

09 April 2025

Shay Bergin
School Infrastructure
259 George Street
Sydney NSW 2000

Dear Shay

RE: Gledswood Hills High School Transport Access Impact Assessment - Response to Submissions

SCT Consulting prepared a Transport Access Impact Assessment on behalf of the NSW Department of Education (DoE) to assess the potential environmental impacts that could arise from the activity of the new Gledswood Hills High School (the Proposal) at 9 Gregory Hills Drive, Gledswood Hills (the site).

The works are proposed by the DoE to meet the growth in educational demand in Gregory Hills and Gledswood Hills, and the broader South West Growth Area.

The Review of Environmental Factors for Gledswood Hills High School was exhibited from 17 February 2025 to 16 March 2025. Submissions were received by members of the community as well as from Camden Council. Further information was also requested from the Department of Education, Assessment team.

The purpose of this letter is to respond to each of the comments raised.

Response to submissions

The transport-related submissions are each responded to in **Table 1**. Some further analysis was requested by the Department of Education, Assessments team, which is supplied in the subsequent sections.

Table 1 Response to submissions

Party	Submission	Response
Design + Planning on behalf of Futuro, the operator of Early Learning Centre at 10 Digitaria Drive, Gledswood Hills (Lot 1 DP1275480)	<ul style="list-style-type: none"> – Futuro Early Learning Centre currently experiences unauthorised parking – The Draft School Transport Plan prepared as part of the Transport Access Impact Assessment does not contemplate the possibility of students driving to school and ways to manage the parking requirements – The Transport Access Impact Assessment does not consider the impact to existing parking if the required parking is not provided – It is improbable that no Year 12 students will drive to school – The provision of kiss 'n drop spaces, a pedestrian crossing and the delivery/emergency access driveway will prevent on-street parking along the school's frontage to Digitaria Drive. – With no designated on-site parking and limited on-street options, students and school visitors are likely to resort to using the car parks of nearby businesses. To prevent this impact on neighbouring establishments, we request that the high school plans be revised to include an adequate number of on-site parking spaces that cater to what is likely to be a more realistic mode share (i.e. increased car use) for the school. – Additionally, the Transport Access Impact Assessment and Draft School Transport Plan should be revised to provide more detail on ensuring that school parents/guardians, visitors and school students do not use the Futuro's Early Learning Centre car park. – The Transport Access Impact Assessment in general, lacks detail on how kiss 'n drop traffic will be managed, particularly once the school is at capacity and the uses along the service road are constructed – It is requested that the Transport Access Impact Assessment and Draft School Transport Plan adequately address the management protocols of the kiss 'n drop, as well as its traffic impact during peak drop-off/pick-up times. 	<p>SCT Consulting on behalf of School Infrastructure engaged with Camden Council in the preparation of the Transport Accessibility Impact Assessment, including on the number of parking spaces, the location and number of kiss 'n drop facilities and offsite infrastructure.</p> <p>The minutes of these meetings were provided in Appendix D of the exhibited Transport Accessibility Impact Assessment. All comments from Camden Council on the infrastructure proposals and kiss 'n drop arrangements were adopted.</p> <p>SCT Consulting consulted with Camden Council on the number of parking spaces during the second Transport Working Group. No concerns were raised by Council. The approach to the number of parking spaces has not changed since that consultation. It was proposed that only one space per staff member is provided during that consultation and in the TAIA.</p> <p>The kiss 'n drop facilities have also been developed in close consultation with Council. Council requested that kiss 'n drop be limited to the frontage of the school to avoid impacts on other landowners, which was adopted.</p> <p>The details of staff management of kiss 'n drop facilities would be confirmed by the school closer to the date of opening. The traffic signage for the kiss 'n drop zone is proposed to be a No Parking sign, which under the Road Rules, drivers may only use for waiting for up to two minutes, which aligns with the kiss 'n drop duration of stay assumption. In practice, school communities develop systems for supervision of Kiss and Drop zones to ensure that they are operating within the road rules. These systems are supported by Council rangers who periodically monitor school zones to enforce the duration of stay. In practice, high school students are much faster at finding their parents/guardians than primary school students and therefore require considerably less management.</p> <p>The proposed kiss 'n drop being on-street is the optimal arrangement for the school and surrounding land uses. If the kiss 'n drop facility were onsite, it would increase traffic use of the north-south driveway, which would impact on Futuro's Early Learning Centre car park.</p> <p>It is agreed that there would be some limited extent of Year 12 students driving to school. It is noted that the surrounding streets already have parking demand from the various surrounding land uses and that the on-street parking demand is typical of any centre of activity. If on-street parking issues become prevalent over time, the school community can work with Council to investigate time-limited parking on the surrounding streets which would likely limit the ability of Year 12 drivers to park in the surrounding</p>

