

20 November 2020

Mr Jim Betts
Secretary
NSW Department of Planning, Industry & Environment
Locked Bag 5022
Parramatta NSW 2124

Attention: Jenny Chu

Dear Mr Betts

**RE: St MATTHEWS CATHOLIC COLLEGE, MUDGEE (SSD 9872)
CORNER BROADHEAD ROAD AND BRUCE ROAD, SPRING FLAT (MUDGEE)
POST RESPONSE TO SUBMISSIONS – REQUEST FOR ADDITIONAL INFORMATION**

I write on behalf of Trustees of the Roman Catholic Church for the Diocese of Bathurst in relation to the current SSD DA for the new St Matthews Catholic College – Secondary Campus at the corner of Broadhead Road and Bruce Road, Spring Flat (Mudgee) and provide a response to requests for further information arising from our Response to Submissions package of early October 2020.

This letter responds to the Department’s letter dated 29 October 2020 and subsequent information provided by the Department. This includes letters and correspondence from the following:

- Transport for NSW;
- NSW Department of Planning, Industry & Environment (Biodiversity, Conservation & Science);
- NSW Department of Primary Industries; and
- Mid-Western Regional Council.

These are tabulated below with our corresponding responses.

The Department has also requested additional information which has been separately provided by email and accepted as suitable.

Agency Comments	Response
Transport for NSW	
Preliminary conversations identified intentions to provide for an education facility from Kindergarten to Year 12 students, the current traffic modelling was based on only 680 students, however the traffic generated by the entire facility will exceed the numbers identified by the applicant.	The subject DA is only for the proposed Secondary College with a maximum capacity of 680 students. Accordingly, this is the development that is subject of assessment. The 'entire facility' is the Secondary College.
While it is understood from the proponent this will form stage 2 of the entire facility a lack of forward strategic planning through a concept development application process has potential for adverse impacts on intersection performance, infrastructure provisions and the safety of the most vulnerable road users.	As above. Like any future development of land, the circumstances, impacts and the like will need to be assessed at that time in the context of not only the site but other development that may have occurred in the vicinity of the site by that time. Any proposal to relocate the Primary School component to this site is not being considered at this point in time. To speculatively assume future traffic at some undefined future point is also counter-intuitive, counter-productive and false. In the event of a Concept DA, it is likely future traffic would need to be remodelled in any case with the later DA, making any assumptions at this point superfluous and misleading.

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	<p>To reiterate, the subject DA is only for the proposed Secondary College with a maximum capacity of 680 students. The applicant is not seeking approval of a Concept DA and is not seeking to recast this DA as a Concept DA. There is no need for this development to be lodged as a Concept DA.</p> <p>It is unclear what 'the most vulnerable road users' refers to and why this is relevant in this context.</p>
<p>By proponent acknowledging the development will indeed exceed the student volume of 680 yet from a transport perspective the development in its current form is not fit for purpose. Subsequently this may require retrospectively addressing road safety issues</p>	<p>The application is for a student volume of 680 students. There is no application to exceed this number.</p> <p>The development is fit for purpose as demonstrated by the EIS, its supporting documentation, acceptance of the development by a wide range of agencies and Council in the negotiations completed to date, as emphasised by the relevant parts of Council's recent response.</p> <p>As with any future development of land, retrofitting or a suite of works commensurate with the scope of development and its relative impacts is commonplace.</p>
<p>The lack of provision of accurate traffic modelling associated with the development is likely to be a costly exercise for the developer. Stage 2 will result in significant retrofitting of the site to accommodate additional parking, bus bays, pedestrian access, circulation for larger vehicles entering exiting the site and significant contribution to upgrading of intersections due to the proportion of traffic associated with the development utilising key intersections on the local and state classified road network.</p>	<p>As set out above. The traffic modelling is for the application provided. The statement that there is a lack of accurate traffic data for the development is not correct.</p>
<p>Consideration should be given to a "concept development application" to allow for adequate planning of the development due to the implications for intersection upgrades, impacts on network safety and efficiency and the potential risks to vulnerable road users.</p>	<p>As set out above, a Concept DA is not warranted or desired by the applicant. A Concept DA will not resolve future detailed traffic or intersection issues, noting traffic matters will need to be revisited by any subsequent DA in any case, as circumstances around the site will likely have changed in the same time. This is further accepted by TfNSW in its own submission in relation of annual background growth.</p>
<p>The revised SIDRA analysis provided within the Traffic Statement prepared by TTPP did not specify whether the modelling includes trips via a bus or is based solely on trips generated by private motor vehicles. Clarification of this within the SIDRA modelling will have an impact as to the modelling outcomes and should be duly considered by the consent authority as to its validity in accurately reflecting the resulting traffic impacts.</p>	<p>TTPP has advised that future traffic modelling scenarios have considered additional trips in the area generated by the SSD, nearby proposed residential development (238 Broadhead Road), and a background growth factor (2% p.a.).</p> <p>For the SSD specifically, the modelling includes car trips generated by staff and the student pick-up/ drop-offs. It does not include buses for the reason that the bus timetabling and route planning would be subject to review, in coordination with Ogden's Coaches, the school's bus operator.</p> <p>Notwithstanding this, there could be in the order of 14-16 buses accessing the school in each peak period</p>

