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11 November 2022

Daniel Cavallo
Director Environment and Planning
Cumberland City Council
PO Box 42, Merrylands NSW 2160

Dear Daniel,

BETTY CUTHBERT DRIVE – RESPONSE TO POST-GATEWAY EXHIBITION COMMENTS

This letter has been prepared on behalf of Property & Development NSW (**PDNSW**), in response to correspondence from Cumberland Council in relation the outcomes of the post gateway consultation of the current Planning Proposal for 80 Betty Cuthbert Drive, Lidcombe.

Council sought additional information in response to the public submissions received during the post gateway public exhibition and to assist Council in finalising the report on the Planning Proposal. The key issues in the submissions relate to educational establishment traffic and drop off / pick up, details around the delivery of the educational establishment and vegetation. A response to these matters is included in the table below, with supplementary information enclosed in:

- **Appendix A** – Technical Memorandum prepared by Mott MacDonald
- **Appendix B** – Correspondence from Schools Infrastructure NSW
- **Appendix C** – Extract of Draft DCP lodged with Planning Proposal

The Planning Proposal facilitates a future educational establishment, a health facility, and residential land. Council have requested further information on the future educational establishment. Previous correspondence has been provided to Council confirming that the Department of Education (DoE) has been working collaboratively with PDNSW and Multiple Sclerosis Limited (MSL) to develop the proposal which includes provision of land for a potential new school.

For assessment purposes, the Planning Proposal made an assumption that the future educational facility could be a 1,000 student primary school as maximum capacity from a traffic perspective. This assumption is conceptual only and the final type and capacity of the future educational establishment is subject to detailed service need planning and business case approval from NSW Treasury. All information provided in response to Council's request for further information is based on data collected and analysed by Mott MacDonald, and is based on the assumptions noted in the Technical Memo enclosed in **Appendix A**. PDNSW consulted with DoE in responding to Council. However, DoE has no further information or data to provide at this time. DoE has provided a formal letter to Council which is enclosed in **Appendix B**.

The development of the future educational establishment will be subject to development approval following the rezoning. As part of any future approval, further information will be prepared by DoE and provided to Council including a range of technical assessments based on the type of educational establishment, overall configuration, and traffic arrangements. There is no further information to provide on the educational establishment at this point in time.

It is not intended or implied that the responses provided to Council's queries in this letter or supporting documentation binds DoE to any of the potential solutions or indicative outcomes, particularly noting that the final future educational establishment is yet to be confirmed. The information provided as part of this response is for Council's information purposes only and is not intended for public distribution has been provided in confidence.

PDNSW have made every effort to address the queries raised by Council, however the level of detail requested is unusual noting the Planning Proposal is simply addressing the rezoning of the site and does not seek consent for any physical works including the future educational establishment.

Should you require any additional information or clarification please do not hesitate to contact the Alaine Roff or the undersigned.

Kind regards,

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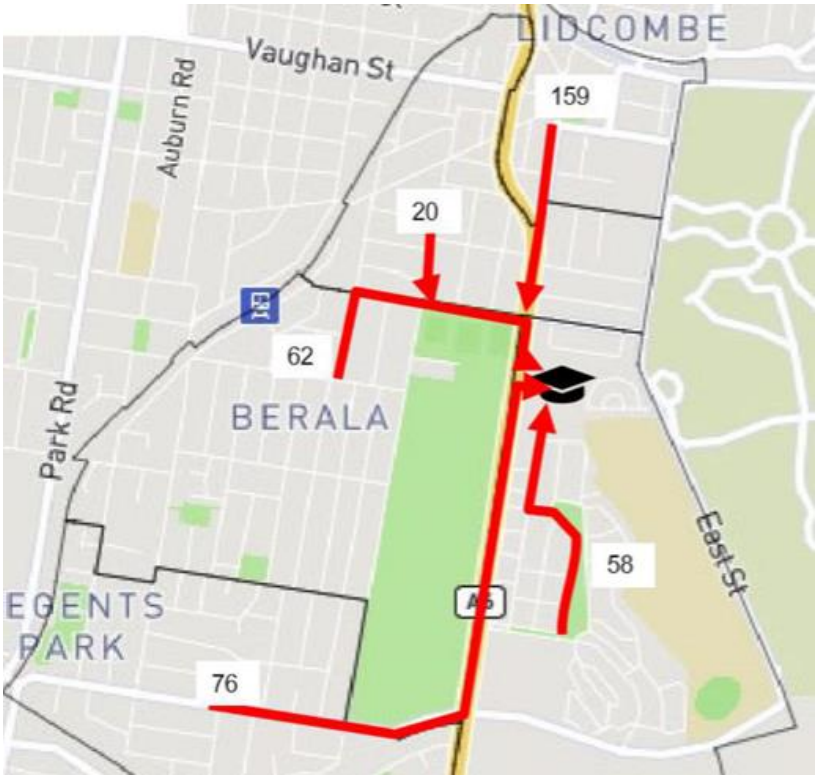
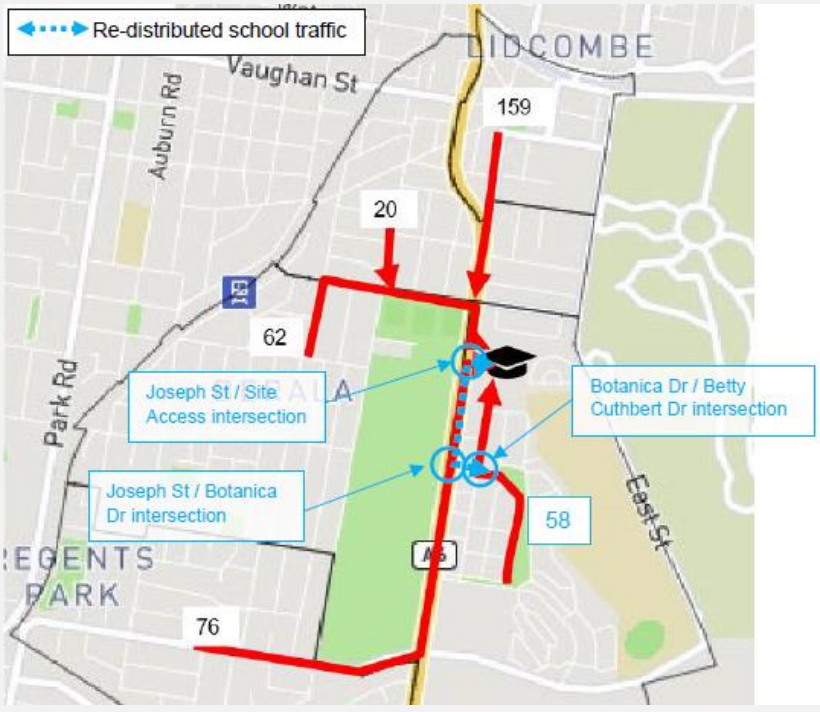
RESPONSE TO COUNCIL REQUEST FOR FURTHER INFORMATION

Council Comment	Response
Traffic, Transport and Access	
Provide information on the ability for Betty Cuthbert Drive to restrict access between the proposed school and the existing residential area	In response to Council's comments, a Technical Memo has been prepared by Mott Macdonald and is enclosed in **Appendix A**. From a traffic perspective it is not considered a positive outcome to constrain movements between the new local access street and Betty Cuthbert Drive for the following reasons: As noted in the Traffic and Engineering Report prepared as part of the Planning Proposal package, only 58 trips are anticipated from within the Botanica Estate during the AM Peak (refer to **Figure 1**). Restriction would require any trips from the south to be made via Joseph Street which would increase traffic movement along the sub-arterial. Figure 1 School Traffic Distribution - AM peak period  *Source: Mott Macdonald (Appendix F – Traffic and Engineering Report)*

Council Comment	Response
	Outside of school hours, the local road provides additional connections with the local road network for residents. The current design of Betty Cuthbert Drive provides parking on both sides of the road. As a result, there are sections that only allow for a single vehicle passageway, which would act as a traffic calming measure. This would mitigate the risk of vehicles travelling at high speeds, as well the potential use as a 'rat run' alternative to Joseph Street. A potential alternative solution considered the project team was to restrict vehicular access from Betty Cuthbert Drive during school peaks hours only. However, this would not eliminate the possibility for vehicles to use that link outside of those hours and would require enforcement to ensure compliance.
Undertake further analysis to understand the implications from a traffic modelling perspective should traffic distribution be modified to access the proposed school. In particular Council is seeking to better understand the implications of redistribution of traffic generation from the existing Betty Cuthbert Drive via Joseph Street and the new access road to the proposed school, as well as the redistribution of traffic generation from the Berala area to Leila Street (where students and or staff would use the proposed pedestrian overpass to access the proposed school.	Further analysis has been prepared by Mott Macdonald as part of the Technical Memo enclosed in **Appendix A**. As noted in **Figure 2**, the traffic generated to and from Betty Cuthbert Drive remains at 58 vehicles in the AM Peak. Figure 2 Redistributed School Traffic Distribution - AM peak period  *Source: Mott Macdonald*