Party	Submission	Response
		<p>streets. These issues, should they occur, are not isolated to the proposal of a school but arise from the attractive mix of land uses in the precinct.</p> <p>No changes are considered necessary based on the feedback provided.</p>
Campbelltown Council submission	<ul style="list-style-type: none"> – The Transport Access Impact Assessment does not consider the impact to existing parking if the required parking is not provided – It is improbable that no Year 12 students will drive to school – Furthermore, the Transport Access Impact Assessment does not consider the impact to existing parking if the required parking is not provided. This matter should be addressed as part of the REF assessment process. – It is difficult to comprehend that the Draft School Transport Plan and Transport Access Impact Assessment are heavily reliant on public and active transport use for students and visitors. – There are presently five vacant lots on the opposite side of Digitaria Drive, therefore the use of on-street parking will increase following the development of those sites. Furthermore, the provision of kiss 'n drop spaces, a pedestrian crossing and the delivery/emergency access driveway will prevent on-street parking along the school's frontage to Digitaria Drive. – To prevent this impact on neighbouring establishments, we request that the high school plans be revised to include an adequate number of on-site parking spaces that cater to what is likely to be a more realistic mode share (i.e. increased car use) for the school. – Additionally, the Transport Access Impact Assessment and Draft School Transport Plan should be revised to provide more detail on ensuring that school parents/guardians, visitors and school students do not use the Futuro's Early Learning Centre car park. – It is assumed that this recognition has led to the placement of a two-minute time limitation for parents using this facility. However, there is little detail on how this will be policed to ensure that 	<p>Many issues raised by Campbelltown Council are responded to in the response to Futuro.</p> <p>It is not necessary to contemplate changed access arrangements as the development of the concept plan was always contemplated, which would introduce additional traffic onto the north-south road. Analysis on pages 8 and 9 of this letter shows that the amount of traffic is less than would have been expected under the previous use. The development of Futuro Early Learning Centre would have had to have regard for the concept plan in the preparation of their proposed site layout, which contemplated bulky goods traffic use of the north south road and competing uses.</p> <p>Detailed operational measures including management of kiss 'n drop arrangements will be provided in the updated School Transport Plan prior to operation. Generally, high school students do not require the same extent of kiss 'n drop management as primary school students.</p> <p>The mode share was tested in consultation with Camden Council during Transport Working Groups and has informed the site layout and kiss 'n drop layout.</p> <p>Further messaging will be prepared prior to occupancy to discourage use of the north-south road and use of Futuro Early Learning Centre car park.</p> <p>Recommendation: the mitigation measures be modified to require an update to the Transport Access Guide to include information discouraging use of the north-south road and Futuro Early Learning Centre car park. This is to occur prior to operation.</p> <p>Recommendation: the School Transport Plan is revised to provide more detail about kiss 'n drop management. This is to occur prior to operation.</p>

