LETTER

Transport Engineering

REF: N164621

DATE: 31 March 2020

Lederer Group
Suite 34.01, 201 Elizabeth Street
SYDNEY NSW 2000

Attention: Mr. Patrick Hall (Portfolio and Development Manager)

Dear Patrick,

RE: SSD 9813 - 136-146 AND 148 DONNISON STREET, GOSFORD (GOSFORD ALIVE) – RESPONSE TO STAKHOLDER SUBMISSIONS

This letter has been prepared in response to stakeholder submissions seeking further information in relation to the proposed mixed-use development at 136-146 and 148 Donnison Street, Gosford.

Correspondence received includes the following:

- Department of Planning, Industry and Environment (DPIE) letter, dated 20 December 2019[1]
- Transport for New South Wales (Transport NSW) letter to DPIE, dated 4 November 2019[2]
- Transport NSW, Roads Authority letter to the DPIE, dated 4 December 2019[3]
- Central Coast Council (Council) letter to the DPIE, dated 7 November 2019[4].

This letter should be read in conjunction with the Gosford Alive Transport Assessment (transport report) prepared by GTA Consultants dated 22 August 2019[5].

As part of the response to submissions process, the project team has proactively responded to a range of queries of which transport is a key component. As a result, this response considers the revised architectural plans and information that will form part of the broader response to submissions. Overall, the number of residential apartments has been slightly reduced (with a greater proportion of three-bedroom apartments), the ground plane modified to improve street activation and the overall quantum of parking slightly increased.

The responses in this letter reflect updates to the traffic and parking analysis as they relate to the revised architectural plans. Overall, while the non-residential land uses have increased, the land use

[1] Mixed use development at Donnison Street (SSD 9813:) response to submissions letter from Brendon Roberts (Associate Director), Department of Planning, Industry and Environment, 20 December 2019
[2] SSD 9813 - Mixed use development at Donnison Street, Gosford letter from Mark Ozinga (Principal Manager, Land Use Planning & Development), 4 December 2019
[3] SSD 9813: Mixed use development (Gosford Alive on Kibbleplex site) 137-146 and 148 Donnison Street Gosford letter from Peter Marler (Manager Land Use Assessment), Roads and Maritime Services Hunter Region, 4 December 2019
[4] Application SSD-9813 Gosford Alive 136-148 Donnison Street, Gosford (Lot 6 DP598833 and Lot 1 DP540292) Applicant Lederer Group Pty Ltd letter from Central Coast Council, 7 November 2019
[5] Gosford Alive, Stage 1 Development Application, Transport Impact Assessment, GTA Consultants, 22 August 2019

VIC | NSW | QLD | SA | WA
Level 16, 207 Kent Street
SYDNEY NSW 2000
t// +612 8448 1800
ABN 31 131 369 376

mix is of benefit to the development generally and better caters for the parking and traffic requirements.

The submitted Development Application (DA) and revised scheme that forms the response to submissions are summarised in Table 1.

Table 1: Overview of submissions

Description	DA submission	Revised plans	Net change from DA submission
Residential	738 apartments	727 apartments	-11 apartments
Retail	3,692sq.m GFA	886sq.m GFA	-2,806sq.m GFA
Commercial	0sq.m GFA	4,536sq.m GFA	+4,536sq.m GFA
Car parking spaces	1,014 spaces	1,015 spaces (plus 8 spaces along the through site link)	+1 space (plus 8 spaces along the through site link)

Transport NSW, Roads Authority

1. A factor of 0.5 has been applied to the weekday PM retail peak traffic generation rate in order to determine the AM trip rate. Clarification is required on why this factor has been used.

The proposed retail space is minor and considered ancillary to the other primary land uses. Small specialty retail tenants are typically either not open in the mornings, or at least not trading at their peak. As such, it is broadly accepted that a reduction factor of 0.5 can be applied to the morning road network peak hour to accurately consider the likely traffic generated by retail tenants during this time.

2. Currently the ratio of the retail and office/medical floor space is split 50:50. As offices and medical centres generate significantly lower trips compared to speciality stores, this may lead to an underestimation of trip generation volumes if ratio of retail is higher. A conservative assessment is to be undertaken to account for the worst-case scenario of 100% retail. Further information on expected land uses is required, or a more conservative ratio used.