Council Comment	Response
Document the operation of Leila Street as an option for a kiss and drop area, as well as providing commentary on the implications on street and local traffic access to this location.	Consideration of the operation of Leila Street as a kiss and drop for the proposed educational establishment and potential implications on street layout and access has been considered as part of the Technical Memo enclosed in **Appendix A**. Based on the assessment by Mott MacDonald, approximately 18 spaces would be anticipated to be free on an average day, which would be well in excess of the expected demand for kiss and drop. Overall, the option to have Leila Street as a kiss and drop area is anticipated to have a negligible impact for local traffic access during school days. It would also be expected to have no impact during weekends, when sporting events are expected to increase parking utilisation in the area.
Document the traffic management arrangements outside the proposed school using the proposed new access road to the school. The should include proposed kiss and drop locations, staff parking, school bus drop off and pick up, active transport access and general traffic circulation for the proposed school.	Traffic management arrangements outside of the school are shown indicatively in **Figure 3**. This shows vehicular and active travel access and circulation at a high-level. The indicative kiss and drop locations on the new local street are expected to be located on the northern and eastern frontages, as well as potentially on the eastern end of Leila Street as per **Figure 3**. The school bus pick-up and drop-off is expected to take place along the eastern frontage due to vehicle and bay length requirements. Further details in terms of cycling infrastructure including parking are anticipated to be provided as part of a future planning application for the school in due course. Staff parking is assumed to be accommodated within the school site (not on-street). The future application for the school site would confirm staff parking requirements and provisions to be made onsite.

Council Comment	Response
Figure 3 Proposed vehicular and active access and circulation  *Source: Urbis*	
Provide further information on the footprint required for the proposed pedestrian overpass for both sides of Joseph Street, as well as the location of new footpaths to access the proposed pedestrian overpass.	The indicative footprint for the pedestrian overpass and associated connected outside of the school are shown indicatively in **Figure 3** above. A schematic for the pedestrian overpass has been previously provided as part of the Planning Proposal package with further information included in the Technical Memo enclosed in **Appendix A**.
Providing commentary on any positive or negative implications on traffic generation and movement for the proposed school, for the following scenarios:	As noted in the Technical Memo enclosed in **Appendix A**, while reducing the maximum capacity on site to 500 or 750 students would likely result in minor improvements to traffic generation, this could fluctuate depending on whether families with multiple children were allocated a space at this school or had to travel to multiple schools in the surrounding locality.

Council Comment	Response
1. Maximum capacity of 500 students, 2. Maximum capacity of 750 students.	A negative implication would be the actual reduction in school capacity. This could affect some of the residents in the wider area, requiring them to travel to other schools, with the potential for some of those trips to still be made within the surrounding road network. However, any potential impact related to this could not be determined at this stage.
<u>Proposed School</u>	
1. Provide further information on the footprint and design parameters for the proposed school, using benchmark information for recent schools	Discussions have occurred between PDNSW and the Department of Education (DoE) and Schools Infrastructure NSW (SINSW) to confirm any further information on the future educational establishment. In response to these discussions, a letter has been provided to Cumberland Council (enclosed in **Appendix B**). The correspondence notes: *Once the planned re-zoning is complete, the Department will commence more detailed service need planning to identify the timing of projected population growth and the impact of enrolments in the short and medium term on current schools in the area and this would involve detailed consultation with council on all aspects of the potential new school including traffic, bulk and scale of buildings and any staging required.* Nevertheless, DoE released the draft '*Master planning guidelines for schools'* in October 2020 and the draft '*School Site Selection and Development Guidelines'* in March 2021. Based on these guidelines, **<u>if</u>** a primary school was to be located on site, the following guidelines would apply: Maximum capacity: 1,000 students Minimum open space: 10sqm per student (approximately 1 hectare) Floor space distribution: Between 8,000m² and 10,000m² Built form: typically up to 4 storeys in height, with open space provided at grade only This is **<u>indicative only</u>** and would be confirmed as part of future planning undertaken by DoE and SINSW.
Provide information on indicative staging	As noted above and in **Appendix B**, once the site is rezoned, DoE will commence more detailed service need planning to identify the

Council Comment	Response
regarding the capacity of the school. Council is seeking to understand the lead time required should a school of 1000 students be required on the site	timing of projected population growth and the impact of enrolments in the short and medium term on current schools in the area. Further consultation with Council will occur as part of future planning undertaken by DoE and SINSW.
Seek clarification from Schools Infrastructure NSW regarding the status of the project, including funding commitments and planning work undertaken	As noted above, discussions have occurred between PDNSW and the Department of Education (DoE) and Schools Infrastructure NSW (SINSW) to confirm any further information on the future educational establishment. In response to these discussions, a letter has been provided to Cumberland Council (enclosed in **Appendix B**).
<u>Preservation of existing vegetation</u>	
1. Provide information regarding the ability for loss of vegetation to be further minimised when compared to the reports provided	Section 3.5 of the Draft DCP prepared in consultation with Cumberland Council incorporates tree retention mapping prepared by Ecological. The specific extract from the DCP is enclosed in **Appendix C**. Control C4 states: *Based on the preliminary tree retention mapping in Figures 10 – 15.* *'medium retention value trees' should be retained wherever possible but should not be a constraint on the development.* *'high retention value trees' are considered important for retention and should be retained and protected wherever possible. All opportunities for retaining these subject trees using design modification and tree sensitive construction techniques should be explored.* In accordance with the DCP, all future applications for the site will require consideration of tree removal.
Provide information as to whether offsets for the loss of vegetation can	While offsets have not been specified in the DCP, it is anticipated that tree replacement strategies will be incorporated as part of any application to remove trees on site. It would be acceptable to add a separate control into Section 3.5 of the DCP which reads:

Council Comment	Response
be provided within the broader site.	*C7. Where tree removal proposed, a tree replacement strategy must be incorporated*

Appendix A

MOTT MACDONALD

Technical Memorandum

Subject	**80 Betty Cuthbert Drive, Lidcombe Master Plan – Planning Proposal – Traffic and Transport Assessment Report Addendum**
Our reference	MMD-405675-PP-TM-01
Date	14/11/2022
Author	Ayyappa Janga / Oliver Kao
Checker	Cesar Calvo Moran
Approver	Thomas Loder

1 Introduction and Purpose

Mott MacDonald was engaged to prepare a Traffic and Transport Study to assist Property and Development NSW (PDNSW) in finalising a master plan and obtaining the necessary planning proposal approvals for the government owned site at 80 Betty Cuthbert Drive, Lidcombe. A traffic engineering report was produced to review existing traffic and transport infrastructure at and surrounding 80 Betty Cuthbert Drive, Lidcombe (the Site), and assess future traffic and transport operations and parking requirements.

The Planning Proposal facilitates a future educational establishment, a health facility, and residential. For assessment purposes, the traffic engineering report assumed that the future educational facility could be a 1,000-student primary school. This assumption is conceptual only and the final type and capacity of the future educational establishment is subject to detailed service need planning and business case approval from NSW Treasury.

PDNSW consulted with DoE in responding to Council. However, DoE has no further information or data to provide at this time. All information provided is based on data collected by Mott McDonald based on assumptions developed to address Council's questions only and are based on a maximum capacity usage of the site as a primary school. The development of the future proposed educational facility will be subject to a development application (DA) and traffic impact studies to the area will be considered as part of that proposal once the type of educational establishment and configuration of that educational facility are designed and presented in the DA. It is not intended or implied that the information provided in this document binds DoE to any of these potential solutions, and is simply provided to address the questions raised by Council.

Following feedback from Cumberland City Council (Council) on 14 October 2022, additional analysis over the traffic and transport assessment previously undertaken was required. This technical memorandum (Memo) builds upon the latest revision of that report (the “Traffic Report” – ref: MMD-405675-PP-RP-01, Traffic and Transport Assessment Report, Rev N, 06 May 2022), providing a response to the queries raised by Council.

The Council feedback relevant to the scope of this Memo is listed below. These queries are addressed in turn within the subsequent sections below.

1. *Provide information on the ability for Betty Cuthbert Drive to restrict access between the proposed school and the existing residential area.*

2. *Undertake further analysis to understand the implications from a traffic modelling perspective should traffic distribution be modified to access the proposed school. In particular Council is seeking to better understand the implications of redistribution of traffic generation from the existing Betty Cuthbert Drive via Joseph Street and the new access road to the proposed school, as well as the redistribution of traffic generation from the Berala area to Leila Street (where students and/or staff would use the proposed pedestrian overpass to access the proposed school.*
3. *Document the operation of Leila Street as an option for a kiss and drop area, as well as providing commentary on the implications on street and local traffic access to this location.*
4. *Document the traffic management arrangements outside the proposed school using the proposed new access road to the school. They should include proposed kiss and drop locations, staff parking, school bus drop off and pick up, active transport access and general traffic circulation for the proposed school.*
5. *Provide further information on the footprint required for the proposed pedestrian overpass for both sides of Joseph Street, as well as the location of new footpaths to access the proposed pedestrian overpass.*
6. *Providing commentary on any positive or negative implications on traffic generation and movement for the proposed school, for the following scenarios; 1. Maximum capacity of 500 students and 2. Maximum capacity of 750 students.*

2 Betty Cuthbert Drive Access – Response to Query #1

This section provides commentary on the ability for restriction of access to the site via Betty Cuthbert Drive (BCD) between the education facility site and residential area.