Party	Submission	Response
	<ul style="list-style-type: none"> – congestion is minimised. In this regard, there is a strong likelihood that congestion of the kiss 'n drop will cause vehicles to cue across the service road entry/exit, impact staff and parents/guardians of the Early Centre from accessing the centre's car park. – It is requested that the Transport Access Impact Assessment and Draft School Transport Plan adequately address the management protocols of the kiss 'n drop, as well as its traffic impact during peak drop-off/pick-up times. – While there are plans to implement parking restrictions around the kiss 'n drop area, there is no mention of additional measures to manage parking along Digitaria Drive. – Accordingly, we request that the relocation of the main entrance be considered, in line with the master plan for the school, to help deter the use of Futuro's private car park. 	
Letter from Camden Council	<ul style="list-style-type: none"> – – The report concluded that transport patterns for the proposed Gledswood Hills High School will be similar to those quoted in the Oran Park High School. It should be noted however, that most students at the proposed school will not be eligible for subsidised public transport and given that the school is located within a commercial environment and not immediately surrounded by residential development, it is considered that these assumptions may not be entirely relevant for this proposed school. – With respect to drop-off and pick up restrictions along Digitaria Drive, signage and line marking require Local Traffic Committee concurrence. It is recommended that a ½ hour parking restriction be proposed rather than a 'No Parking' restriction. The 'No Parking' measures at other schools within the LGA have not worked satisfactorily as parents tend to arrive well before the school finish time and significantly exceed the 2-minute period enforced by the no parking restrictions. – Year 11 and 12 students of driving age who elect to drive to school will be required to park on street and given the general reliance on the use of motor vehicles within the 	<p>SCT Consulting engaged with Camden Council including discussing the relevant benchmarking high school for mode share purposes. It was with Camden Council's agreement that Oran Park High School was selected. It is not proposed to update the mode share based on this prior engagement.</p> <p>Any changes to signage would require Council and Local Traffic Committee approval. If Council wishes to deliver ½ P parking along the frontage of the school compared to a no parking zone, then the team would deliver that parking. It is noted that there are concerns from other stakeholders that on-street parking would be congested, hence it is preferred to retain the No Parking zone during school hours if this is considered acceptable to Council.</p> <p>SCT Consulting consulted with Camden Council on the number of parking spaces during the second Transport Working Group. No concerns were raised by Council. The approach to the number of parking spaces has not changed since that consultation. It was proposed that only one space per staff member is provided during that consultation and in the TAIA.</p> <p>It is agreed that there would be some limited extent of Year 12 students driving to school. It is noted that the surrounding streets already have parking demand from the various surrounding land uses and that the on-street parking demand is typical of any centre of activity. If on-street parking issues become prevalent over time, the school community can work with Council to investigate time-limited parking on the surrounding streets which would likely limit the ability of Year 12 drivers to park in the surrounding</p>

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	<p>Camden LGA, additional off-street car parking should be provided. This is necessary to reduce potential impacts on surrounding commercial uses from increases in on-street car parking in the vicinity of the site.</p> <ul style="list-style-type: none"> – It is proposed to relocate Bus Stop 25573 on Gregory Hills Drive from west of Central Hills Drive to the east of Central Hills Drive and this initiative is supported, subject to consultation with bus company and agreement of Transport for NSW. A revised bus zone should be included on the signage plan for future endorsement. – Works proposed as part of the development include a raised crossing in Digitaria Drive and the widening of the footpath along Digitaria Drive to 2 metres across the frontage of the site. The raised crossing must be designed in accordance with relevant standards and design specifications and is subject to Local Traffic Committee review and concurrence. Consultation is also to be undertaken with affected surrounding landowners and occupiers. With respect to the footpath widening, it should be noted that there are kerbside stormwater catchments that would need to be considered in any design. 	<p>streets. These issues, should they occur, are not isolated to the proposal of a school but arise from the attractive mix of land uses in the precinct.</p> <p>It is agreed that a signage plan should be prepared for the relocation of Bus Stop 25573 and that the project consult with Camden Council in the preparation of these plans.</p> <p>Recommendation: the mitigation measures be modified to include preparation of a bus zone relocation signage plan for Camden Council endorsement.</p> <p>Recommendation: the mitigation measures be modified to specify that the raised crossing must be designed in accordance with relevant standards and design specifications and are subject to Local Traffic Committee review and concurrence. Consultation is also to be undertaken with affected surrounding landowners and occupiers.</p>
Department of Education, Assessments team	<p>The north south right of way is expected to service the adjacent childcare centre, a future hotel and fast-food restaurant along with the staff car park. However, it may also be used by parents to access the drop-off and pick-up (DOPU) area along the northern frontage. A cumulative traffic assessment of the right of way is recommended to mitigate any traffic impacts along the right of way and at the accesses.</p>	<p>Refer to analysis on pages 7 and 8 of this letter.</p>
	<p>Additional traffic calming devices should be considered along right of way to reduce speed and discourage use by parents getting to the DOPU.</p>	<p>The north-south driveway is considered a driveway as it is not a public road.</p> <p>I am advised the following by SDG's Registered Surveyor, "Subject to complying with the Access Conditions contained in section 24 "Definitions" of the 88B instrument, the Terms of the Right of Carriage Way numbered 4 in DP1262720 contains the provision for all authorised users of the easement to "... have at all times the right to go, pass and repass over the Easement Site by vehicle for the purposes of gaining access to Digitaria Drive and Gregory Hills Drive." It is my opinion that there is nothing in the terms of the easement that prevents the Grantor from limiting the speed of vehicles using the easement, either by signage and / or physical speed reduction measures such as speed humps or raised thresholds, as these do not constitute prohibitions or</p>