As part of the response to submissions process, the non-residential land use has been refined to include 886 square metres retail GFA (850 square metres GLFA) and 4,536 square metres commercial land use. The quantum of residential apartments has also been reduced by 11. Assuming the worst-case scenario where all retail land use is specialty shops, the revised plans results in a marginal increase in vehicle trips in the weekday AM peak period (27 trips), marginal reduction to the PM peak vehicle trips (30 trips) and significant reduction in the Saturday midday peak period vehicle trips (139 trips) when compared to the DA submission.

The transport report considered the traffic impacts of the proposal following full development of the site. SIDRA intersection modelling results indicate that all study intersections will continue to operate similar to existing (LOS C or better) indicating that the proposal will not inherently change traffic conditions in and around Gosford. A marginal increase of 27 trips in the AM peak period would clearly have an insignificant impact to these results.

3. A residential trip generation rate of 0.35 trips per apartment has been stated in the report. The RMS Guide to Traffic Generating Development states a regional average of 0.53 trips per unit in the AM peak hour and 0.32 trips unit in the PM peak hour. Clarification is required as to why these values have not been adopted.

The regional average trip rate of 0.53 is based on two sites, one in Charlestown and the other in Wollongong. The Wollongong site includes just nine apartments and the Charlestown site 109 apartments. The Charlestown site is afforded less access to high frequency public transport and is not within a practical daily commute of Sydney. That said, it has an average generation rate of about 0.4 trips per apartment. This is consistent with the adopted rate of 0.35 trips per apartment. Gosford should also be considered a sub-regional centre as opposed to regional per se, thus attracting a lower trip rate. While reference to a single site in Charlestown is hardly exhaustive, it does demonstrate that the adopted rate is conservatively high.

The proposal is also significantly larger than the two regional example sites and within a convenient walk of frequent express rail services that travel through Gosford station. As such, the proposal will tend to attract residents that prefer to commute by train on a daily basis.

A residential trip generation rate of 0.35 trips per apartment strikes an appropriate balance between the Sydney average of 0.15 and 0.19 trips per apartment in the respective peak hours and the regional rates. In this regard, the trip rates could also be considered conservatively high, with a rate of 0.25 trips per apartment also broadly considered accurate for such developments in similar locations.

4. A background traffic growth rate of 1.5% has been adopted. Clarification is required for the use of this rate.

Furthermore, it is not clear from the SIDRA files how the growth has been applied. The SIDRA files have not been run to account for 1.5% compound growth year on year, so a manual calculation appears to have been done. Clarification is required of the use of this growth rate and the methodology for calculating the 1.5% growth year on year is requested.

The 1.5 per cent growth rate is broadly accepted by stakeholders in such locations. This rate was applied to existing traffic volumes and is considered to account for local developments (under construction or in planning) and broader growth on the network.

RMS count stations also show that background traffic volumes have had minimal growth between 2006 and 2017. The count stations are on The Entrance Road (500 metres north-east of Russell Street) and Pacific Highway (20 metres west of Berrys Head Road).

The data indicates no discernible growth along The Entrance Road, with a growth rate of just 0.6 per cent per annum between 2006 and 2014. The Pacific Highway has shown a minor reduction in traffic volumes (-0.12) between 2006 and 2016.

Similarly, there has been only modest growth in traffic volumes on The Entrance Road during the road network AM and PM peak periods, with growth rates between 0.5 and one per cent per annum between 2006 and 2014. The Pacific Highway was even lower with between 0.4 and -0.3 per cent growth between 2006 and 2016.

Based on this, a 1.5 per cent per annum growth rate is conservatively high and readily accounts for background growth and future local development.

Turning movements in and out of the existing site have been deducted from the background traffic volumes and distributed through the study intersections based on existing directional distributions of traffic. The compound growth rate of 1.5 per cent was applied to all background volumes, without existing site traffic for a period of 10 years.

5. A cumulative assessment which outlines future year intersection performance including surrounding approved developments is required.

It is understood that Council is preparing a Gosford city centre traffic model to accurately assess the traffic impacts of all future developments, including Gosford Alive. In this regard, it is not prudent for each development site to do the same as this would likely result in conflicting distribution and, hence modelling outputs. Notwithstanding, the applied 1.5 per cent growth rate does account for background growth and other developments and is considered appropriate as part of the proposal.

