7	1076	1400 - 1500	23	5	273	450	1412	18	18	9	17	22	1624	26	3897
1415 - 1430	8	2	70	117	338	7	10	0	5	9	348	6	920														
1430 - 1445	2	1	60	90	384	2	2	3	4	4	447	8	1007	PEAK HOUR	23	8	424	453	1840	16	17	13	17	24	1810	31	4676
1445 - 1500	5	1	59	86	325	3	4	3	3	5	395	5	894														
Period End	91	21	1373	1722	6573	68	58	49	73	82	6725	99	16934														
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<u>Heavies</u>	-	NORT			WEST			SOUTI			EAST			<u>Heavies</u>		NORTI			WEST			SOUTI			EAST		
	-	ecours	e Rd		WEST			orts Pa	ark	Centr	EAST	t Hwy		<u>Heavies</u>		NORTI	e Rd	Centra	al Coas	t Hwy		SOUTI orts Pa	ark	Centra	EAST al Coas		
Time Period	-	ecours <u>T</u>	e Rd R			t Hwy <u>R</u>	Sp <u>L</u>			L	al Coas	<u>R</u>	тот	Peak Period	Race L	cours <u>T</u>	e Rd R	Centro	al Coas	t Hwy	Sp L	orts Pa	ark <u>R</u>	Centra	al Coas	<u>R</u>	тот
Time Period 1100 - 1115	-	ecours	<b>R</b> 0		al Coas	t Hwy		orts Pa	ark	<b>Centr</b> <u>L</u> 0	T 0		TOT 1			ecours	<b>e Rd R</b>	<u>L</u>	al Coas	t Hwy		orts Pa	<b>R</b> 0	Centra L 0	<b>I</b> 5	<u>R</u>	TOT 14
Time Period	Race <u>L</u>	ecours <u>T</u>	e Rd R	Centra <u>L</u>	al Coas	t Hwy <u>R</u>	Sp <u>L</u>	orts Pa	R   0   0	L	T 0 2	<u>R</u>	TOT 1 7	Peak Period	Race L	cours <u>T</u>	e <i>Rd</i> R  3	<u>L</u> 0 2	al Coas <u>T</u> 6	t Hwy	Sp L	orts Pa	ark <u>R</u>	L	<b>I</b> 5	<u>R</u> 0	
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Time Period 1100 - 1115 1115 - 1130	Race   L   0   0	ecours  T 0 0	<b>R</b> 0 2	<b>Centra L</b> 0  0	1 1 3	<b>R</b> 0	<b>Sp</b> <u>L</u> 0	0 0	R   0   0	<u>L</u> 0	T 0 2	R 0 0	TOT 1 7	Peak Period 1100 - 1200 1115 - 1215	<b>L</b> 0	Ecours T 0	e <i>Rd</i> R  3	<u>L</u> 0 2	al Coas <u>T</u> 6	8t Hwy R 0 0	<b>Sp</b> <u>L</u> 0	orts Pa <u>T</u> 0	0 0	<u>L</u> 0	<b>I</b> 5	<u>R</u> 0	14 16