Party	Submission	Response
		<p>obstructions to free passage (section 24(b)(vi)). Conversely, it is my opinion, that the construction of measures such as lane narrowing, kerb “blisters” or “pedestrian havens” may be regarded as obstructions or restrictions to passage.”</p> <p>The driveway would be considered a Circulation Roadway per the definition in AS2890.1 Section 1.3.9.</p> <p>AS2890.1 Section 4.3.2 states, “As far as practicable a car park layout shall be designed so that it does not encourage excessive speed and if excessive speeds are a particular problem at any location, traffic management devices such as speed humps (see Clause 4.9) shall be used.”</p> <p>Based on this requirement, I consider that the long Circulation Roadway lengths are conducive to fast traffic speeds and therefore would benefit from speed limiting devices. AS2890.1 does not supply any advice as to the appropriate spacing. I have used Austroads Guide to Traffic Management Part 8 Local Street Management Table 4.3. To achieve a target 85th percentile speed of 35km/h, I recommend a spacing of 50m. I recommend that rather than a permanent concrete installation that a speed hump which can be drilled into the existing pavement be installed to allow for flexibility when other uses are delivered. The speed humps should be determined during detailed design of the project.</p> <p>Recommendation: the mitigation measures be modified to include speed hump installation on the north-south road at 50m spacing.</p>
	<p>Pedestrian safety for students crossing the right of way should be considered.</p>	<p>It is not common practice to provide pedestrian crossing across driveways. This is firstly because pedestrian crossings have several requirements in terms of size, spacing, layout and signage that can't be achieved across a driveway. For example, the footpath is proposed to be widened to 2.0m, but a zebra crossing has a minimum width of 3.0m. This crossing would take up almost the entire driveway. Zebra crossings require no stopping zones on approach, which would also involve the removal of parking spaces within the Futuro Early Learning Centre, which is not appropriate. Lastly, the signage which indicates to drivers that they are approaching a zebra crossing can't be provided on Gregory Hills or Digitaria Drive.</p>
	<p>The DOPU has 10 spaces however queuing at the DOPU has not been assessed which may impact the right of way access on Digitaria Dr.</p>	<p>The moderate case mode share identifies that there would be up to 326 students arriving by car. Based on 1.5 students per vehicle and 90% of vehicles arriving in the peak hour, there would be 196 vehicles arriving. Based on a typical dwell time of two minutes per vehicle and a 30-minute arrival period, 13 kiss 'n drop spaces would typically be required. A total of 10 spaces are provided along the frontage, indicating a deficit of 3 spaces.</p> <p>SCT Consulting engaged with Council in the preparation of the kiss 'n drop proposal. Council requested the removal of kiss 'n drop spaces on the northern side of Digitaria Drive, despite the benefit these would provide to the reduction of congestion arising</p>

Party	Submission	Response
		<p>from the school. It was Council's perspective that the parking arrangements should be limited to the frontage of the school to minimise impacts on other landowners.</p> <p>Should queuing issues occur during pick up and drop off, the school community can work with Council as road authority to provide additional pick up and drop off zones to reduce queuing outside of the school.</p>
	The widening of the footpath should be assessed in accordance with the Walking Space Guide, 2020.	Refer to analysis on page 9 of this letter.
	Consideration of mitigation measures to guide students to safe crossing locations along Gregory Hills Drive.	<p>The desire lines for students along the southern boundary is to head towards the bus stop on the southern side of Gregory Hills Drive just west of Donovan Boulevard and to the residential area accessed via Donovan Boulevard. A signalised pedestrian crossing is available for this.</p> <p>There are no reliable methods of guiding students to safe crossing locations as fencing would still need to have gaps where driveways occur, so is not a foolproof method. The Transport Access Guide should be updated prior to occupancy to discourage crossing except at the traffic signals.</p> <p>Recommendation: The Transport Access Guide is to be updated prior to occupancy to discourage crossing except at the traffic signals.</p>

Concept Approval traffic assessment

The SOMA Lifestyle Precinct contemplated that the north-south driveway along the eastern boundary of the site would be a key access point for a large mix of uses.