6. The TIA has only sought to address impacts for the fully developed site and not provided any data regarding anticipated traffic generation for each stage of the development.

The provision of data regarding the traffic generation of each stage allows for an assessment for each stage of the development to address the staged provision of infrastructure to mitigate impacts of the development.

The transport report considered the traffic impacts of the development following full development of the site. SIDRA intersection modelling results indicate that all study intersections will continue to operate similar to existing (LOS C or better) indicating that the proposal will not inherently change traffic conditions in Gosford city centre. This is mostly due to the proposal removing trips generated by the existing on-site car park and mostly reversing the flow of traffic during peak hours.

Notwithstanding, the revised plans include a staged approach with provision of publicly accessible temporary parking during both Stage 1 and Stage 2 of the development. This intends to offset the loss of public parking on the site, with an indicative capacity for around 170 spaces in Stage 1 and 120 spaces in Stage 2. Any traffic generated by this activity will clearly be less than what the existing site has generated in recent years and less than the full development of the site. For example, around 220 vehicles currently enter the site to access the 600 parking spaces equating to approximately 62 vehicles for Stage 1 and 44 vehicles for Stage 2. This is clearly less than the estimated 300 to 400 trips generated by the proposed development when fully occupied.

As such, traffic modelling to detail the staged development approach is not considered necessary, especially given that traffic conditions would be expected to temporarily improve.

7. The report details which development access point vehicles are expected to use, however, it does not detail where these vehicles are approaching from. It appears from Figure 8.1 that the majority of vehicles are approaching from the east, with minimal traffic coming from the west. However, there appears to be significant development to the west, including industrial, retail and an entertainment ground and other significant employment generators.

Clarification is required for the trip distribution assumptions used.

The directional distributions have primarily been influenced by the existing turning movements at the study intersections, the broader local and regional road network and review of Journey to Work data. Overall, the west (Donnison Street) accounts for 23 per cent of all development traffic, the south and east (Henry Parry Drive) 34 per cent and the north (Henry Parry Drive) 43 per cent.

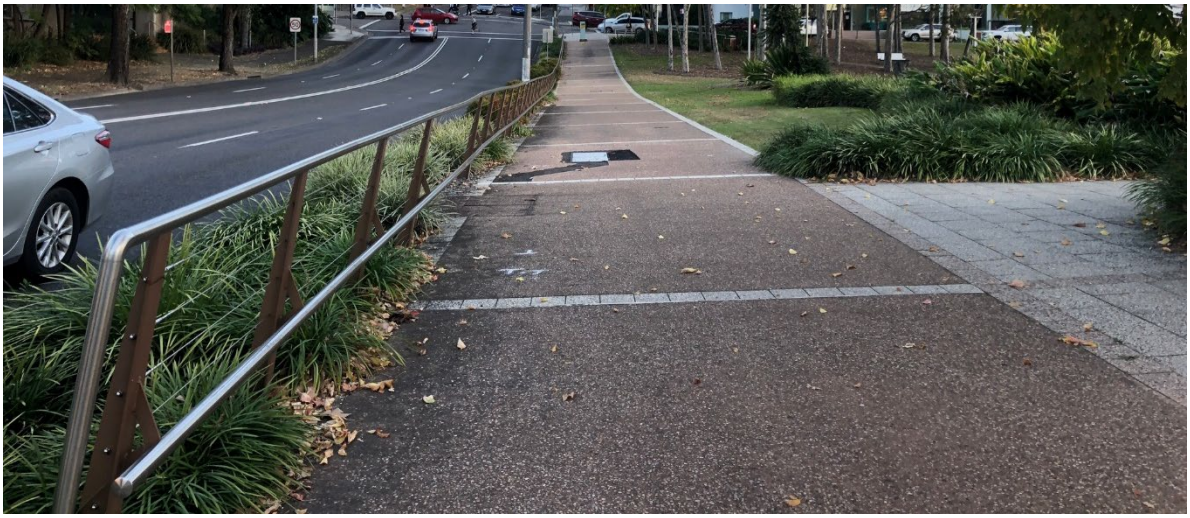
8. The intersections of Henry Parry Drive / Donnison Street and Henry Parry Drive / William Street are signalised intersections. It is not clear if site observations along with SCATs data were used to calibrate and validate the base year intersection models. Please provide further commentary or alternatively please update modelling using SCATs data. SCATs data can be obtained from SCATS.Traffic.Signal.Data@rms.nsw.gov.au.