Time Period 1100 - 1115 1115 - 1130 1130 - 1145	Race   L   0   0   0   0	T	e Rd	Centra   L	1 1 3 0	Et Hwy  R 0 0 0	\$p\$ <u>L</u> 0  0  0	0 0 0	R   0   0   0	0 0 0	I	R 0 0 0	TOT 1 7 2	Peak Period 1100 - 1200 1115 - 1215 1130 - 1230	Race   L	0 0	e Rd R 3 3 2	L 0 2 2	6 6 5	R           0           0           0	\$p\$  L 0 0 0	0 0 0	0 0 0	0 0 0	5 5	R 0 0 0	14 16 14
Time Period 1100 - 1115 1115 - 1130 1130 - 1145 1145 - 1200	Racco   L	T	e Rd	0 0 0 0	1 1 3 0 2	Et Hwy  R  0  0  0  0	\$p\$  L 0 0 0 0 0	0 0 0 0	R	0 0 0 0	T 0 2 2 1	R 0 0 0 0 0	TOT 1 7 2 4 3 5	Peak Period 1100 - 1200 1115 - 1215 1130 - 1230 1145 - 1245	0 0 0 0	0 0 0	e Rd R 3 3 2 3	L 0 2 2 2	6 6 7	8t Hwy R 0 0 0 0 0	\$p\$  L 0 0 0 0	0 0 0 0	0 0 0	0 0 0 0	5 5 5	R 0 0 0 0 0 0	14 16 14 17
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Time Period 1100 - 1115 1115 - 1130 1130 - 1145 1145 - 1200 1200 - 1215 1215 - 1230	Racco   L	T	e Rd R 0 2 0 1 0 1	Central	1 1 3 0 2 1 2	Et Hwy  R  0  0  0  0  0  0  0	\$\begin{align*} \begin{align*} \begin{align*} \begin{align*} 0 & 0 & \\ 0 & 0 & \\ 0 & 0 & \\	0 0 0 0 0 0	R	L 0 0 0 0 0	T 0 2 2 1 0 2 2 2 1 0 2 2 1 0 2 2 1 0 2 2 1 0 2 2 1 0 2 2 1 1 0 2 2 1 1 0 2 2 1 1 0 2 2 1 1 1 1	R 0 0 0 0 0 0 0 0 0	TOT 1 7 2 4 3 5	Peak Period 1100 - 1200 1115 - 1215 1130 - 1230 1145 - 1245 1200 - 1300 1215 - 1315	Race   L	0 0 0 0 0	e Rd  R 3 3 2 3 4	L 0 2 2 2 3 1	6 6 5 7 7	R 0 0 0 0 0 0 0 0	\$\overline{\boldsymbol{L}}{\textsupersupersupersupersupersupersupersuper	0 0 0 0 0	R	0 0 0 0	5 5 5 5 7	R 0 0 0 0 0 0 0 0 0	14 16 14 17 19
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Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