Should an access restriction be sought between BCD and the proposed education facility, then trips to and from the proposed education facility travelling from that direction (southeast) would need to be made via Joseph Street and the new site access / local street.

This could be achieved by restricting vehicular access on BCD, south of the new local street, near its intersection with Ironbark Crescent. A connection should be maintained for active transport to ensure pedestrian network permeability, with a potential opportunity to convert the closed section into a shared path.

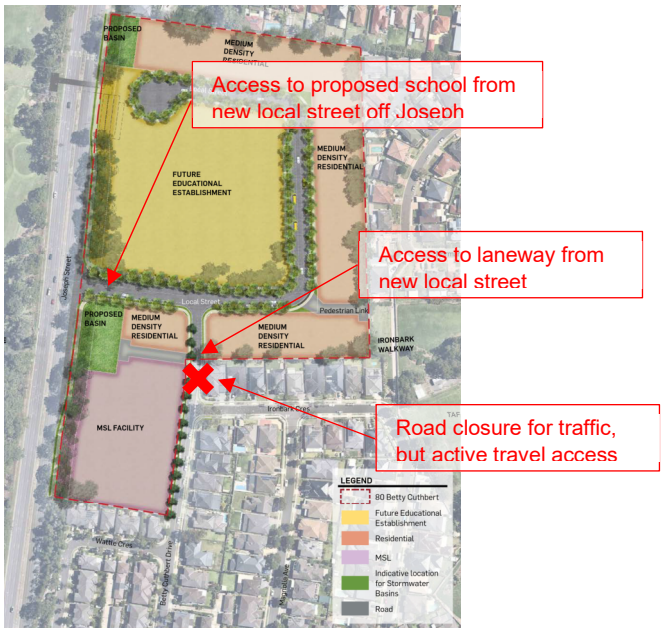
Such closure should be located south of the proposed laneway linked to the medium density residential component on the western side of BCD (see Figure 1). This would ensure that new trips to the site are made via the proposed new site access and local street. Trips to the Multiple Sclerosis Limited (MSL) facility would be retained along BCD as per the existing situation, noting however that users of this facility would be unable to use the new site access and local street to access it. It is also noted that, depending on the final location of the closure, a turnaround facility may be required to the south of it to allow vehicles on BCD to turn back.

A potential alternative solution would be to restrict vehicular access from BCD during the peak hours of the education facility only. However, this would not eliminate the possibility for vehicles to use that link outside of those hours and would require enforcement to ensure compliance. As a positive outcome, this would provide an additional access route for residents in the area.

Further to the above, it is worth highlighting that BCD is a local road with parking allowed on both sides. As a result, there are sections that only allow for a single vehicle passageway, which would act as a traffic calming measure. This would assist in reducing the ability for traffic to travel at high speeds, as well as the desire for its use as a rat running alternative to Joseph Street in the future if a link is created with Botanica Drive. Trips to the education facility would be considered local in nature and, as such, it would be appropriate for these to use the local road network to travel instead of using the arterial network and adding to any congestion on Joseph Street. A link between the new access and BCD would also increase connectivity opportunities for the residents in the area, reducing local traffic accessing from the southern side of BCD.

Overall, it would not be considered a positive outcome to constrain movements between the new local access street as part of the proposals and BCD.

Figure 1: Concept Indicative Layout Plan – Potential Measures to Restrict Traffic Movements on BCD



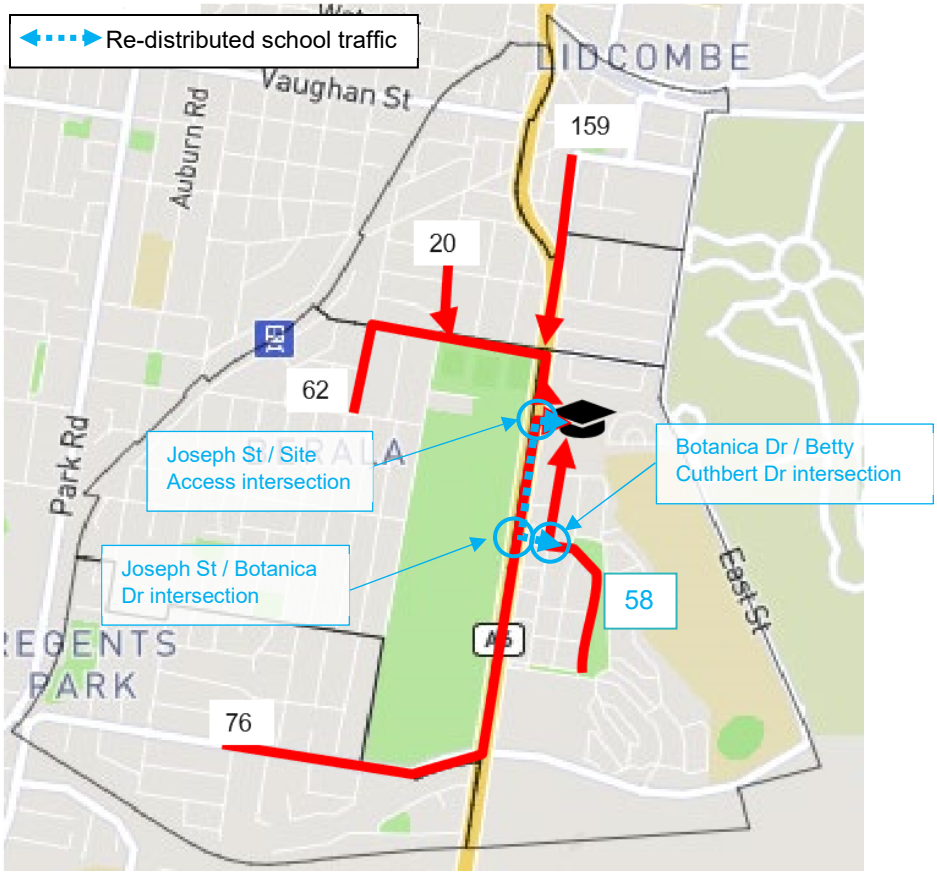
Source: Figure 3.1 of the Traffic Report plus markup.

3 Additional SIDRA Modelling – Response to Query #2

This section provides a review of implications from an all-vehicle movement ban from BCD to the site. As such, an update to the distribution for the education facility has been assumed and tested over the AM peak hour for Scenario 4.3 of the SIDRA traffic model (2036 with all development traffic plus mitigation measures but excluding upgrade to Joseph Street) as presented in the Traffic Report. It is noted however that, while commentary and analysis is provided in the next section regarding likely percentage of trips from the Berala area which are expected to use Leila Street drop off instead of accessing the site, the redistribution of this traffic has been excluded from the traffic model test to represent a worst case. In addition, it has been assumed that there are no changes to wider traffic volumes or previous assumptions to traffic generation, all modelling assumptions and caveats for previous models are carried over to this assessment. The latter includes any calibration / validation, which are understood to have taken place as part of the previous modelling exercise that informed the Traffic Report.

Traffic generating from the existing BCD is re-distributed to the proposed education facility via Joseph Street and the new access proposed for the education facility from Joseph Street. The traffic generated to / from BCD to education facility is 58 vehicles in the AM Peak. For the purpose of this modelling test, this traffic is diverted to / from Botanica Drive / BCD intersection to Joseph Street / Site Access intersection via Joseph Street / Botanica Drive intersection. An update to Figure 5.7 of the Traffic Report is included below in Figure 2 to highlight this change in traffic distribution.

Figure 2: Education Facility Traffic Distribution - AM peak period



The change in traffic distribution is limited to the three intersections highlighted in blue in the figure above. This change in flows would represent less than 2 % of the overall traffic travelling through each of the intersections on Joseph Street for that peak hour and scenario, which represents a lower value than daily fluctuations (generally considered to be within 10 %). Therefore, to better understand any potential change in intersection performance, the SIDRA models for these intersections have been run individually with the new flows.

The results from this exercise are summarised in Table 1 below, noting that this new modelling scenario is referred to as Scenario 4.5 for consistency with those in the Traffic Report. Intersection numbers are also kept in line with the Traffic Report. The SIDRA modelling outputs are provided in Appendix A.

Table 1: Intersection Performance, AM Peak (Scenario 4.5)

Intersection	Governance	Scenario 4.5 (Scenario 4.3 with diverted traffic)				
		Traffic Volume	DoS	Delay (s)	LoS	95% Q Length (m)
2 - Joseph St / Botanica Dr	Signalised	6,496	0.90	20.5	B	507 South
4 - Botanica Dr / Betty Cuthbert Dr	Priority	489	0.13 West	6.3 West RT	A	1 South
5 - Joseph St / Site Access	Signalised	6,972	0.92	22.4	B	555 South

Note: Outputs for the priority intersection are for the worst-performing movement.