GTA recorded traffic signal phase times for all study intersections at the time of the traffic surveys (in mid-May 2019). Vehicle queuing, lane utilisation and driver behaviour were recorded on-site to assist with the calibration and validation of the base year intersection models. The survey video data was also reviewed to confirm accuracy.

9. Pathways and landscaping are proposed to channel pedestrians through the development and towards the signalized intersections of Henry Parry Drive / William Street and Henry Parry Drive / Donnison Street. Transport for NSW has concerns that pedestrians will still seek to cross Henry Parry Drive mid-block. The adequacy of the existing fencing along Kibble Park on Henry Parry Drive is to be addressed.

The existing fencing and landscaping along the western side of Henry Parry Drive is considered an adequate deterrent to pedestrians crossing mid-block (see figure 1).

Figure 1: Henry Parry Drive (May 2019)



10. A revised traffic impact assessment should be submitted for further review by Transport for NSW prior to determination of the proposal.

Based on the responses provided in this letter, a revised traffic impact assessment is not considered necessary.

Central Coast Council

Planning Comment

6. Pedestrian access across Henry Parry Drive must be addressed as the development must link with the City Centre without impacts on traffic and pedestrian safety. The site is separated from the Commercial Core of the City by Henry Parry Drive. The masterplan must address the connection of the site to the City Centre which is by a pedestrian overbridge.

Following consultation with the design panel, the major east-west pedestrian connection linking the site with Henry Parry Drive has been realigned to better accommodate a potential future pedestrian connection across Henry Parry Drive to Kibble Park. Naturally, a pedestrian crossing, whether it be at grade or via a pedestrian overbridge, would only be provided should it be deemed necessary by Transport for NSW noting that Transport for NSW are the ultimate approval authority for a pedestrian crossing of State Roads.

9. EIS Section 6.3.2 Parking - As the proposal is relying on the special provisions of the SEPP (GCC2018) and DCP2018, it should provide the car parking spaces as required under the DCP (i.e: a minimum of 1117 instead of 1014 spaces). As the development/site already gains benefit/concessions from the Gosford City Centre SEPP and DCP, it should not then defer to get further concessions on parking from other policies (such as RMS standards). This is particularly essential given the location of the site away from the other major public parking areas of the City Centre and separation by Henry Parry Drive.

Overall, the revised plans meet the DCP requirements with respect to one bedroom and three bedroom apartments. Where the DCP requires 1.2 spaces for every two-bedroom apartment, the revised plans allow for 1.07 spaces per apartment. This represents a minor shortfall of 52 spaces (or five per cent) on Council DCP requirements. Visitor parking is proposed at one space per seven apartments rather than one per five apartments. This equates to 104 spaces for the revised plans with these able to be distributed across the site to ensure appropriate access to the lifts and access points. This assessment assumes a commercial parking requirement of one space per 75 square metres GFA in accordance with Council's DCP. This results in 60 parking spaces for the commercial uses.

The site is within a 500m to 600m walk of Gosford railway station and even closer to Gosford City Centre which includes the Imperial Centre and other retail shops and transport options. Encouraging active and public transport use is important to reduce dependence on travel by private vehicle. The proposed residential parking provision achieves a good balance between the lower RMS rates and Council DCP noting that the provision is only marginally short of Council DCP requirements. There is also opportunity to provide car share spaces (GoGet etc.) as part of the development, to be provided in-lieu of parking. Where relevant Council DCPs specify the benefits of car share spaces, it is recognised that on average, one car share space can be provided in lieu of four parking spaces.

10. The claims in the EIS that the removal of existing public parking (600 existing spaces) will not change the parking environment in the City Centre is strongly disagreed with. The current shortage of car parking in the City Centre and loss of about 600 spaces currently available on the site will have an impact on the existing and future businesses and may impact economic viability of the city centre

This comment is noted. It is acknowledged that the removal of 600 publicly accessible spaces will affect parking in Gosford City Centre however it is not the responsibility of the applicant to manage public parking in Gosford generally. Council could implement the actions outlined in the short-term car parking strategy for Gosford CBD[6] prepared by Bitzios on behalf of Council in June 2018. These include utilising spare capacity at the Barker Street parking station and Central Coast Leagues Club, in addition to constructing temporary car parks on the fringe of the CBD.