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	<p>based on the current bus routes and timetabling. Given that the intersections are shown to operate at Levels of Service As and Bs in the future scenarios, there would be ample capacity to accommodate buses without causing any detrimental impact on the local road network.</p>																															
<p>The SIDRA modelling factors for current traffic volumes and routes to the proposed High School and did not appear to have factored in changed routes from growth of future Urban Release Areas or the take up of the Green Travel strategy. TfNSW seeks the consent authority duly recognise a need by the proponent to address how this be captured and updated when the development reaches capacity and how any subsequent upgrades potentially required at key intersections will be undertaken and funded.</p>	<p>The traffic study has considered a 2% background traffic growth per annum to account for growth in the surrounding area.</p> <p>Council's Urban Release Strategy states annual population growth rates for Mudgee as calculated by Department of Industry and Environment (DPIE) (formerly known as Department of Environment, DP&E) and HillPDA. DPIE has acknowledged its projects for the LGA does not account for anticipated growth due to new mining activity in the area. With assistance from Council, HillPDA have estimated population growth having consideration for new mining activity in the Mudgee area. Both sets of population projections are as follows:</p> <p>Table 21 - Annual Population Growth Rate Comparison (2011-2031)</p> <table border="1" data-bbox="791 891 1362 999"> <thead> <tr> <th rowspan="2"></th> <th colspan="3">Actual Population Size (ABS)</th> <th colspan="2">Population Projections (DP&E)</th> <th colspan="2">Population Projections (HillPDA)</th> </tr> <tr> <th>1991-2011</th> <th>2001-2011</th> <th>2006-2011</th> <th>2011-2021</th> <th>2011-2031</th> <th>2011-2021</th> <th>2011-2031</th> </tr> </thead> <tbody> <tr> <td>Mudgee</td> <td>1.1%</td> <td>1.0%</td> <td>2.4%</td> <td>0.9%</td> <td>0.8%</td> <td>2.0%</td> <td>1.3%</td> </tr> <tr> <td>Gulgong</td> <td>0.8%</td> <td>1.4%</td> <td>-4.0%</td> <td>0.5%</td> <td>0.4%</td> <td>1.0%</td> <td>0.7%</td> </tr> </tbody> </table> <p>Source: HillPDA</p> <p>The highest population growth rate forecasted for the the Mudgee area would be up 2.0% per annum (HillPDA's prediction for 2011-2021).</p> <p>Therefore, the background traffic growth rate of 2% per annum which has been adopted in the traffic study for the proposal is in-line with the forecasted growth as presented in by the Urban Release Strategy.</p> <p>Furthermore, it is noted that up to the year 2031 HillPDA's forecasted growth rate is 1.3% yet the traffic study adopts a rate of 2.0% per year for each future year scenario. Given that the traffic modelling carried out for the proposal is based on the highest annual growth rate prediction each year (i.e. 2%), the analysis presented by the TIA and traffic statement are considered to be conservative.</p>		Actual Population Size (ABS)			Population Projections (DP&E)		Population Projections (HillPDA)		1991-2011	2001-2011	2006-2011	2011-2021	2011-2031	2011-2021	2011-2031	Mudgee	1.1%	1.0%	2.4%	0.9%	0.8%	2.0%	1.3%	Gulgong	0.8%	1.4%	-4.0%	0.5%	0.4%	1.0%	0.7%
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<p>It was noted that the Traffic Statement identified four different forecasts for the traffic generation to obtain the Level of Service (LoS) models. The models identify that the key intersections will be operating at a LoS A/B, however it was unclear as to what the traffic volumes were to conclude these LoS levels.</p>	<p>TTPP has reiterated as follows:</p> <p><u>Scenario 1</u> – 2026 Future Case with DA traffic and without SSD traffic. This also considers background traffic growth of 2.0% p.a. in Mudgee up to year 2026.</p> <p><u>Scenario 2</u> – 2026 Future Case with DA traffic and SSD traffic, with background traffic growth of 2.0% p.a. in Mudgee up to year 2026.</p>																															

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	<p><u>Scenario 3</u> – 2036 Future Case with DA traffic and without SSD traffic. This also considers background traffic growth of 2.0% p.a. in Mudgee up to year 2036.</p> <p><u>Scenario 4</u> – 2036 Future Case with DA traffic and SSD traffic, with background traffic growth of 2.0% p.a. in Mudgee up to year 2036.</p> <p>See attached for intersection turning movements in all of the above future modelled scenarios. Also attached are the SIDRA modelling results which TTPP had previously summarised in the traffic statement. These outputs are for the same models reported in the traffic statement.</p>
<p>Figures 3 and 4 within the revised traffic statement prepared by TTPP did not provide existing background traffic volumes at the identified intersections in addition to the traffic generated by the proposed high school and the nearby subdivision. It was not clear as to why this information was provided within previous modelling as a part of the TIA however was not included within the Traffic Statement.</p>	<p>Figures 3 and 4 of the traffic statement identify the cumulative development traffic generation (i.e. adjacent traffic generation and school traffic generation). The existing traffic flows were depicted in Figures 4.8 and 4.9 of the TIA report.</p> <p>Notwithstanding, the traffic flow figures containing both existing flows and additional flows in the area (i.e. 2% background growth, nearby development, and proposal development traffic) are provided attached.</p>
<p>The development site is subject to works that will be undertaken by Council for flood mitigation and downstream impacts which will involve the provision of a drainage corridor that will be designed to accommodate the 1:100 flood event. Careful consideration for the timing of these works and the subsequent provision of the pedestrian footpath from Broadhead Road to the kiss and drop area situated above the drainage corridor to be able to adequately provide safe access in light of the flooding should be further investigation. Further, how the pedestrian access will designed to accommodate the 1:100 flood event plus freeboard also requires additional consideration.</p>	<p>The RtS included an updated Stormwater Management Plan (including revised stormwater modelling) prepared by the applicant. This includes the latest information provided by Council as received in August 2020. The site levels including the carpark, overland flow paths and buildings were adjusted based on this latest information.</p> <p>Whilst the subject public pedestrian footpath outside of the school site is understood to be subject to sheeting or partial inundation, due to the shallow depths and slow velocity of water movement in a 1:100 flood event, it is understood to be useable should it be required to do so.</p>
<p>It is noted within 6.9 Road Upgrades of the TIA that Broadhead Road and Bruce Road (currently unsealed) would involve sealing a number of unsealed local roads. The traffic volumes and types of vehicles associated with this development will require the sealing and widening of Broadhead Road and Bruce Road prior to the operation of the school, in particular the Green Travel Plan identified a reliance on the use of these roads.</p>	<p>These roads are local roads under Council’s jurisdiction. The applicant has liaised extensively with Council (including agreeing the scope for Works in Kind Agreements) and relies on these agreements to take precedence.</p>
<p>TfNSW further notes the Mid-Western Local Strategic Planning Statement and the draft Mudgee Large Lot Residential Strategy, specify that on average 10 lots will be supplied annually around the Spring Flat Road, Broadhead Road area. The traffic generation associated with the release of this land over a ten year period will fundamentally</p>	<p>The area is known as part of Mudgee’s growth / expansion area. However, it is not considered that the release of an average of 10 lots annually will impact on the background and forecast traffic assumptions included in the project’s modelling – noting again that an annual 2% growth is already part of the modelling. This level of growth (10 lots per annum) is modest in its</p>