The results presented in the above table indicate that all intersections would be able to discharge all traffic within the peak hour, with minimal delays overall and Levels of Service (LoS) A and B. The degree of saturation (DoS) for the Joseph Street / Site Access intersection would be 0.92. This is slightly above the maximum practical DoS of 0.9 for intersection capacity as per the Transport for New South Wales (TfNSW,

Road and Maritime Services - RMS) Modelling Guidelines (version 1.0, 2013). The 95th percentile queues are shown to be over 500 for the southern approaches to the intersections on Joseph Street. This is in line with what was presented in the Traffic Report, albeit noting that results were reported as part of a network then, and thus queues to the Joseph Street / Site Access intersection where constrained by the outer intersections to the network. Therefore, this analysis focuses on the DoS for that intersection, noting that TfNSW do review and provide feedback on results provided.

A potential mitigation measure has been tested to reduce the DoS for the Joseph Street / Site Access intersection to an acceptable level as per TfNSW's Modelling guidelines. This is shown in Figure 3 below. In the current proposed design, the western approach has one lane for the left turn and one lane for the right turn into Joseph Street. This has been modified into two right turn lanes, with the southern lane being shared for left and right turn movements. This is a simple change to the intersection proposed as part of the development which results in a DoS reduction from 0.92 to 0.87 as shown in the Table 2, which suggests that the traffic redistribution tested for this scenario would be acceptable to TfNSW in terms of intersection capacity, subject to network constraints at the outer intersections in terms of queueing as shown in the Traffic Report.

Figure 3: Potential Mitigation Measure for Joseph Street / Site Access Intersection – Scenario 4.5

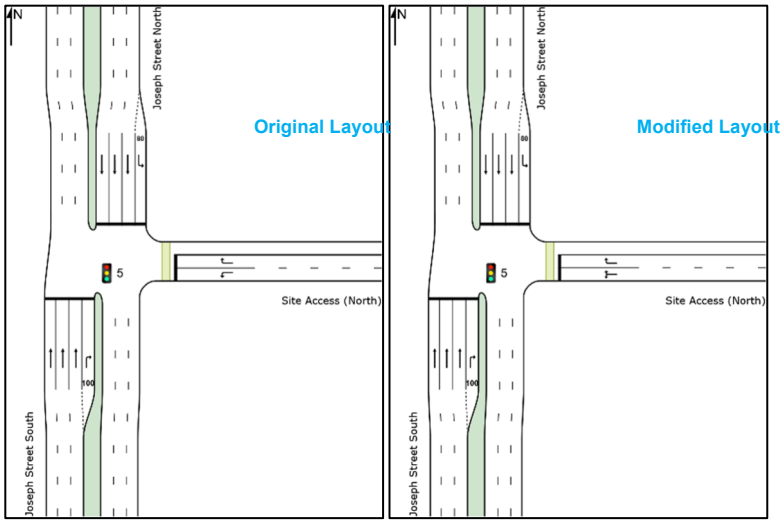


Table 2: Intersection Performance, AM Peak – Scenario 4.5 with Potential Mitigation

Intersection	Governance	Scenario 4.5 with Potential Mitigation				
		Traffic Volume	DoS	Delay (s)	LoS	95% Q Length (m)
5 - Joseph St / Site Access	Signalised	6,972	0.87	17.6	B	447 South

4 Leila Street Parking Assessment – Response to Query #3

Commentary is provided in this section in regard to the operation of Leila Street as an option for kiss and drop for the proposed education facility and potential implications on street layout and access. This is in response to an assumed percentage being diverted from generated traffic in the Berala area, reviewing existing provisions and likely usage.

While providing a reasonable alternative for residents in the Berala area to bypass potential traffic delay along Georges Avenue and Joseph Street, it is noted that there would still be a notable distance from Leila Street to the proposed education facility (assumed in excess of 300 m one-way plus stairs / ramps, equating to approximately four to five minutes walking distance each direction). Therefore, it is anticipated that the majority of traffic generation from the Berala area, as identified in the Traffic Report, would drive from Georges Avenue and connect to the proposed new access road via Joseph Street. For the purpose of this analysis, it has been assumed that approximately 10 to 20 % of the trips generated in this area would divert

to Leila Steet to use as a kiss and drop area. This would result in up to approximately 13 trips in and out (total of 26 trips). Staff parking is expected to be accommodated onsite.

Measurements from aerial photos suggest a total on-street parking capacity for around 22 spaces on the northern side (assuming 6 m per space and 130 m in length), and around 14 spaces on the southern side (85 m of available frontage) for Leila Street as shown in Figure 4. This would total approximately 36 spaces along the street.

Figure 4: Aerial view of Leila Street with approximate measurements (Source: Nearmap)

Observations from Google Street View imagery across several years between December 2007 and October 2020 indicate that there generally is ample spare capacity, with low levels of parking occupancy during the day. This is expected given that parking on the area should mainly be residential in nature, with most of the houses having their own private parking or driveway, and some of those using their cars for commuting purposes. Notwithstanding this, for the purpose of this assessment, it has been assumed that 50 % of the parking would be used by residents, with the remaining 50 % being available for kiss and drop activities related to the education facility.

Taking the above into account, approximately 18 spaces would be anticipated to be free on an average day, which would be well in excess of the expected demand for kiss and drop. Moreover, while some students would require to be accompanied into education facility and thus need to park for a longer period, a proportion of trips would involve a single drop-off, which would require less than one to two minutes. Parking spaces for the latter type of drop-off would be shared between users, with a single space likely to allow between five and10 drop-offs during the morning peak (assuming it occurs within approximately a 10-minute window).

To assist in directing traffic to the nearest side of the street to the education facility, on the easternmost end, a section of the street could be demarcated for kiss and drop only (2-minute parking) during peak times. This could be made to accommodate two vehicles at any one time, approximately 12 m long (or up to 16 m long if higher turnover is expected, 8 m each). Parents requiring a longer stay could utilise a free parking space along the street.

A review of peak time traffic conditions on Google Maps indicates that there would typically be no congestion along Nottinghill Road in the vicinity of its intersection with Leila Street. Therefore, given the low number of additional traffic movements at that intersection (assumed 26 trips total), these would be expected to generate no congestion or noticeable queuing, and thus would have no impact on its operation.

Overall, the option to have Leila Street as a kiss and drop area is anticipated that would have a negligible impact for local traffic access. It would also be expected to have no impact during weekends, when sporting events are expected to increase parking utilisation in the area. Observed parking capacity and usage trends

from various available aerials and imagery (including Google and Nearmap) indicate that there is enough parking capacity on Leila Street to cater for this activity.

Further to the above, should additional on-street parking be required over time, then the configuration of the street could be rearranged to provide angled parking on the northern side. A more detailed assessment would be required to provide appropriate scaled sketches, however, as Leila Street appears to be over 12 m wide, a range of angled parking arrangements could be investigated. These could include 90-degree parking on the northern side only or a combination of 30 or 45-degree parking on the northern side and parallel parking on the southern side.

5 Traffic Management Arrangements – Response to Query #4

Traffic management arrangements outside of the education facility are shown indicatively in Figure 5. This shows vehicular and active travel access and circulation at a high-level.

The proposed kiss and drop locations on the new local street are expected to be located on the northern and eastern frontages, as well as potentially on the eastern end of Leila Street as per the plan. The bus pick-up and drop-off is expected to take place along the eastern frontage due to vehicle and bay length requirements.

Active travel access would be as shown in the plan. Further details in terms of cycling infrastructure including parking are anticipated to be provided as part of a future planning application for the education facility in due course.

Staff parking is assumed to be accommodated within the education facility site (not on-street). The future application for the education facility site would confirm staff parking requirements and provisions to be made onsite.

Figure 5: Proposed vehicular and active travel access and circulation (Source: Urbis with annotations)

6 Pedestrian Overpass Commentary – Response to Query #5

This section provides information on footprint of, and access to, the proposed pedestrian overpass. It is noted that this is subject to a future planning application for the education facility which will be submitted in due course.

Figure 6 shows a plan of the proposed pedestrian overpass and the footprint required. This is an extract from the plan included in Appendix B of the Traffic Report, which presents the typical envelope schematic.

The connection to the existing footpath on the eastern side of Joseph Street is shown in Figure 7 (Figure 3.4 of the Traffic Report). Wider connectivity to the west for the pedestrian overpass would be achieved via a new proposed pedestrian link from Leila Street as shown in Figure 5. The typology and width of this link would be determined at a later date.