Notwithstanding, the revised plans positively responded to this comment through a staged approach with provision of publicly accessible temporary parking during Stage 1 and Stage 2 of the development, with an indicative capacity for 170 spaces in Stage 1 and 120 spaces in Stage 2.

[6] Central Coast Parking Strategy, Part 1: Short -term Gosford CBD Strategy, Bitzios, 12 June 2018

Architectural Design/ SEPP6 Comments

5. Provide an overhead pedestrian link between the development and Kibble Park. This would have obvious benefits in assisting in managing through traffic as well as improving amenity and the over-all connectivity of the development to the wider public realm of Kibble Park and the remainder of the City Centre.

This comment is noted. Refer to response to Council Planning comment 6 above.

Engineering Comment

Henry Parry Drive is a State road (MR673) and as part of this application separate comments need to be sought from Roads & Maritime Services (RMS) in relation to the impact of the proposed development on the surrounding road network, and any proposed changes to existing road infrastructure including lane widths as implied in the landscape plans.

This comment is noted. Comments have been received from Transport for NSW (formerly RMS) in this regard in their letter dated 4 December 2019[7].

It is noted that historic correspondence from RMS that was included as part of the lodged application indicates that upgrades of the Henry Parry Drive / Donnison Street and Henry Parry Drive / William Street intersections should be included in a S7.11 contribution plan. Council does not have a contribution plan for such works nor a mechanism to direct funding to these works. In regard to the nexus of the impact of this development on these intersections the consent authority should consider that any upgrading of these intersections be undertaken by RMS as part of contributions received by the State Government for this and future applications related to the proposed masterplan.

This comment is noted. For consideration by DPIE.

A landscaped median approximately 1.2m wide is proposed within William Street on the centreline of the road across the frontage of 'Tower 1'.

This landscaped median is not supported...

The architectural and landscape plans will be updated to remove the landscaped median.

Narrowing of the road pavement in Henry Parry Drive from the existing 13m-14m width to a total width of 12m (as per the section of Henry Parry Drive on the Landscape Masterplan).

This is not supported...

This comment is noted. The architectural and landscape plans do not propose any modifications to the road pavement along Henry Parry Drive.

Loss of the bus stop in Donnison Street.

The architectural and landscape plans will be updated to retain the existing bus stop.

[7] SSD 9813: Mixed use development (Gosford Alive on Kibbleplex site) 137-146 and 148 Donnison Street Gosford letter from Peter Marler (Manager Land Use Assessment), Roads and Maritime Services Hunter Region, 4 December 2019

Narrowing of the road pavement within the frontage of the site in Albany Street north between the Albany Street North / Donnison Street intersection and the vehicle crossing in Albany Street north (for access to a car park within the development).

This is not supported…

This comment is noted. The architectural and landscape plans will be updated to retain the existing road pavement in this location.

Kerb blisters at the intersections of Henry Parry Drive / Donnison Street & Donnison Street / Albany Street North that narrow the pavement width in Donnison Street.

This is not supported…

This comment is noted. The architectural and landscape plans will be updated to retain the existing road pavement in this location.

Access and parking

The plans indicate that these accesses will incorporate kerb returns into the footways. The use of kerb returns within the footways are not supported and all vehicle access crossings within the road reserves are to be heavy duty standard with laybacks on the kerb line to comply with Council's Civil Works Specification for access into development, and to reinforce the perception that all of these accesses (including the shared link) are private accesses within the development. These vehicle access crossings will need to be constructed with each development that will utilise them.

The architectural plans will be updated to comply with Council's Civil Works Specification for access into developments.

Parking is proposed over five (5) levels catering for a total of 1,014 car spaces. Access and car parking arrangements are to comply with AS 2890, in particular AS/NZS 2890.1:2004, AS 2890.2:2018, and AS 2890.6:2009.

The site access arrangements and car park design will comply with AS 2890, in particular AS/NZS 2890.1:2004, AS 2890.2:2018, and AS 2890.6:2009. This includes the temporary car park proposed during Stage 1 and Stage 2.

Waste

It is noted that that the Transport Impact Assessment prepared by GTA (Report Ref N164620 Issue A dated 22/8/19) indicates that 10-11m long truck are proposed to service the development for garbage/waste servicing. This size truck does not satisfy Council's waste contract and future residential units may not be able to be serviced by Council unless the provision for the truck size is increased.