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<p>impact the background and forecasted traffic volumes.</p>	<p>context and the likely impact upon existing intersections near the site.</p> <p>This comment appears to contradict the assumed relevance of a Concept DA. As noted, should changes occur in the intervening period, and the school still seek to have the Primary School join the Secondary College, then the appropriate time to model and consider traffic impacts with a level of certainty would be at that time.</p>
<p>This cumulative increase in traffic generation will likely impact upon the intersection performance of Lions Drive/Castlereagh Highway, Burrundulla Road/Castlereagh Highway and Spring Flat Road/Castlereagh Highway. Accordingly, TfNSW seek Council prepare an overall Traffic Study and associated modelling for this area to identify the impacts on key intersections with the Castlereagh Highway and the local road network resulting from the proposed growth in development in this area of Mudgee.</p>	<p>The modelling completed by the applicant determines the cumulative increase in traffic from this development <u>does not</u> impact on the intersections identified by TfNSW.</p> <p>As noted extensively throughout this response, any future increase and redirection of traffic will need to be considered at that time to ascertain what impacts, if any, occur at these intersections that could reasonably be attributed as school-traffic.</p>
<p>The outcomes, which may identify potential requirements for intersection upgrades and a definitive need for local road upgrades, including sealing and widening could then form the basis of a Section 7.11 or 7.12 Contributions plan that will assist in funding key intersection upgrades and other such transport requirements. The timing to initiate such a plan for contributions prior to a determination of any future development proposals including this proposal is crucial in order to equitably share the burden of costs amongst those who will benefit from them.</p>	<p>As noted in Council's commentary in response to the RtS on contributions, this matter is resolved.</p> <p>This is solely a matter for Council to address and Council's jurisdiction. As noted, the applicant has liaised extensively with Council (including preparation for Works in Kind Agreements) and relies on these agreements to take precedence, where they relate to roadworks and intersection upgrades to Council's roads.</p> <p>As noted in Council's response, Council confirms that further discussions have taken place in relation to the upgrade of Bruce Road beyond the school boundary and it has agreed to the proponent's request that the full amount of Section 7.12 contributions be applied directly to these works.</p> <p>Other agreement reached relates to roadworks to both Broadhead and Bruce Roads and other intersection works.</p>
<p>Pursuant to Clause 57 of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP) and Clause 104 of State Environmental Planning Policy (Infrastructure) 2007 (ISEPP), TfNSW seek the consent authority consider inclusion of the following conditions form part of any development consent for this proposal:</p>	<p>It should be noted that clause 104 of the ISEPP is not applicable to this DA as the development is not traffic generating development under that instrument.</p> <p>Only clause 57 of the Education SEPP applies. It is noted that a number of TfNSW comments set out above, and suggested conditions set out below appear to be dealing in very detailed matters, including on-site operational and local road matters that appear well outside of regional traffic matters of State interest or of the terms of reference / provisions under clause 57 for the Department's consideration of the DA.</p>
Lighting	
<p>All outdoor lighting within the Subject Site must comply with AS 1158.3.1:2005 lighting for roads and public spaces – Pedestrian area (Category P)</p>	<p>The project's electrical / lighting consultant has confirmed this condition would be workable and therefore can be accepted.</p>

Agency Comments	Response
lighting – Performance and design requirements and AS 4282-1997 Control of the obtrusive effects of outdoor lighting. Details demonstrating compliance with these requirements must be submitted to the satisfaction of the Certifying Authority prior to the certification of Crown building works.	However, any condition in this regard should remove reference to Crown building works.
Signage	
Way-finding signage and signage identifying the location of staff car parking must be installed prior to occupation.	Agree, noting however that this appears to be outside of terms of reference for TfNSW.
Bicycle way-finding signage must be installed within the site to direct cyclists from footpaths to designated bicycle parking areas prior to occupation.	Agree, noting however that this appears to be outside of terms of reference for TfNSW.
A signage plan for internal directional signage and to formalise the kiss and drop area is to be prepared in consultation with TfNSW. Once finalised the signage within the plan is to be erected prior to the operation of the School at no cost to TfNSW.	<p>Agree to this condition being applied, however being signage internal to the site this should be reasonably able to be considered and approved by the PCA.</p> <p>We would contest that a Council or TfNSW consultation role would be limited to signage external to the site and affecting general road users only.</p>
Traffic Management	
<p>An Operational Transport Access Management Plan is to be prepared by a suitably qualified person, in consultation with Council and TfNSW and must address the following prior to the issuance of an occupation certificate:</p> <ul style="list-style-type: none"> - Detailed pedestrian analysis including the identification of safe route options - to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the Site in a safe and efficient manner during school start and finish; - The location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.); - The location and operational management procedures of the pick-up and drop-off parking, including staff management/traffic controller arrangements; - The location and operational management procedures for the pick-up and drop-off of students by buses and coaches for excursions and sporting activities, including staff management/traffic controller arrangements. 	<p>Agree broadly, subject to further comments below.</p> <ul style="list-style-type: none"> - Agree - Agree in part to this condition being applied to the approval, noting the consultation will apply only to the allocation of the spaces nominated on the design documentation submitted, not the location of spaces which will be determined as part of this approval. - Agree in part to this condition being applied to the approval, noting the consultation will apply only to the operational procedures of the pickup and drop off parking nominated on the design documentation submitted, not the location of spaces which will be determined as part of this approval. - Agree, again noting only the operational aspects will be subject of the consultation, not the location / design which will be determined as part of this approval.
Buses	
The bus lay by is to be redesigned to accommodate the provision of four (4) bus bays within the proposed bus lay by area. The plan is to be prepared in consultation with TfNSW and Council prior to the commencement of works	It appears this requested increased provision is in part based on the presumption that the development is for the assumed 'entire facility' rather than an application for a 680 student secondary school. This is reflected in that the matter was not previously raised by TfNSW.

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	<p>The bus lay by / bus bays (including their capacity and number) have been prepared in consultation with local bus operator (Ogdens) and Council. Neither raises concern.</p> <p>This suggested condition is not supported.</p>
Swept Path Plan	
<p>The swept path plan is to be revised identifying the largest vehicle required to access the site can do so safely, in particular via the Broadhead Road and Bruce Road intersection. The swept path plan is to be submitted to the consent authority and TfNSW. It is noted the current swept path plan provided by the proponent does not include the centrelines for the intersection of the Broadhead and Bruce Road intersection, the 12.5m vehicle identified in the swept path plan can only technically manoeuvre within the correct lane.</p>	<p>The largest vehicle likely to visit the site is a 12.5m bus (as used by Ogden's – the school's bus service provider). The swept path analysis by Triaxial (see attached) is based on this length. Note the vehicle size of a garbage truck is a maximum of 8.8m length (as used by the proposed contractor JR Richards). Accordingly, there should be no corresponding difficulty in this sized vehicle visiting the site.</p> <p>Based on a 12.5m long bus visiting the site via Broadhead Road and returning in the same direction, this vehicle will be able to turn from Lions Drive into Broadhead Road and then from Broadhead Road into Bruce Road in a lane correct manner in each instance. Sufficient road width also exists to enable buses in opposing directions to use the same intersections concurrently.</p> <p>Once at the school and exiting the bus bay, the bus will be able, with continuous forward motion, to turn within the turning bay and re-enter Bruce Road in a lane correct manner. As noted, the largest likely service vehicle (at 8.5m) will easily be accommodated by the bus turning bay to continue into the school for servicing purposes.</p> <p>Accordingly, this matter can now be resolved as part of the assessment of the DA and be excluded from any draft conditions.</p>
Green Travel Plan	
<p>The Green Travel Plan (GTP) prepared by The Transport Planning Partnership is to be amended to include:</p> <ul style="list-style-type: none"> - Objectives and modes share targets (i.e. site and land use specific, measureable and achievable and timeframes for implementation) to define the direction and purpose of the GTP; - Specific tools and actions to help achieve the objectives and mode share targets; - Measures to promote and support the implementation of the plan, including financial and human resource requirements, roles and responsibilities for relevant employees involved in the implementation of the GTP; - Details regarding the methodology and monitoring/review program to measure the effectiveness of the objectives and 	<ul style="list-style-type: none"> - The GTP already states a 3-5% mode share should be achieved for educational land uses. This is based on knowledge of local and international GTPs, and as stated by experts in Land Environment Court proceedings for the Australian Catholic University in Strathfield. This appears suitable without further conditioning. - Site specific measures are outlined in Table 5.1, such as managing on-site parking provision, bicycle parking provision and end-of-trip facilities, construction of a shared path along the western site boundary to improve accessibility by active travel means, implementation of walking and bicycle groups, promotion of bus routes and SSTS scheme for students (and potentially staff) and walking/cycling routes. These appear ample to satisfy this requirement without further conditioning. - The GTP currently states that implementation of the GTP would need a Travel Plan Coordinator who would be response for developing, implementing and