Figure 6: Proposed Pedestrian Bridge – Typical Envelope Schematic (Ramp Option)

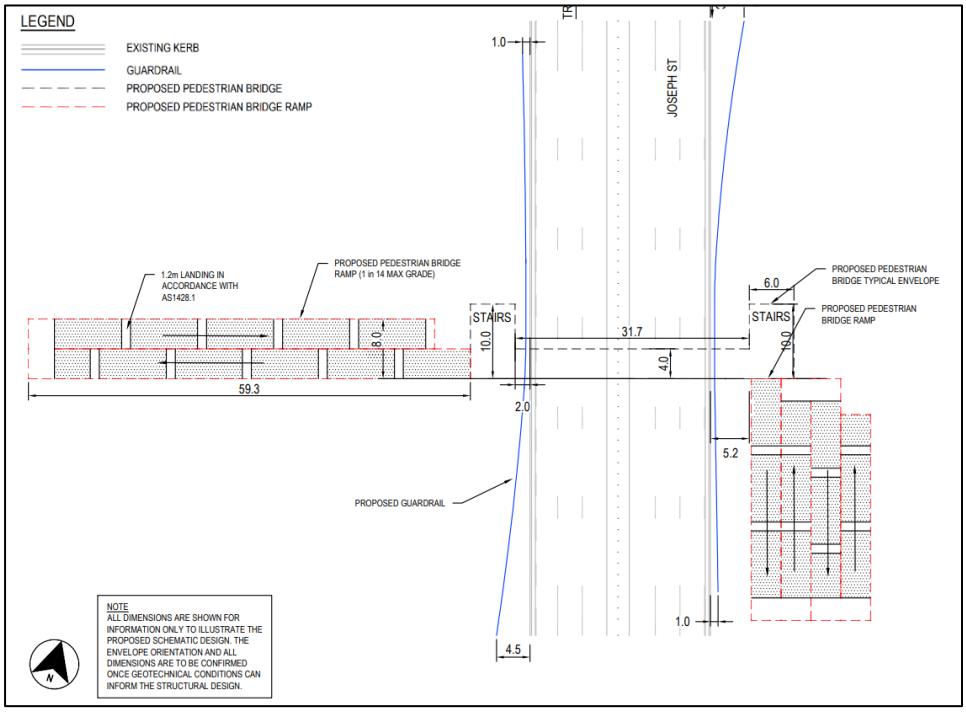
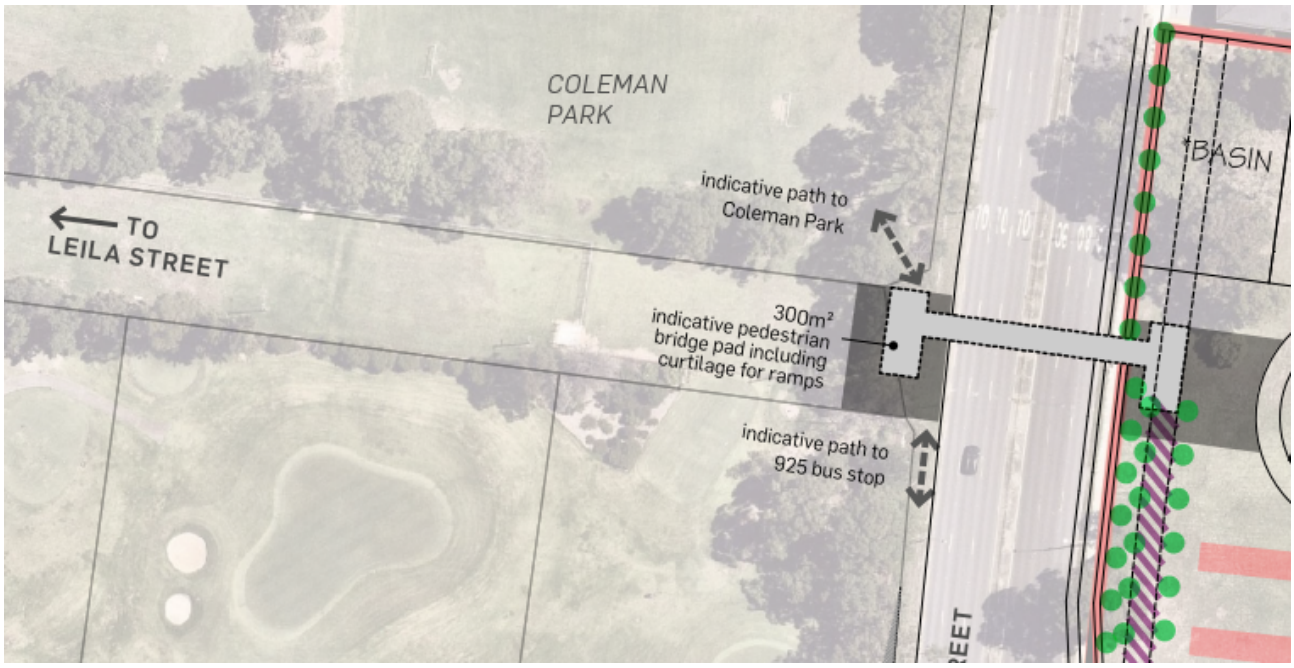


Figure 7: Indicative Pedestrian Bridge Connection



7 Education Facility Capacity Reduction Review – Response to Query #6

This section provides commentary of potential implications of reducing capacity proposals to a maximum of 500 and 750 students respectively, from a transport planning perspective.

A seemingly positive implication of a reduced capacity for the school would be a direct decrease in overall traffic generation to / from this education facility. For the scenario with a reduced capacity of 500 students, if taken as average, this could mean a 50 % reduction in trips. This could fluctuate depending on whether families with multiple children were allocated a space at this education facility or had to travel to other one in the vicinity. Similarly, on average, a 25 % reduction could be achieved when the capacity is 750 students from the initial 1,000 students assumed. This could have an impact on the morning peak traffic conditions in terms of intersection / network operation.

The assessment undertaken in support of the planning application for this Site is presented in the Traffic Report. This assumed a primary school with a capacity of 1,000 students for testing purposes only, noting that the final education facility type and capacity are subject to change. As such, the tested capacity would represent a worst-case scenario from a transport planning perspective. It is therefore considered that any lower capacity should result in relative improvements to the study network and require no further analysis.

A negative implication would be the actual reduction in capacity. This could affect some of the residents in the wider area, requiring them to travel to other education facilities, with the potential for some of those trips to still be made within the study network. However, any potential impact related to this could not be determined at this stage.

A. SIDRA Modelling Outputs

MOVEMENT SUMMARY

Site: 2 [2 Joseph St / Botanica Dr AM - Scenario 4.5 (Site Folder: General)]

Joseph Street / Botanica Drive
Scenario 3 - All Development
AM Peak Hour Volumes
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Degree of Saturation)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Joseph Street South														
2	T1	3677	200	3677	5.4	* 0.898	16.5	LOS B	69.2	506.6	0.85	0.81	0.85	59.2
3	R2	12	2	12	16.7	0.184	87.3	LOS F	0.9	7.2	1.00	0.68	1.00	23.3
Approach		3689	202	3689	5.5	0.898	16.7	LOS B	69.2	506.6	0.85	0.81	0.85	59.0
East: Botanica Drive														
4	L2	32	2	32	6.3	0.090	52.4	LOS D	1.9	13.8	0.84	0.69	0.84	30.3
6	R2	292	3	292	1.0	0.883	80.5	LOS F	23.4	165.5	1.00	0.97	1.25	14.2
Approach		324	5	324	1.5	0.883	77.8	LOS F	23.4	165.5	0.98	0.94	1.21	15.7
North: Joseph Street North														
7	L2	126	4	126	3.2	* 0.697	27.2	LOS B	36.9	274.4	0.71	0.70	0.71	34.4
8	T1	2357	188	2357	8.0	0.697	18.2	LOS B	38.4	287.3	0.70	0.66	0.70	57.4
Approach		2483	192	2483	7.7	0.697	18.7	LOS B	38.4	287.3	0.70	0.66	0.70	56.6
All Vehicles		6496	399	6496	6.1	0.898	20.5	LOS B	69.2	506.6	0.80	0.76	0.81	54.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Joseph Street South												
P1	Full	50	50	69.3	LOS F	0.2	0.2	0.96	0.96	104.5	45.8	0.44
East: Botanica Drive												
P2	Full	50	50	69.3	LOS F	0.2	0.2	0.96	0.96	94.5	32.8	0.35
All Pedestrians		100	100	69.3	LOS F	0.2	0.2	0.96	0.96	99.5	39.3	0.39

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 4 [4 Botanica Dr / Betty Cuthbert Dr AM - Scenario 4.5 (Site Folder: General)]

Botanica Dr / Betty Cuthbert Dr
Scenario 3 - All Development
AM Peak Hour Volumes
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Betty Cuthbert Dr S														
1	L2	50	2	50	4.0	0.039	5.4	LOS A	0.2	1.1	0.32	0.54	0.32	43.3
2	T1	4	2	4	50.0	0.008	4.6	LOS A	0.0	0.2	0.31	0.54	0.31	45.9
3	R2	4	2	4	50.0	0.008	6.1	LOS A	0.0	0.2	0.31	0.54	0.31	45.1
Approach		58	6	58	10.3	0.039	5.4	LOS A	0.2	1.1	0.32	0.54	0.32	43.8
East: Botanica Dr W														
4	L2	8	2	8	25.0	0.126	5.0	LOS A	0.0	0.2	0.01	0.02	0.01	49.0
5	T1	235	4	235	1.7	0.126	0.0	LOS A	0.0	0.2	0.01	0.02	0.01	49.8
6	R2	2	2	2	100.0	0.126	6.3	LOS A	0.0	0.2	0.01	0.02	0.01	47.0
Approach		245	8	245	3.3	0.126	0.2	NA	0.0	0.2	0.01	0.02	0.01	49.7
North: Betty Cuthbert Dr N														
7	L2	4	2	4	50.0	0.038	5.5	LOS A	0.1	0.9	0.28	0.58	0.28	45.4
8	T1	4	2	4	50.0	0.038	4.7	LOS A	0.1	0.9	0.28	0.58	0.28	45.6
9	R2	38	2	38	5.3	0.038	5.4	LOS A	0.1	0.9	0.28	0.58	0.28	42.9
Approach		46	6	46	13.0	0.038	5.4	LOS A	0.1	0.9	0.28	0.58	0.28	43.6
West: Botanica Dr W														
10	L2	16	2	16	12.5	0.078	5.0	LOS A	0.1	0.8	0.09	0.10	0.09	47.5
11	T1	112	4	112	3.6	0.078	0.1	LOS A	0.1	0.8	0.09	0.10	0.09	48.6
12	R2	12	2	12	16.7	0.078	5.5	LOS A	0.1	0.8	0.09	0.10	0.09	47.3
Approach		140	8	140	5.7	0.078	1.1	NA	0.1	0.8	0.09	0.10	0.09	48.4
All Vehicles		489	28	489	5.7	0.126	1.6	NA	0.2	1.1	0.09	0.16	0.09	47.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 5 [5 Joseph St / Site Access AM - Scenario 4.5 (Site Folder: General)]