This comment is noted. The site layout plans will continue to be developed with the loading dock size and layout dependent on the size of Council's garbage truck and the largest service vehicle requiring access. This includes height clearances, access arrangements and manoeuvring areas.

Traffic Comments

Assumed distribution of trips

GTA consultants have assumed that 60 per cent of vehicles would use the William Street access, 30 per cent the Donnison Street access and 10 per cent the Albany Street North access. Albany St north has access to the Erina Street and Henry Parry Drive signals that cater for all movements.

Comment 1

It is assumed traffic distribution to and from the site for all development stages - be increased as much as possible to be using the Donnison Street west approach to the Henry Parry Drive intersection. If possible, for all stages I would suggest Donnison St (west) cater for 60 percent of traffic, William St 30 percent and Albany St north cater for twenty percent. If possible this assumption should be checked and confirmed by GTA. Perhaps also GTA could look how the capacity of the Donnison St / Henry Parry Drive intersection can be upgraded (perhaps investigate options)?

The traffic distribution adopted as part of the transport report was based on existing distribution of traffic at the study intersections, and convenience for site generated traffic to access the surrounding road network. Drivers will naturally choose alternative routes should they be perceived to be easier or faster travel routes. This is especially the case for residents. The distribution effectively shows a 'worse case' scenario and is therefore robust. Any distribution that differs from this would result in better intersection operation than that reported to date.

Consistent with achieving greater reliance on Donnison St strategy the following suggestions are made:

- *Can carpark driveway access for Tower 1 be redirected from William St to Donnison St frontage?*
- *Can carpark driveway for Tower 2 be connected to Donnison St?*
- *The through site shared road link between William St and Donnison St is supported as it is likely to encourage traffic to use Donnison St. for access.*
- *When does Tower 3 access the road system?*
- *Perhaps tower 1 and 2 could be done in one stage, with a majority of carpark access to Donnison St?*

The design has considered a range of options for driveway access into the site and is thought to better accommodate approach and departure routes while also not compromising internal operation and queuing. Gradients across the site prevent practical access from Donnison Street to the basement car park with William Street naturally able to facilitate basement car park access and through site link. The through site link also encourages use of Donnison Street by a variety of users.

The traffic modelling included in the transport report supports the proposed access arrangements and resultant traffic distribution.

Tower 3 will initially access the site via the William Street access prior to Tower 4 opening and the Donnison Street access coming online.

Comment 2

During peak periods; Donnison St / Henry Parry Drive intersection

- *Based on existing traffic survey counts the Donnison St (west) approach to Henry Parry Drive signals appears to have spare capacity.*
- *Similarly, based on existing traffic survey counts the Erina East west approach to Henry Parry Drive signals appears to have spare capacity*
- *The Donnison Street approach to Henry Parry Drive signals appears to have low existing traffic volumes for through and left into Henry Parry Drive. Due to the difficult topography there are existing right turn bans from Henry Parry Drive into Donnison St (west) and Donnison St (west) into Henry Parry Drive which are likely to be retained.*

The net increase in development traffic for right turns is shown below for AM, PM and weekend peak hours is shown below. For all three peak periods assessed the Development right turns from Henry Parry Dr into William St are likely to continue to be too high for the capacity of the right turn bay in Henry Parry Drive.

With the loss of traffic associated with the existing on-site car park, traffic turning right from Henry Parry Drive into William Street will moderately increase or in the case of the weekday AM peak, reduce from existing conditions as a result of the proposed development.

SIDRA modelling included in the transport report confirms that this right turn is expected to continue to operate well with spare capacity (LOS C or better) in all 2029 peak periods. 95th percentile queues are expected to be between five metres and 60 metres in any peak hour in 2029, well below the existing available lane storage of circa 100 metres on Henry Parry Drive. It is also noted that sensitivity testing indicates that northbound vehicles on Henry Parry Drive will tend to avoid the centre lane in favour of the kerbside lane. This is not significantly influenced by the right turn volumes themselves.

As discussed in the response to Transport for NSW Comment 2, the revised plans result in marginal increase in vehicle trips generated during the weekday AM peak hour (27 trips) and reduction in the weekday PM and Saturday midday peak hours when compared with the submitted DA. The marginal increase of 27 trips in the AM peak would clearly have an immaterial effect on the SIDRA results included as part of the transport report.