Agency Comments	Response
<p>mode share targets of the GTP, including the frequency of monitoring and the requirement for travel surveys to identify travel behaviours of students and staff to and from both schools at appropriate times throughout the academic year.</p>	<p>monitoring the GTP. The Travel Plan Coordinator would be an appointed staff member or an independent expert. Again, this appears to meet the need without further conditioning.</p> <p>- It is recommended in GTP that surveys be repeated and results reported every 1, 3 and 5 years. As above, this appears suitable without further conditioning.</p>
<p>To further support the Green Travel Plan, a shared pedestrian footpath with a width of 2.5m (as Austroads Guide to Road Design Part 6A Paths for Walking and Cycling) is to be installed along Broadhead Road prior to the issuance of any occupation certificate for the school.</p>	<p>The ability to satisfy this is driven principally by the availability of road width in this location and the extent of works which are limited by agreement with Council to the extent of the boundary to the school site only. Council has accepted that there is insufficient space to fit a full 2.5m width.</p> <p>Most relevantly, being a secondary school, students are legally required to ride on the road rather than the footpath. This circumstance is amplified by the discontinuous nature of footpath-based cycle facilities within Mudgee, rendering bicycle access for the secondary students largely to be confined to the roadway that they are required to ride on.</p>
<p>The GTP will need to be amended for Stage 2 of the proposal as the increase in student attendance will likely alter the data and modal splits.</p>	<p>There is no Stage 2 component as the DA is not a Concept DA. This matter would be later resolved as part of a future DA.</p>
<p>Pedestrian Access (including pick up and drop off areas)</p>	
<p>The footpath identified at the south eastern corner of the kiss and drop area identified on Part Site Plan currently terminates before the boundary. The footpath should be extended beyond the boundary to the Broadhead Road footpath to provide for safe pedestrian movement.</p>	<p>This footpath would only link the bus stop area with the kiss and drop area and not provide any other meaningful connection. Its principal purpose is to serve students arriving and departing the school premises by private vehicle. No assumed desire line arises to support its extension. It would otherwise alternatively foster pedestrian access across Bruce Road into the school (for which there is no desire line). This would be unsafe in the context of car and bus movements in this general location.</p> <p><u>This suggested condition is not supported.</u></p>
<p>The extension of the footpath is to be installed prior to the issuance of any occupation certificate.</p>	<p>Based on the above, this suggested condition is not supported.</p>
<p>A footpath should be provided on all sides of the pick-up/drop-off area to allow all weather access to the school for students. This provision it to have occurred prior to the issuance of the occupation certificate.</p>	<p>This is agreed to in fostering all weather access around the perimeter of the kiss and drop zone / car park, notwithstanding the role of the western-most spaces is a waiting zone for vehicles to move into the kiss and drop zone proper.</p>
<p>A fence is required to be installed along the perimeter of the carpark to ensure the safe passage of pedestrians and students to the school. The fence is required to be installed prior to the issuance of any occupation certificate for the development.</p>	<p>Additional fencing is not needed. The car parking area is subject to appropriate management, and like any other school car park it will be out-of-bounds during school teaching and play periods. The school is a secondary college and students will be well aware of the management regime and personal safety. The fence would add unnecessary clutter noting landscaping acts to provide delineation between vehicles and pedestrians. No additional fencing will be installed as this creates a dual secure line which is redundant. In the event additional barriers are required from a road safety standpoint these will be addressed with the PCA.</p>

Agency Comments	Response
	Note, Council has also not raised any car park management issues as an unresolved matter.
Appropriate sight distance in accordance with Austroads Guide to Road Design Part 4A is required to be provided and maintained where pedestrians cross the car park to the pick-up/drop-off area.	<p>This is reasonable and accepted. TTPP has advised it is proposed to indent the pick-up/drop-off area bays to improve sight distance to pedestrians at the crossing. Notwithstanding, crossing sight distance (CSD) and approach sight distance (ASD) will be included in the detailed design of the pedestrian crossing in-line with Austroads Guide to Road Design Part 3.</p> <p>Based on an operating speed of 10 km/h and crossing length of 3m, the CSD is calculated as 5m and ASD is 7m (using a reaction time of 2.0 seconds and deceleration coefficient of 0.36).</p>
School crossing and pedestrian refuge's associated with the proposed school are required to be designed to meet the current standards, relevant Transport Technical Directions and warrants where appropriate (no warrants for a refuge). Council is required to exercise their delegation through Traffic Committee prior to approval and installation of these facilities.	This is noted and accepted.
Service vehicles	
The loading and unloading to service the site will require reversing 30m into the loading dock within the boundary of site. Service vehicles entering and exiting the site is to be undertaken in forward direction only. The service vehicles are to be a maximum length of 12.5m in size, as per the swept path plan and loading and unloading is to occur outside of peak hours for the school.	Noted. The proposed arrangements ensure forward in and forward out results as requested during the redesign process culminating in the RtS.
Car parking	
Car parking spaces provided equates to 107 spaces, which is 25 spaces above the requirements as specified in the Mid-Western Regional Council DCP. The additional 25 car parking spaces should be made available during special events to cater for any overflow requirements.	Noted, recognising this surplus parking will assist in ensuring on-street parking is not a relevant issue. Council has previously noted that it is generally satisfied that restriction to on-street parking could be removed if the on-site parking supply was increased.
The EIS stated the kiss and drop area will be incorporated into the overflow parking requirements for special events. Signage will need to be provided in the kiss and drop area to identify the timeframes for the kiss and drop area and shall be incorporated into the signage plan to be prepared in consultation with TfNSW. This should be installed prior to the issuance of the occupation certificate for the development.	It is disagreed that consultation will be required with TfNSW on this matter. This would most appropriately be a matter to be considered and certified via the PCA.
No on street car parking is to occur within Broadhead Road or Bruce Street frontage of the school, accordingly no stopping signage is to be installed by the proponent.	This is not supported and should be considered only once the site has been in operation for a period of time and the parking management regime has been tested. This is on the basis of Council's earlier commentary that surplus parking on-site would be considered favourable and would alleviate any immediate or direct need for on-street parking prohibition, particularly on Bruce Road. Street signage on local roads is the jurisdiction of Council rather than TfNSW.