Joseph Street / Site Access (North)
Scenario 3 - All Development
AM Peak Hour Volumes
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Joseph Street South														
2	T1	3816	202	3816	5.3	* 0.915	16.9	LOS B	75.8	554.8	0.81	0.79	0.83	46.8
3	R2	152	0	152	0.0	0.726	79.0	LOS F	11.2	78.7	1.00	0.84	1.08	21.7
Approach		3968	202	3968	5.1	0.915	19.3	LOS B	75.8	554.8	0.82	0.79	0.84	44.5
East: Site Access (North)														
4	L2	138	0	138	0.0	0.242	46.0	LOS D	7.5	52.3	0.79	0.76	0.79	28.5
6	R2	252	0	252	0.0	* 0.885	84.0	LOS F	20.5	143.3	1.00	0.98	1.28	21.2
Approach		390	0	390	0.0	0.885	70.6	LOS F	20.5	143.3	0.93	0.90	1.11	23.2
North: Joseph Street North														
7	L2	269	0	269	0.0	0.199	12.3	LOS A	5.7	39.8	0.32	0.69	0.32	45.6
8	T1	2345	190	2345	8.1	0.729	20.6	LOS B	41.5	310.9	0.73	0.68	0.73	43.6
Approach		2614	190	2614	7.3	0.729	19.8	LOS B	41.5	310.9	0.69	0.68	0.69	43.8
All Vehicles		6972	392	6972	5.6	0.915	22.4	LOS B	75.8	554.8	0.78	0.76	0.80	41.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Site Access (North)												
P2	Full	50	50	69.3	LOS F	0.2	0.2	0.96	0.96	93.8	31.9	0.34
All Pedestrians		50	50	69.3	LOS F	0.2	0.2	0.96	0.96	93.8	31.9	0.34

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 5 [5 Joseph St / Site Access AM - Scenario 4.5_Modified (Site Folder: General)]

Joseph Street / Site Access (North)
Scenario 3 - All Development
AM Peak Hour Volumes
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Joseph Street South														
2	T1	3816	202	3816	5.3	* 0.870	9.3	LOS A	61.1	447.4	0.67	0.64	0.67	55.0
3	R2	152	0	152	0.0	0.686	77.0	LOS F	11.0	77.2	1.00	0.83	1.04	22.1
Approach		3968	202	3968	5.1	0.870	11.9	LOS A	61.1	447.4	0.69	0.65	0.69	51.6
East: Site Access (North)														
4	L2	138	0	138	0.0	0.839	80.1	LOS F	16.6	116.2	1.00	0.93	1.20	21.1
6	R2	252	0	252	0.0	* 0.839	82.0	LOS F	16.6	116.2	1.00	0.93	1.23	21.5
Approach		390	0	390	0.0	0.839	81.3	LOS F	16.6	116.2	1.00	0.93	1.22	21.4
North: Joseph Street North														
7	L2	269	0	269	0.0	0.201	12.6	LOS A	5.8	40.8	0.33	0.69	0.33	45.3
8	T1	2345	190	2345	8.1	0.688	17.2	LOS B	37.5	280.8	0.67	0.62	0.67	46.6
Approach		2614	190	2614	7.3	0.688	16.7	LOS B	37.5	280.8	0.63	0.63	0.63	46.4
All Vehicles		6972	392	6972	5.6	0.870	17.6	LOS B	61.1	447.4	0.68	0.66	0.70	45.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Site Access (North)												
P2	Full	50	50	69.3	LOS F	0.2	0.2	0.96	0.96	93.8	31.9	0.34
All Pedestrians		50	50	69.3	LOS F	0.2	0.2	0.96	0.96	93.8	31.9	0.34

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Appendix B

NSW GOVERNMENT | Education

4 November 2022

Daniel Cavallo
Director Environment and Planning
Cumberland City Council
PO Box 42, Merrylands NSW 2160

Dear Mr Cavallo,

We are writing to reiterate and confirm our involvement in the re-zoning planning proposal being presented to Council by the NSW Government in respect of 80 Betty Cuthbert Drive, Lidcombe.

The Department of Education (the Department) has continued to work collaboratively with Property Development NSW (PDNSW) and Multiple Sclerosis Limited (MSL) to develop the proposal which includes provision of land for a potential new school. Planning has included early analysis of student enrolment projections together with site specific analysis of catchment alignment, traffic and transport needs and other early phase due diligence.

Once the planned re-zoning is complete, the Department will commence more detailed service need planning to identify the timing of projected population growth and the impact of enrolments in the short and medium term on current schools in the area and this would involve detailed consultation with council on all aspects of the potential new school including traffic, bulk and scale of buildings and any staging required.

As previously noted, a business case would then need to be developed for consideration by NSW Treasury as part the budget process. Until a business case is approved, the Department is unable to provide a firm commitment to the timing of the provision of the potential new school on the site.

Should you require any further information, please do not hesitate to contact Ryan Thoroughgood, Director, Infrastructure Planning at ryan.thoroughgood7@det.nsw.edu.au.

Yours sincerely,

Paul Towers
Executive Director, Infrastructure Planning

SCHOOL INFRASTRUCTURE NSW
259 George Street Sydney NSW 2000 PO Box 33 Sydney NSW 2001 T 9273 9200
education.nsw.gov.au

Appendix C

3.5 Landscape and Public Domain

Objectives

O1. Retain high and medium value trees where possible subject to future educational establishment, MSL and residential development.

O2. Extend streetscape character of Betty Cuthbert Drive and establish the streetscape character to the future educational establishment perimeter street.

O3. Provide a consistent landscape buffer along Joseph Street to reflect the Botanica interface.

Controls

C1. All development is to be consistent with the Landscape and Public Domain Strategy in **Figure 9**.

C2. Retention of trees shall consider:

- the safe useful life expectancy (assessed by a qualified arborist) and estimated future lifespan;
- the current and future amenity and contribution to the landscape that the tree provides;
- management and safety issues associated with retention
- preliminary tree retention mapping in **Figures 10 – 15.**

C3. Landscape design of private lots and retained existing trees shall contribute to the landscape amenity of the neighbourhood and precinct landscape framework.

C4. Based on the preliminary tree retention mapping in **Figures 10 – 15.**

- 'medium retention value trees' should be retained wherever possible but should not be a constraint on the development.
- 'high retention value trees' are considered important for retention and should be retained and protected wherever possible. All opportunities for retaining these subject trees using design modification and tree sensitive construction techniques should be explored.

C5. Street patterns and street tree planting shall be strong components of the landscape framework.

C6. Streetscape planting shall ensure the coherence of new plantings and continuity with key elements and themes of the existing landscape mand surrounding residential developments.