Comment 3

Active Transport.

The Study in Section 6.2 cites that "Based on the existing mode share of Gosford interchange, detailed in Section 3.4, and an assumed average of 1.5 to two people per dwelling, it is likely there would be a demand for 270 to 360 public transport trips and 100 to 130 active travel trips during the weekday peak hours."

There appears to be little discussion on likely active trips impacts at both adjacent intersections on Henry Parry Dr at William Street and Donnison St. Discussion of the likely pedestrian movement impacts for each peak is requested.

The transport report tested the 10-year post development scenario with significantly increased pedestrian volumes (400 pedestrians) on the southern leg of the Henry Parry Drive/ William Street intersection to understand the impact of increased pedestrian movements travelling between the site, Gosford city centre and public transport facilities. The results of the assessment are detailed in Table 2.

Table 2: Henry Parry Drive/ William Street 2029 with development pedestrian sensitivity scenario

Scenario	Peak	Degree of Saturation (DOS)	Average Delay (sec)	95th Percentile Queue (m)	Level of Service (LOS)
2029 without sensitivity	AM	0.80	18	86	B
	PM	1.04	20	94	B
	Sat	0.86	14	87	A
2029 with sensitivity	AM	0.80	18	86	B
	PM	1.04	20	94	B
	Sat[1]	0.64	11	82	A

[1] 80 per cent traffic turning left from William Street into Henry Parry Drive redistributed to turn left at Donnison Street. Minor impact to Henry Parry Drive/ Donnison Street intersection, with overall average delay increasing by 1 second and level of service remaining as B

The results indicate that increased pedestrian volumes do not have a material effect on intersection operation during any peak hour. This is mostly due to the existing weekday pedestrian volumes being greater than 50 per hour, hence SIDRA modelling already triggers the pedestrian phase on each cycle. Increasing the pedestrian volumes to 400 therefore requires no more green time than existing. This will also maintain an appropriate level of pedestrian amenity.

It is noted that very few pedestrians use this crossing on Saturdays. This results in a somewhat larger impact associated with increased pedestrian activity. That said, and as suggested by Council, traffic is likely to respond positively to any such short term and/ or immediate congestion. For example, traffic exiting the site can use Donnison Street on exit rather than William Street to access Henry Parry Drive. Should this be the case, SIDRA modelling confirms that pedestrians would have a negligible impact on the operation of the intersection, including the left turns from William Street into Henry Parry Drive. Again, the minor increase of 27 vehicle trips during the weekday AM peak would not affect this with minor improvements expected in the other peak hours.

Comment 5

The proposed development will increase traffic flows across the Donnison Street railway overbridge, Dane Drive and Central Coast Highway and particularly at the Central Coast and Dane Drive roundabout.

As outlined in the SEAR's Attachment A Strategic Plan "Gosford City Centre Transport Management and Accessibility Plan"; The Donnison Street railway overbridge requires major upgrading now for improved bus, vehicle, pedestrian and cyclists access across the railway corridor.

This comment is noted. This detail is likely to be incorporated into the traffic model being prepared by Council.

Access concern

The location of proposed driveway to Tower 1 on William St appears to be very close to the Henry Parry Dr / William St signals. William St has two storage lanes that could be impacted. Any right turns from William St into the proposed driveway could extend queues back into the intersection area of the signals causing congestion and safety issues. The Applicant is requested to clarify and possibly address these concerns by;

- *Relocating the driveway further west away from the existing traffic storage lanes.*
- *If possible relocate driveway access to Donnison Street frontage.*
- *Alternatively a physical central median could be constructed in William St to ban right turns. Cars into Tower 1 Carpark are then likely to carry out u-turns in William St. and arrive via Donnison St or Erina Street.*

The access driveway is proposed to be located around 45 metres east of the Henry Parry Drive/ William Street intersection. To understand the potential impact of the proposed driveway, the 10-year post development SIDRA intersection scenario has been tested with the access driveway included in the network model. The results indicate that the driveway location does not impact operation of the intersection during any road network peak hour.

The site access driveway (including the right turn in) operates well with a LOS A, with the Henry Parry Drive south approach right turn and north approach left turn into William Street not affected. There is also nominal (less than five metres) queuing for the west approach to the proposed access driveway. Queuing on William Street is therefore not expected to extend as far as Henry Parry Drive in any peak hour as a result of the proposal.