The new Gledswood Hills High School is in the central portion of the concept approval as shown in **Figure 1**. This figure is an overlay on a Site Plan from Mod 5, which are the only plans the project team have access to. Notwithstanding, the general layout of the site is largely the same as the original Concept layout.

Figure 1 Notional Concept DA layout



Transport Accessibility Impact Assessment considered in detail the broad compatibility of the site with the concept approval and easements (**Section 4.2**).

A further detailed traffic assessment is conducted to evaluate the cumulative traffic impacts of the site.

The only traffic proposed to use the north-south driveway arising from Gledswood Hills High School is the access to the car park, which caters for staff parking and waste. There are a total of 72 parking spaces. Conservatively, the traffic generated by staff during their arrival and departure periods could be as high as 72 vehicles per hour. It is likely that the actual number is less, as some staff will arrive earlier or later due to before/after school activities.

The most recent traffic report available to SCT Consulting is *Lots 843, 844 (partial) and 845: SOMA Lifestyle Precinct, Gledswood Hills - Traffic and Parking Impact Statement – Addendum 2* (Mott Macdonald, dated 6 February 2020). The traffic generated by the SOMA precinct is replicated in **Table 2** (overleaf).

Table 2 Traffic generation of concept DA

	Land Use	Size	Unit	Multi-Purpose Use Factor	AM Trip Rate	PM Trip Rate	Unit	AM Traffic Generation (vph)	PM Traffic Generation (vph)
Lot 1	Café	436	sqm GFA	20%	0.6	1	Trips per 100m ²	1	1
	Business Premises	4239	sqm GFA	100%	1.6	1.2	Trips per 100m ²	68	51
	Bulky Goods	835	sqm GFA	80%	0.504	2	Trips per 100m ²	4	14
	Subtotal							73	66
Lot 2	Bulky Goods	16925	sqm GFA	80%	0.504	2	Trips per 100m ²	69	271
	Business Premises	220	sqm GFA	100%	1.6	1.2	Trips per 100m ²	4	3
	Café	72	sqm GFA	20%	0.6	1	Trips per 100m ²	1	1
	Cinema	1380	seats	80%	25%	25%	Turnover rate	42	69
	Subtotal							116	344
Lot 3	Unconfirmed Leisure	2166	sqm GFA	80%	0.09	1.84	Trips per 100m ²	2	32
	Subtotal							2	32
Lot 4	Hotel	135	rooms	80%	0.064	0.32	Trips per unit	7	35
	Subtotal							7	35
Lot 5	Business Premises	3637	sqm GFA	100%	1.6	1.2	Trips per 100m ²	59	44
	Subtotal							59	44
Total								257	521

Source: 369626-TPIS-ADD02, 6 February 2020

The uses sitting within Lot 2 are the uses which would be those replaced by the proposed Gledswood Hills High School.

There are multiple connections anticipated within the concept approval, which would distribute the traffic across multiple areas. It is estimated that approximately half of the traffic in **Table 2** could use the north-south driveway.

A comparison of the traffic from Lot 2 which would use the north-south driveway is provided in **Table 3**. This traffic assessment assumes that 50 per cent of the traffic arising from Lot 2 would use the north-south road.

Table 3 Comparison of traffic generation of concept DA land uses and new high school using the north-south driveway

Context	AM peak hour	PM peak hour
Concept DA	58 veh/h	172 veh/h
Gledswood Hills High School	72 veh/h	72 veh/h
Net increase	+14 veh/h	-100 veh/h

The impact of the provision of the school is a net reduction in total traffic using the north-south driveway. It is noted that a historical assessment¹ of the potential use of the driveway was as 229 veh/h in the am peak hour and 515 in the pm peak in a similar pattern of flow to the proposed school staff car park arrangement.