Figure 9 Landscape and Public Domain Strategy

Figure 10 Tree Retention Value Reference Map

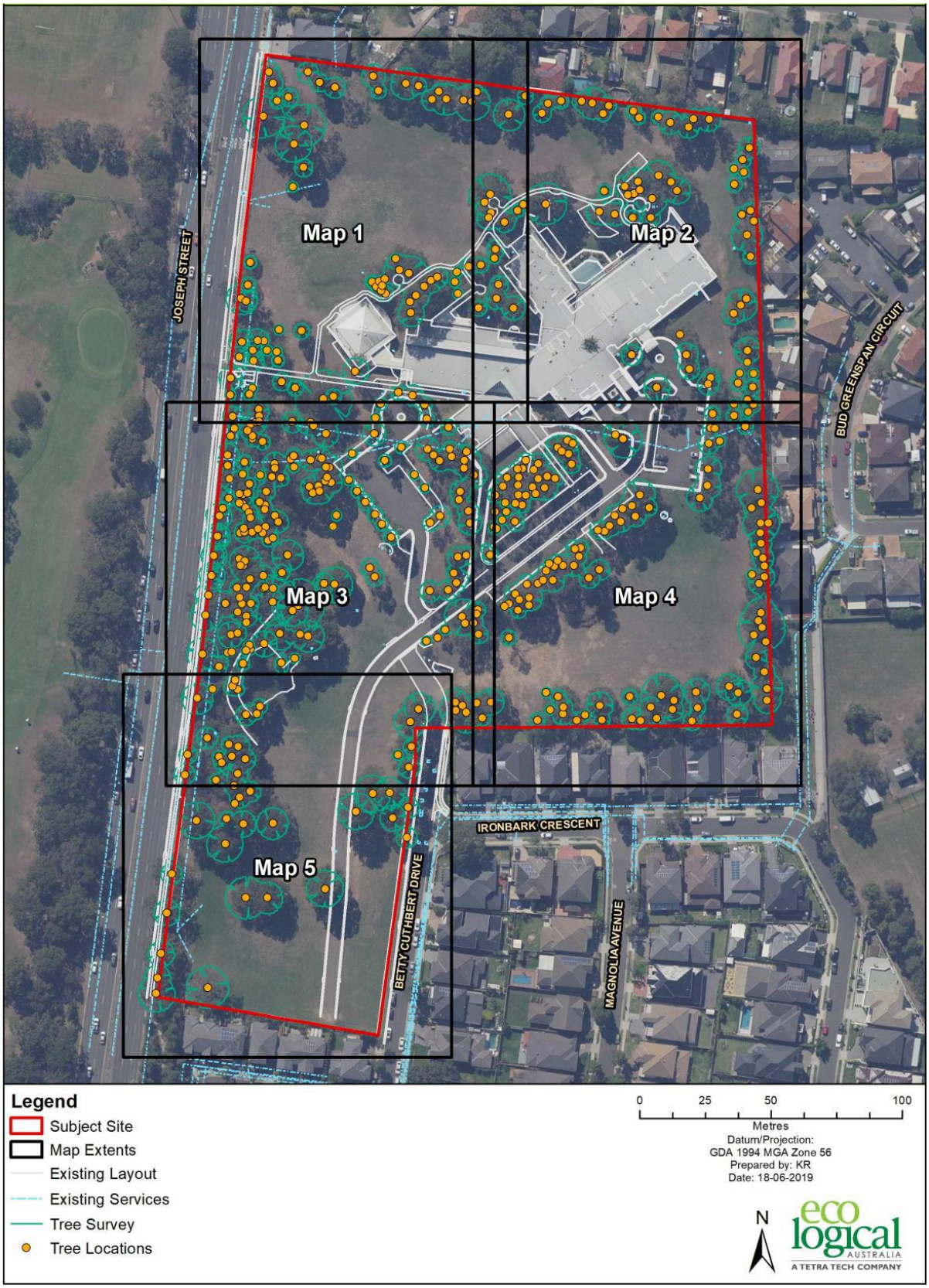


Figure 11 Tree Retention Values – Map 1

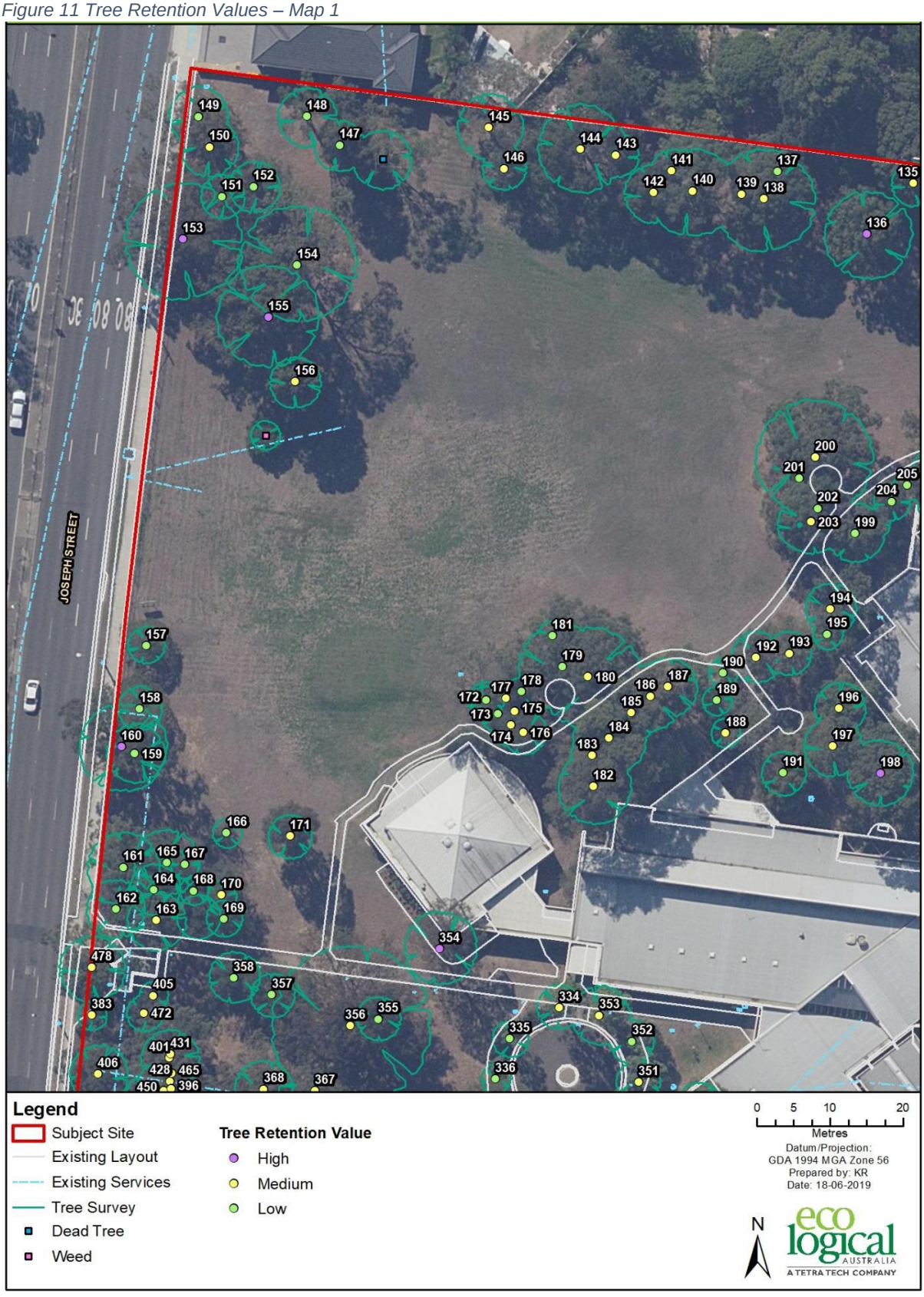


Figure 12 Tree Retention Values – Map 2