Client : Varga Traffic Planning

Job No/Name : 5322 WEST GOSFORD Racecourse Rd

Day/Date : Saturday 13th September 2014

		NORT	_		WEST			SOUTH	_		EAST			H		,	NORTH	_		WES1			SOUT	ш		EAST		
COMPINED							<u> </u>			Comfin				$\vdash$	COMPINED										Comfr			
COMBINED	Rac	ecours		Centra	al Coas		Sp	orts Pa		Centr	al Coas			┾	COMBINED	Race	ecours		Centra			S	ports P		Centra	al Coas		_
Time Period	<u> </u>	<u>I</u>	<u>R</u>	<u>L</u>	I	<u>R</u>	L	<u>T</u>	<u>R</u>	느	<u>T</u>	<u>R</u>	TOT	╄	Peak Period	<u> </u>	<u>T</u>	<u>R</u>	느	I	<u>R</u>	<u> </u>	<u>T</u>	<u>R</u>	<u> </u>	<u>T</u>	<u>R</u>	TOT
1100 - 1115	7	0	87	113	406	4	2	0	4	7	488	5	1123	+	1100 - 1200	15	4	349	421	1709	13	9	11	18	24	1771	19	4363
1115 - 1130	3	2	97	100	420	2	3	5	7	5	411	5	1060	1	1115 - 1215	17	5	383	429	1740	15	11	16	19	21	1706	21	4383
1130 - 1145	4	1	96	118	476	2	0	1	3	5	451	6	1163	4	1130 - 1230	20	6	394	428	1779	17	15	13	14	18	1713	23	4440
1145 - 1200	1	1	69	90	407	5	4	5	4	7	421	3	1017	Ļ	1145 - 1245	19	7	391	429	1815	22	16	14	17	21	1736	25	4512
1200 - 1215	9	1	121	121	437	6	4	5	5	4	423	7	1143	Ļ	1200 - 1300	25	8	432	455	1857	18	15	13	16	19	1770	30	4658
1215 - 1230	6	3	108	99	459	4	7	2	2	2	418	7	1117	1	1215 - 1315	23	8	428	454	1847	16	17	13	17	24	1817	31	4695
1230 - 1245	3	2	93	119	512	7	1	2	6	8	474	8	1235	L	1230 - 1330	25	5	397	436	1706	14	14	15	24	26	1707	28	4397
1245 - 1300	7	2	110	116	449	1	3	4	3	5	455	8	1163	1	1245 - 1345	27	5	375	433	1661	14	15	14	23	19	1615	27	4228
1300 - 1315	7	1	117	120	427	4	6	5	6	9	470	8	1180	1	1300 - 1400	28	4	331	400	1612	19	16	16	22	17	1579	24	4068
1315 - 1330	8	0	77	81	318	2	4	4	9	4	308	4	819		1315 - 1415	29	4	299	438	1553	21	12	14	21	12	1544	23	3970
1330 - 1345	5	2	71	116	467	7	2	1	5	1	382	7	1066		1330 - 1430	29	6	293	474	1575	26	18	10	17	17	1585	25	4075
1345 - 1400	8	1	66	83	400	6	4	6	2	3	419	5	1003		1345 - 1445	26	5	283	448	1494	21	18	12	16	20	1651	26	4020
1400 - 1415	8	1	85	158	368	6	2	3	5	4	435	7	1082		1400 - 1500	23	5	277	451	1421	18	18	9	17	22	1628	26	3915
1415 - 1430	8	2	71	117	340	7	10	0	5	9	349	6	924															
1430 - 1445	2	1	61	90	386	2	2	3	4	4	448	8	1011		PEAK HOUR	23	8	428	454	1847	16	17	13	17	24	1817	31	4695
1445 - 1500	5	1	60	86	327	3	4	3	3	5	396	5	898															
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		31	8363	8394				26	6737	6763											e vi	14						
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R.O.A.R. DATA Reliable, Original & Authentic Results

Ph.88196847, Fax 88196849, Mob.0418-239019

Client

: Varga Traffic Planning : 5322 WEST GOSFORD Racecourse Rd Job No/Name

Day/Date : Saturday 13th September 2014

<b>Pedestrians</b>	NORTH	WEST	SOUTH	EAST		<u>Pedestrians</u>	NORTH	WEST	SOUTH	EAST	
	Racecourse Rd	Central Coast Hwy	Sports Park	Central Coast Hwy			Racecourse Rd	Central Coast Hwy	Sports Park	Central Coast Hwy	
Time Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT	Peak Period	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	TOT
1100 - 1115	2	0	0	1	3	1100 - 1200	7	0	3	4	14
1115 - 1130	4	0	3	1	8	1115 - 1215	8	0	5	5	18
1130 - 1145	1	0	0	0	1	1130 - 1230	7	0	8	10	25
1145 - 1200	0	0	0	2	2	1145 - 1245	7	0	8	11	26
1200 - 1215	3	0	2	2	7	1200 - 1300	8	0	9	10	27
1215 - 1230	3	0	6	6	15	1215 - 1315	8	0	10	13	31
1230 - 1245	1	0	0	1	2	1230 - 1330	8	0	6	7	21
1245 - 1300	1	0	1	1	3	1245 - 1345	9	0	6	11	26
1300 - 1315	3	0	3	5	11	1300 - 1400	10	0	6	12	28
1315 - 1330	3	0	2	0	5	1315 - 1415	7	0	4	7	18
1330 - 1345	2	0	0	5	7	1330 - 1430	6	0	5	9	20
1345 - 1400	2	0	1	2	5	1345 - 1445	6	0	11	4	21
1400 - 1415	0	0	1	0	1	1400 - 1500	4	0	11	5	20
1415 - 1430	2	0	3	2	7						
1430 - 1445	2	0	6	0	8	PEAK HOUR	8	0	10	13	31
1445 - 1500	0	0	1	3	4						
Period End	29	0	29	31	89						