Agency Comments	Response
School zones	
<p>Consultation with TfNSW and authorisation is required by TfNSW prior to the installation of any school zones (associated signage), speed management signage, crossings and associated pavement markings pursuant to Section 122 of the Road Transport Act 2013, which must occur prior to the issuance of any occupation certificate for the development.</p>	<p>It is noted and accepted.</p> <p>We note no TfNSW warrants are required for the pedestrian refuge on Broadhead Road. However, a pedestrian crossing at this location would need to meet RMS warrants.</p> <p>Note: TfNSW has suggested previously, this cannot practically happen until the site is operational for a period and traffic flow and pedestrian data can be gathered at the proposed location. Therefore, the recommended approach was to provide a refuge until the data would be available to undertake a warrants analysis or when the pedestrian crossing was required.</p> <p>On this basis whilst a school zone can be implemented prior to Occupation Certificate, other matters such as the crossing cannot be implemented until after the school is operational. Any proposed condition will need to be mindful of this nuance and avoid a scenario that cannot be implemented.</p>
NSW Department of Planning, Industry & Environment (Biodiversity, Conservation & Science)	
<p>BCS have reviewed the response to submissions documents including the revised Landscape Plans. BCS notes that a total of 10 trees are proposed to be removed, this includes 4 dead trees and 6 planted <i>Eucalyptus nicholii</i>. It is also noted that an additional 9 trees are proposed to be removed and replanted. BCS recognises that these trees are planted trees, which are outside of their known and predicted geographical range, with a predominately non-native understorey, and as such would not be consistent with a plant community type in the Inner Slopes IBRA subregion.</p> <p>BCS is satisfied that the removal of these trees is likely to have negligible adverse impacts on threatened species and flight path integrity.</p>	<p>Noted. This mirrors previous comments from the same agency.</p>
NSW Department of Primary Industries	
<p>We note the Landuse Conflict Risk Assessment undertaken. It is reasonable under current agricultural land use conditions, and at least the development is aware of its infringement into an agricultural area should enterprise changes take place.</p>	<p>Noted, understanding the area is in transition from agricultural lands and any change in intensity of agricultural activity would by the same token be required to be mindful of the permissible school uses at the site and avoid conflict with them.</p>
Mid-Western Regional Council	
<p>Road Upgrades – Broadhead Road Council confirms that the proposed road upgrades as outlined in the EIS and RtS are satisfactory. As per Council's EIS submission and normal Council practice, it is requested that the final design and detailed drawings are approved by Council prior to commencement of road upgrade works.</p>	<p>Noted, with reference to the <i>Roads Act 1993</i> and section 4.42 of the EP&A Act, that Council cannot refuse the application nor require changes to the plans which are not substantially consistent with the consent.</p>
<p>Road Upgrades – Bruce Road Council confirms that further discussions have taken place with the proponent in relation to the</p>	<p>This was confirmed in the RtS submission.</p>

Agency Comments	Response
<p>upgrade of Bruce Road and that agreement has been reached for the works required (as per page 13 of the RtS). The only point to clarify is that the Kerb & Gutter is to be extended for the full length of the school boundary, as per the 9m wide pavement to ensure there are no gaps in drainage infrastructure.</p>	
<p>Car Parking Council notes the changes to the car parking design and increase in the number of car parks to be provided for the development. It is noted that the design does not include any specific details of internal car park pavement marking or signage which should be considered to indicate the channelisation and separation of the entry path and merging of exit lines which may cause confusion.</p> <p>Given the location of the school, Council still has some concerns that a higher number of senior students may choose to drive to school than has currently been allowed for in the traffic/transport assumptions. The RtS indicates that there is sufficient space on site for future car parking expansion. Council therefore requests that a condition is included in the consent to ensure all car parking for staff/students is contained on-site (ie. not utilising on-street car parking which will result in additional congestion and potential safety issues).</p>	<p>See commentary above related to this matter under the response to TfNSW matters. Signage and linemarking is to be provided to ensure clear, efficient and safe use of the car park.</p> <p>This is generally agreed. Prohibition of on-street car parking is however not supported as part of this application. See prior similar commentary in response to TfNSW matters. Should Council seek to signpost 'no-parking', that is a future parking management matter for Council.</p>
<p>Water Access Council confirms that further discussions have taken place with the proponent in relation to the relevant water connection point. It has been agreed that the proponent will construct the required 200mm water main along Broadhead Road to service the development. The proponent has agreed to construct the 200mm main at its expense and will put forward a works in kind agreement for Council approval to be offset against S64 Water Contributions. See further below.</p>	<p>Noted.</p>
<p>Sewer Access Council confirms that sewer connection can be obtained via the existing main running through the development site. The developer will be required to confirm the final connection point with Council prior to construction and obtain necessary approvals.</p>	<p>Noted.</p>
<p>Section 64 Contributions Based on 680 students, the developer contributions applicable to the proposed development are: Water Headworks (\$8,548 x 0.04) x 680 = \$232,505.60 Sewer Headworks (\$3,903 x 0.04) x 680 = \$106,161.60</p>	<p>We note Council's reference to the sewer headworks charges differs from that set by Council's Submission to the EIS. This appears to have been a typographical error in the original Submission. The correct figure is \$106,161.60 as referenced in the column to the left.</p>