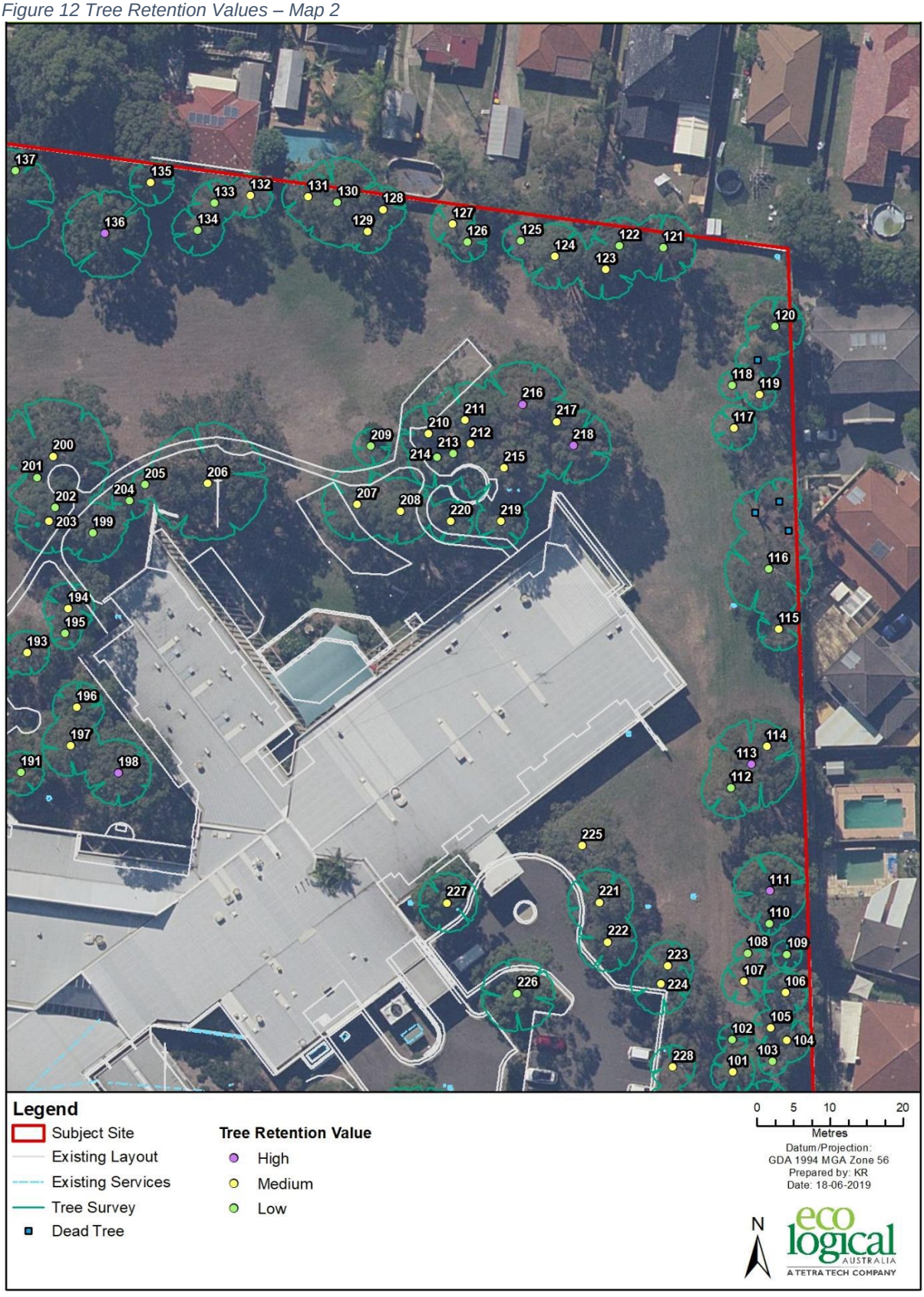


Figure 13 Tree Retention Values – Map 3

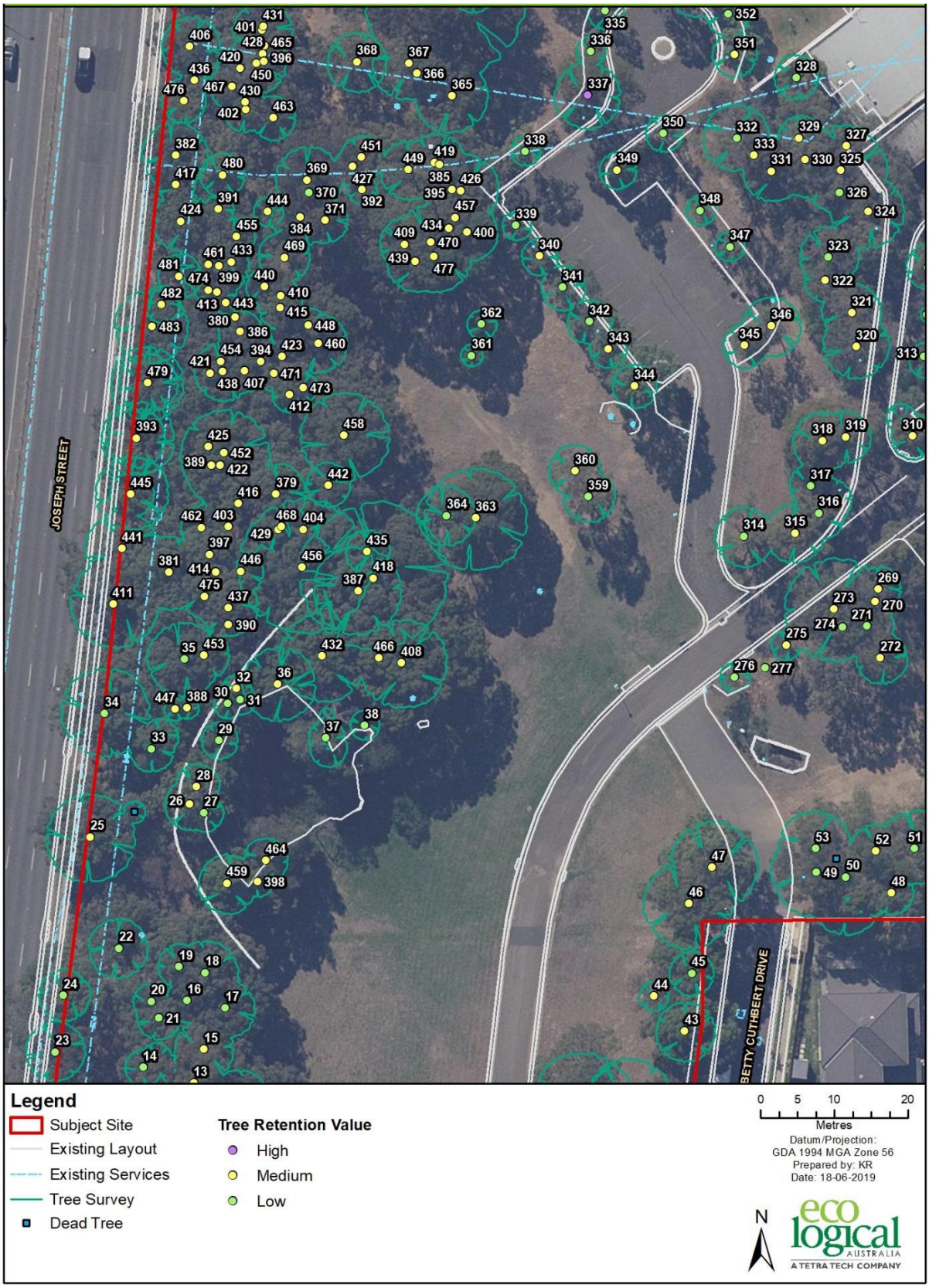


Figure 14 Tree Retention Values – Map 4

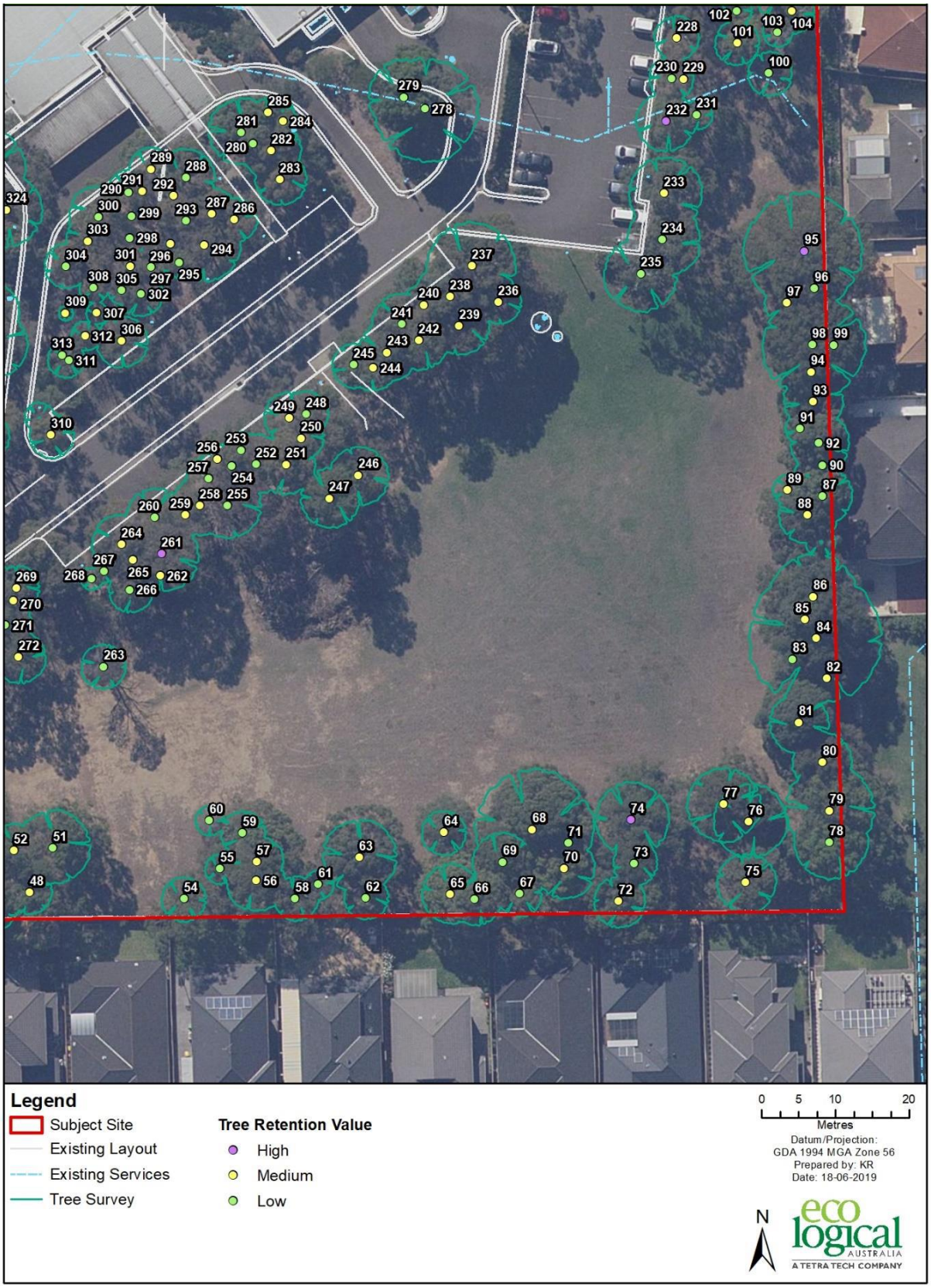


Figure 15 Tree Retention Values – Map 5