The anticipated traffic from the school should be considered as less than what the concept approval would have generated. Historical reports showing much heavier use of the north-south driveway also indicate that it could handle significantly higher traffic than arising from the school. There will also be less bulky goods vehicles using the road, which is a positive on the other land uses, like the child care, that use this north-south driveway.






¹ Lots 843, 844 (partial) and 845: SOMA Lifestyle Precinct, Gledswood Hills - Traffic and Parking Impact Statement – Addendum 1 (Mott Macdonald, dated 22 June 2018)

Walking space guide

The Walking Space Guidelines provide recommendations for the minimum amount of footpath space to meet pedestrian comfort levels. **Figure 2** provides the summary requirements.

Figure 2 Walking Space Guidelines Summary

Footpath Type 1	Type 2	Type 3	Type 4	Type 5
Typical description: Local footpath – Low activity	Local footpath – Medium activity	Main street footpath – Medium activity / Local footpath – High activity	Main street footpath – High activity	Main street footpath – Very high activity
Short walk interaction: Unlikely to pass someone	Likely to pass someone	Virtually certain to pass someone	Virtually certain to meet multiple groups of people	Busy
Peak hour maximum use: Very few people per hour	7 or more people per hour	70 or more people per hour	400 or more people per hour	More than 2,000 people per hour
MINIMUM TARGET Walking Space: 2.0m	2.3m + 0.6m Passing Zone	3.2m (3.0m not adjacent to active shopfronts)	3.9m (3.7m)	less than or equal to 9.5 People Per Metre / Minute
Intervention Trigger (less than): 1.3m*	1.6m + 0.6m Passing Zone	2.3m (2.2m)	2.9m (2.7m)	greater than 18.0 People Per Metre / Minute

 <p>Low activity local footpaths are appropriate where people walking are unlikely to pass people coming the other way.</p> <p>These footpaths support 2 friends walking together and passing if they walk in single file.</p>	 <p>Medium activity local footpaths are appropriate where people walking are more than likely to pass people coming the other way.</p> <p>These footpaths support 2 people passing walking abreast or 2 friends walking together passing another person using the Passing Zone.</p>	 <p>Medium activity main street footpaths are appropriate where people walking are virtually certain to pass people coming the other way.</p> <p>These footpaths support 2 friends walking together and passing another person without having to walk in single file.</p>	 <p>High activity main street footpaths are appropriate where people walking are virtually certain to meet multiple groups of people coming the other way.</p> <p>These footpaths support 2 friends passing 2 friends coming the other way without either group having to walk in single file.</p>	 <p>Very high activity main street footpaths are appropriate where it is very busy most of the time.</p> <p>These footpaths provide enough space for large numbers of people to walk comfortably.</p>
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Source: TfNSW

Schools typically aim for a 3.2m footpath width based on a Type 3 context. However, this is not appropriate at the site and instead a 2.0m widening is proposed along the northern boundary.

The northern boundary cannot accommodate a wider footpath zone due to the provision of rain gardens which are spaced regularly along the footpath of Digitaria Drive, not just along the frontage of the school but along the road as a whole. Council noted that these rain gardens cannot be removed as they are part of the water sensitive urban design requirements for the area. Therefore, the footpath would need to narrow back to the current width (approximately 1.5m) as soon as it leaves the site boundary. The school is widening the footpath to 2.0m, which is the extent of what is possible along the northern frontage.

Along the southern frontage, the footpath on Gregory Hills Drive is also approximately 1.5m wide. Council has planted trees regularly along the road, which are now mature. Widening of the footpath would compromise the health of trees and would likely require them to be removed. Research into walking indicates that tree canopy coverage is an important support for walking uptake and so this would undermine the sustainability objectives of the Transport Accessibility Impact Assessment. The footpath is also close to Gregory Hills Drive and can't be widened without the buffer to the roadway reducing. Therefore, the footpath is recommended to remain as is on this frontage.

Yours sincerely

A handwritten signature in black ink, consisting of the letters "JDB" in a cursive, stylized font.

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Associate Director

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