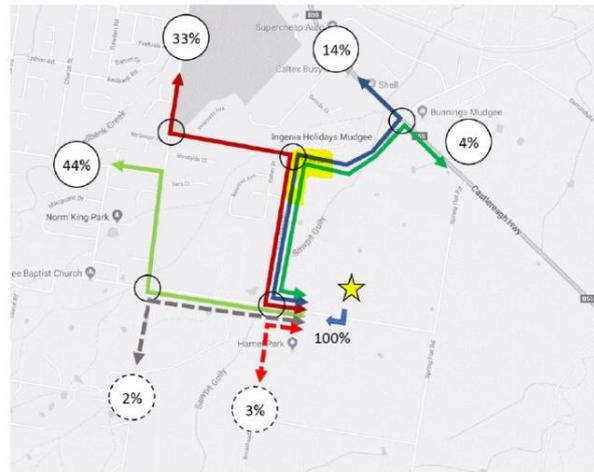
Agency Comments	Response
<p>Council confirms that further discussions have taken place in relation to a works in kind agreement for Water Headworks. In lieu of paying Water Headworks contributions (\$232,505.60), the proponent has agreed to construct a 200mm water main on Broadhead Road at its expense in order to connect to Council's water supply. The proponent will be required to prepare and submit a works in kind agreement for the approval of Council.</p> <p>It is noted that the proponent accepts the payment of Sewer Headworks contributions as per Council's submission.</p>	<p>Noted.</p> <p>In this regard the only cash contribution to Section 64 levies is \$106,161.60.</p>
<p>Section 7.12 Contributions The applicable Section 7.12 contribution for the proposed development is \$362,740. Council confirms that further discussions have taken place in relation to the upgrade of Bruce Road beyond the school boundary and it has agreed to the proponent's request that the full amount of Section 7.12 contributions be applied directly to these works.</p>	<p>Noted.</p>
<p>Conditions of Consent It is noted that there are a number of matters which require relevant conditions to be included in a development consent. Please let us know if you would like Council to assist in reviewing or drafting suitable conditions to address any Council related matters as outlined in the EIS and RtS.</p>	<p>Noted, understanding the applicant would seek a review of all final draft conditions sought to be imposed by the Department through its assessment, as is common practice.</p>
<p>Stormwater Drainage Design and Management Plan Modelling provided by Triaxial Consulting indicates that a large flood event will result in considerable areas of sheet flow from upstream catchments across the site in general.</p>	<p>This modelling is based on data derived from Council. The results of the modelling indicate the sheeting is modest but of sufficiently significant impact to warrant a minor redesign of the development. This culminated in the redesign of the landscaping area fronting Bruce Road and the lifting of the development to provide a 1:100 year freeboard.</p>
<p>The preliminary / concept drainage design appears to indicate appropriate and adequate arrangements are proposed for stormwater drainage infrastructure (levee banks / detention tanks and basin / piped drainage systems) can be provided that will adequately control stormwater runoff.</p>	<p>This is noted.</p>
<p>Additionally, the road design for Bruce Road adjacent the school will divert runoff from upstream catchments around the actual building site.</p>	<p>Again, this is noted.</p>
<p>Detailed design and calculation will be required to be submitted for approval prior to the commencement of construction.</p>	<p>Noted and accepted, appreciating the distinction between the levels of detail of the concept plan and that needed for construction.</p> <p>The applicant seeks a suitably worded condition that progresses this matter in a timely fashion given delays in securing relevant information from Council previously.</p>

Agency Comments	Response
<p>Traffic Flow Distribution and Upgrades to Intersections – pick up / drop off – parking and circulation There are a number of assumptions made in the Traffic Statement prepared by ttp Transport Planning that may not in fact reflect what will become actual access routes to and from the school.</p> <p>Civil plans provided with the RtS raise concerns that proposed details of intersection upgrades predominantly provide only for upgrade to line-marking with some limited pavement widening and kerb and gutter.</p> <p>It is considered that the following intersections will require detailed design that may include upgrades and widening to provide for marked left and right turning lanes.</p>	<p>General comment We believe Council’s review of the TTPP data and modelling may have been misinterpreted, as is set out and explained below.</p> <p>Accordingly, the client does not believe that Council’s latest request for additional works to the four intersections is justified. To clarify and resolve the matter a further meeting was held with Council on 17 November 2020 regarding the intersections. After the meeting Triaxial prepared and submitted additional intersection plans for review – see attached. On 20 November 2020 agreement was reached that the intersections as dimensioned in these plans are acceptable, subject to further detailed construction plans at that time.</p> <p>This further supports initial agreement as set out in minutes from 13 August 2020 (see attached), where the applicant and Council agreed that the additional two intersections (Lions Drive / Robertson Road and Bruce Road / Robertson Road) would be reviewed and upgraded accordingly for light traffic only. The comments made by David Webster in his email request upgrades for traffic congestion that is not anticipated by the TTPP traffic assessments.</p>
<p><u>Broadhead Road / Lions Drive</u> It is likely / possible that greater than 4% of vehicles exiting the School using Broadhead Road may wish to turn right at Lions Drive. Broadhead Road may require widening to provide for left and right turn lanes to avoid congestion and excessive queuing.</p>	<p>Broadhead Road / Lions Drive The Broadhead Road / Lions Drive intersection has been discussed extensively with Council and agreed would be upgraded to suit required swept paths for the school bus route along with suitable treatment methods for longevity. This latest request for widening and addition of lanes is not supported by the traffic modelling.</p>
<p><u>Robertson Street / Lions Drive</u> This is a T-intersection with Robertson Street as the through road. There is potential for a significant proportion of traffic (including existing traffic not associated with the school) exiting Lions Drive wishing to turn left to access Spring Road which provides alternative access to other areas of Mudgee South. This may also require some widening of Lions Drive to provide for left and right turn lanes. (Note: Existing pavement width might allow for turning lane definitions using line-marking only but further detailed survey and design would be required).</p>	<p>Note, also Council’s acceptance of the extent of Broadhead Road roadworks as set out immediately above in the first comment by Council on the submitted RtS – as quoted below:</p>
<p><u>Robertson Road / Bruce Road</u> This intersection is a crossroad with Bruce Road through this intersection having an offset alignment. There is no kerb and gutter on any of the pavements and the pavement will require some upgrade prior to line-marking and installation of signage.</p>	<p>Road Upgrades – Broadhead Road <i>Council confirms that the proposed road upgrades as outlined in the EIS and RtS are satisfactory. As per Council’s EIS submission and normal Council practice, it is requested that the final design and detailed drawings are approved by Council prior to commencement of road upgrade works.</i></p>
<p>The revised SIDRA modelling provided indicates that 12% of vehicle access will use Bruce Road east of school and Spring Flat Road. This would suggest that sealing of this road beyond the school abuttal and extending to Spring Flat Road is warranted.</p>	<p>With further respect to the Broadhead / Lions intersection and to confirm, the traffic assessment considers a traffic split of 18% (14% plus 4%) (not the 4% quoted by Council) turning right from Broadhead Road south approach to Lions Drive east approach as shown / highlighted below (Figure 8.2 of the TIA).</p>

Agency Comments

Response

Figure 8.2: Future Vehicle Trip Distribution



The SIDRA modelling results indicate that the intersection would operate at a Level of Service 'A' in all future scenarios. In the scenario with the highest traffic flows (Scenario 4), the average delay and queue lengths are minor for both the left-turn and right-turn movements. Screenshots are provided further below showing the SIDRA modelling outputs for this intersection in Scenario 4 – it shows an average queue length of 1m i.e. less than one vehicle. Specifically, for the right turn movement, the model considers 24 vehicles (AM peak) and 17 vehicles (PM peak) which corresponds with the 18% right-turn split as mentioned above.