Transport NSW

The following details are noted from the Transport Impact Assessment (TIA) report:

- *Table 3.2 provides the Public Transport summary in the vicinity of Gosford Station. Bus route number 41 which operates on Donnison Street at the front of the site is not included in the table.*
- *Section 6.4 states that "the site is well served by several high frequency rail services and bus routes". It is advised that the bus stop on Donnison Street at the front of the site is currently served by one low frequency route.*

Recommendation:

The information in the TIA report including any ramifications to the proposal should be revised accordingly.

Route 41 provides a loop bus service through Gosford Station via Gosford Hospital, Gosford Public School, along Donnison Street West, past the site and Imperial Centre. The travel time between the site and Gosford Station is eight minutes and it is likely that some residents/ visitors (and the less mobile) may use this service to travel between the site and Gosford Station. This service has a low frequency (seven services per day) and with the city centre being within a 500-metre walk of the site it is unlikely to attract the same level of patronage as the high frequency public transport services at Gosford Interchange itself. For these reasons it is not considered as important to overall public transport provision in the area as these other more frequent public transport services.

The TIA report envisaged the proposed development would generate a demand for 270 to 360 public transport trips and 100 to 130 active travel trips during the weekday peak hours, based on the existing mode share Gosford interchange and an assumed average of 1.5 to 2 people per dwelling. The subject

site is within 800m walking distance from Gosford Station, however, only one low frequency bus service is available at its frontage on Donnison Street. Consideration should be given to the above demand that some of the public transport trips would potentially start off as active travel trips from the site to Gosford Station.

Recommendation:

Clarification should be provided to discuss the implications on the surrounding transport infrastructures (i.e. intersections, shared paths, etc.) as a result of the forecasted demand of public transport and active travel trips. Improvements should also be identified, if necessary, to support this demand and active travel connectivity between the site and Gosford Station.

Gosford City Centre caters well for high pedestrian activity with established pedestrian networks, footpaths, through site connections and provision of ample formal crossing facilities with adequate site permeability. The pedestrian network is well established and would link the site well with Gosford Interchange in Gosford CBD a 650 metre walk from the site.

Refer to response to Council Traffic comment 3 above that reviews the capacity of the Henry Parry Road/ William Street intersection to accommodate significantly increased pedestrian volumes during peak periods. As discussed, increased pedestrian volumes do not have a material effect on intersection operation during any peak hour, primarily due to the high existing weekday pedestrian volumes associated with the on-site car park. It is also important to consider that active travel and public transport trips starting as active travel are likely to be spread across a two to three-hour period. For example, residents commuting to Sydney by train will likely start their journey between 6:30am and 7:30am and those working locally travel much later.

Therefore, even if all public transport trips commence as active trips the pedestrian network between the site and Gosford City Centre and Gosford Interchange can (and already do) clearly accommodate this demand.

It is requested that the applicant be conditioned to prepare a detailed Construction Pedestrian and Traffic Management Plan prior to construction activities being carried out on site.

This comment is noted.

Prior to occupancy, a comprehensive Travel Plan should be prepared in consultation with Council and TfNSW.

This comment is noted.

Department of Planning, Industry and Environment

The Department requests further consideration be given to the impacts of the proposal on traffic, parking, transport, pedestrian and road networks, including consideration of cumulative impacts arising from other significant proposals in the city centre. In addition, consider any further mitigation measures, infrastructure or upgrades required to accommodate the proposal and how these might be linked with future development stages.

This comment is noted. Refer to response to Council Planning comment 4, 5, and 6 above

Noting the proposal is disconnected from Gosford's commercial core by a classified road (Henry Parry Drive), the Department requests further investigation into measures to improve pedestrian connectivity from the site to the commercial core (across Henry Parry Drive).

This comment is noted. Refer to response to Council Planning comment 6 above

As the proposal will result in the loss of 600 public parking spaces in the city centre, the Department requires further consideration of potential impacts and measures to mitigate the loss of public car parking. In doing so, the Department requires further consultation with Council to consider the implications of the Gosford City Centre Carparking Strategy and details of new bus routes that may service the city centre.

This comment is noted. Refer to response to Council Planning comment 10 above.

I trust provides the information you require. Should you have any questions or require any further information, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely

GTA CONSULTANTS

Rhys Hazell
Director