Site: 101 [[AM 2036 DEV] Broadhead Rd- ** Network: 1 [AM 2036 +SSD School +DA DEV] Lions Dr]

18472 St Matthews Catholic College, Mudgee
AM PEAK 8:15 - 9:15 AM
Site Category: 2036 + SSD School Dev + Adjacent DA Dev
Giveaway / Yield (Two-Way)

Movement Performance - Vehicles														
Mov ID	Turn	Demand Flows	Arrival Flows	Deg. Satn	Average Delay	Level of Service	Aver. Back of Queue	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed			
		Total veh/h	HV %	Total %	HV %	v/c	sec	veh	m					
South: Broadhead Rd														
1	L2	83	1.3	83	1.3	0.087	6.0	LOS A	0.1	1.0	0.23	0.54	0.23	45.8
3	R2	24	4.3	24	4.3	0.087	6.7	LOS A	0.1	1.0	0.23	0.54	0.23	45.8
Approach		107	2.0	107	2.0	0.087	5.4	LOS A	0.1	1.0	0.23	0.54	0.23	45.8
East: Lions Dr-E														
4	L2	22	4.8	22	4.8	0.080	4.6	LOS A	0.0	0.0	0.08	0.08	0.00	49.3
5	T1	128	4.1	128	4.1	0.080	0.0	LOS A	0.0	0.0	0.08	0.08	0.00	49.3
Approach		151	4.2	151	4.2	0.080	0.7	NA	0.0	0.0	0.08	0.08	0.00	49.3
West: Lions Dr-W														
11	T1	212	7.5	212	7.5	0.169	0.2	LOS A	0.2	1.7	0.17	0.16	0.17	47.5
12	R2	86	1.2	86	1.2	0.169	5.1	LOS A	0.2	1.7	0.17	0.16	0.17	47.5
Approach		298	5.7	298	5.7	0.169	1.7	NA	0.2	1.7	0.17	0.16	0.17	47.5
All Vehicles		556	4.5	556	4.5	0.169	2.1	NA	0.2	1.7	0.14	0.21	0.14	47.6

Agency Comments	Response																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	<p>Site: 101 [[PM 2036 DEV] Broadhead Rd- Lions Dr] ** Network: 3 [PM 2036 +SSD School +DA DEV]</p> <p>18472 St Matthews Catholic College, Mudgee PM PEAK 2:45 - 3:45 PM Site Category: 2036 + SSD School Dev + Adjacent DA Dev Giveaway / Yield (Two-Way)</p> <table border="1"> <thead> <tr> <th colspan="14">Movement Performance - Vehicles</th> </tr> <tr> <th>Mov ID</th> <th>Turn</th> <th>Demand Flows</th> <th>Arrival Flows</th> <th>Deg Satn</th> <th>Average Delay</th> <th>Level of Service</th> <th colspan="2">Aver. Back of Queue</th> <th>Prop. Queued</th> <th>Effective Stop Rate</th> <th>Aver. No. Cycles</th> <th>Average Speed</th> <th></th> </tr> <tr> <th></th> <th></th> <th>Total veh/h</th> <th>HV %</th> <th>Total %</th> <th>HV %</th> <th>v/c</th> <th>sec</th> <th>Vehicles</th> <th>Distance</th> <th></th> <th></th> <th></th> <th></th> </tr> <tr> <th></th> <th></th> <th>veh/h</th> <th></th> <th>veh/h</th> <th></th> <th></th> <th></th> <th>veh</th> <th>m</th> <th></th> <th></th> <th>km/h</th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="14">South: Broadhead Rd</td> </tr> <tr> <td>1</td> <td>L2</td> <td>80</td> <td>1.3</td> <td>80</td> <td>1.3</td> <td>0.077</td> <td>5.2</td> <td>0.1</td> <td>0.8</td> <td>0.29</td> <td>0.55</td> <td>0.29</td> <td>45.7</td> </tr> <tr> <td>3</td> <td>R2</td> <td>17</td> <td>0.0</td> <td>17</td> <td>0.0</td> <td>0.077</td> <td>6.2</td> <td>0.1</td> <td>0.8</td> <td>0.29</td> <td>0.55</td> <td>0.29</td> <td>45.7</td> </tr> <tr> <td colspan="2">Approach</td> <td>97</td> <td>1.1</td> <td>97</td> <td>1.1</td> <td>0.077</td> <td>5.3</td> <td>0.1</td> <td>0.8</td> <td>0.29</td> <td>0.55</td> <td>0.29</td> <td>45.7</td> </tr> <tr> <td colspan="14">East: Lions Dr-E</td> </tr> <tr> <td>4</td> <td>L2</td> <td>27</td> <td>0.0</td> <td>27</td> <td>0.0</td> <td>0.111</td> <td>4.8</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.07</td> <td>0.00</td> <td>49.4</td> </tr> <tr> <td>5</td> <td>T1</td> <td>179</td> <td>7.6</td> <td>179</td> <td>7.6</td> <td>0.111</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.07</td> <td>0.00</td> <td>49.4</td> </tr> <tr> <td colspan="2">Approach</td> <td>206</td> <td>6.6</td> <td>206</td> <td>6.6</td> <td>0.111</td> <td>0.6</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.07</td> <td>0.00</td> <td>49.4</td> </tr> <tr> <td colspan="14">West: Lions Dr-W</td> </tr> <tr> <td>11</td> <td>T1</td> <td>128</td> <td>2.5</td> <td>128</td> <td>2.5</td> <td>0.112</td> <td>0.4</td> <td>0.2</td> <td>1.2</td> <td>0.23</td> <td>0.19</td> <td>0.23</td> <td>47.0</td> </tr> <tr> <td>12</td> <td>R2</td> <td>66</td> <td>0.0</td> <td>66</td> <td>0.0</td> <td>0.112</td> <td>5.3</td> <td>0.2</td> <td>1.2</td> <td>0.23</td> <td>0.19</td> <td>0.23</td> <td>47.0</td> </tr> <tr> <td colspan="2">Approach</td> <td>195</td> <td>1.6</td> <td>195</td> <td>1.6</td> <td>0.112</td> <td>2.1</td> <td>0.2</td> <td>1.2</td> <td>0.23</td> <td>0.19</td> <td>0.23</td> <td>47.0</td> </tr> <tr> <td colspan="2">All Vehicles</td> <td>498</td> <td>3.6</td> <td>498</td> <td>3.6</td> <td>0.112</td> <td>2.1</td> <td>0.2</td> <td>1.2</td> <td>0.15</td> <td>0.21</td> <td>0.15</td> <td>47.7</td> </tr> </tbody> </table> <p>Further to this, there would be a length of 10m of 'No Stopping' which left-turning vehicles would use to get around a vehicle waiting to turn right to Lions Drive. Therefore, based on the modelling results and the current intersection layout, there would not be a need to further widen the intersection or carry out works over and above that already planned for and agreed with Council.</p> <p>Again, as noted above, the meeting of 17 November 2020 has culminated in agreement from Council on 20 November 2020 of the adequacy of this intersection.</p> <p>Robertson Road / Lions Drive The intersection of Robertson Road and Lions Drive would operate at a Level of Service 'A' during peak periods in Scenario 4, with minor queue lengths for the left-turn and right-turn movements (less than one car length). The lack of anticipated delay at the intersection would not warrant additional works to that agreed with Council. See below for queue lengths at this location.</p> <p>Site: 101 [[AM 2036 DEV] Lions Dr- Robertson St] ** Network: 1 [AM 2036 +SSD School +DA DEV]</p> <p>18472 St Matthews Catholic College, Mudgee AM PEAK 8:15 - 9:15 AM Site Category: 2036 + SSD School Dev + Adjacent DA Dev Giveaway / Yield (Two-Way)</p> <table border="1"> <thead> <tr> <th colspan="14">Movement Performance - Vehicles</th> </tr> <tr> <th>Mov ID</th> <th>Turn</th> <th>Demand Flows</th> <th>Arrival Flows</th> <th>Deg Satn</th> <th>Average Delay</th> <th>Level of Service</th> <th colspan="2">Aver. Back of Queue</th> <th>Prop. Queued</th> <th>Effective Stop Rate</th> <th>Aver. No. Cycles</th> <th>Average Speed</th> <th></th> </tr> <tr> <th></th> <th></th> <th>Total veh/h</th> <th>HV %</th> <th>Total %</th> <th>HV %</th> <th>v/c</th> <th>sec</th> <th>Vehicles</th> <th>Distance</th> <th></th> <th></th> <th></th> <th></th> </tr> <tr> <th></th> <th></th> <th>veh/h</th> <th></th> <th>veh/h</th> <th></th> <th></th> <th></th> <th>veh</th> <th>m</th> <th></th> <th></th> <th>km/h</th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="14">South: Robertson St-S</td> </tr> <tr> <td>2</td> <td>T1</td> <td>82</td> <td>1.3</td> <td>82</td> <td>1.3</td> <td>0.135</td> <td>0.8</td> <td>0.3</td> <td>2.0</td> <td>0.34</td> <td>0.34</td> <td>0.34</td> <td>46.6</td> </tr> <tr> <td>3</td> <td>R2</td> <td>123</td> <td>12.0</td> <td>123</td> <td>12.0</td> <td>0.135</td> <td>5.5</td> <td>0.3</td> <td>2.0</td> <td>0.34</td> <td>0.34</td> <td>0.34</td> <td>40.7</td> </tr> <tr> <td colspan="2">Approach</td> <td>205</td> <td>7.7</td> <td>205</td> <td>7.7</td> <td>0.135</td> <td>3.6</td> <td>0.3</td> <td>2.0</td> <td>0.34</td> <td>0.34</td> <td>0.34</td> <td>44.5</td> </tr> <tr> <td colspan="14">East: Lions Dr-E</td> </tr> <tr> <td>4</td> <td>L2</td> <td>71</td> <td>6.0</td> <td>71</td> <td>6.0</td> <td>0.293</td> <td>4.7</td> <td>0.5</td> <td>3.4</td> <td>0.17</td> <td>0.58</td> <td>0.17</td> <td>30.8</td> </tr> <tr> <td>6</td> <td>R2</td> <td>235</td> <td>0.4</td> <td>235</td> <td>0.4</td> <td>0.293</td> <td>6.3</td> <td>0.5</td> <td>3.4</td> <td>0.17</td> <td>0.58</td> <td>0.17</td> <td>43.0</td> </tr> <tr> <td colspan="2">Approach</td> <td>305</td> <td>1.7</td> <td>305</td> <td>1.7</td> <td>0.293</td> <td>5.9</td> <td>0.5</td> <td>3.4</td> <td>0.17</td> <td>0.58</td> <td>0.17</td> <td>42.0</td> </tr> <tr> <td colspan="14">North: Robertson St-N</td> </tr> <tr> <td>7</td> <td>L2</td> <td>189</td> <td>0.6</td> <td>189</td> <td>0.6</td> <td>0.118</td> <td>4.6</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.46</td> <td>0.00</td> <td>45.2</td> </tr> <tr> <td>8</td> <td>T1</td> <td>29</td> <td>0.0</td> <td>29</td> <td>0.0</td> <td>0.118</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.46</td> <td>0.00</td> <td>45.2</td> </tr> <tr> <td colspan="2">Approach</td> <td>219</td> <td>0.5</td> <td>219</td> <td>0.5</td> <td>0.118</td> <td>4.0</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.46</td> <td>0.00</td> <td>45.2</td> </tr> <tr> <td colspan="2">All Vehicles</td> <td>729</td> <td>3.0</td> <td>729</td> <td>3.0</td> <td>0.293</td> <td>4.7</td> <td>0.5</td> <td>3.4</td> <td>0.16</td> <td>0.48</td> <td>0.16</td> <td>43.6</td> </tr> </tbody> </table>	Movement Performance - Vehicles														Mov ID	Turn	Demand Flows	Arrival Flows	Deg Satn	Average Delay	Level of Service	Aver. Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed				Total veh/h	HV %	Total %	HV %	v/c	sec	Vehicles	Distance							veh/h		veh/h				veh	m			km/h		South: Broadhead Rd														1	L2	80	1.3	80	1.3	0.077	5.2	0.1	0.8	0.29	0.55	0.29	45.7	3	R2	17	0.0	17	0.0	0.077	6.2	0.1	0.8	0.29	0.55	0.29	45.7	Approach		97	1.1	97	1.1	0.077	5.3	0.1	0.8	0.29	0.55	0.29	45.7	East: Lions Dr-E														4	L2	27	0.0	27	0.0	0.111	4.8	0.0	0.0	0.00	0.07	0.00	49.4	5	T1	179	7.6	179	7.6	0.111	0.0	0.0	0.0	0.00	0.07	0.00	49.4	Approach		206	6.6	206	6.6	0.111	0.6	0.0	0.0	0.00	0.07	0.00	49.4	West: Lions Dr-W														11	T1	128	2.5	128	2.5	0.112	0.4	0.2	1.2	0.23	0.19	0.23	47.0	12	R2	66	0.0	66	0.0	0.112	5.3	0.2	1.2	0.23	0.19	0.23	47.0	Approach		195	1.6	195	1.6	0.112	2.1	0.2	1.2	0.23	0.19	0.23	47.0	All Vehicles		498	3.6	498	3.6	0.112	2.1	0.2	1.2	0.15	0.21	0.15	47.7	Movement Performance - Vehicles														Mov ID	Turn	Demand Flows	Arrival Flows	Deg Satn	Average Delay	Level of Service	Aver. Back of Queue		Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed				Total veh/h	HV %	Total %	HV %	v/c	sec	Vehicles	Distance							veh/h		veh/h				veh	m			km/h		South: Robertson St-S														2	T1	82	1.3	82	1.3	0.135	0.8	0.3	2.0	0.34	0.34	0.34	46.6	3	R2	123	12.0	123	12.0	0.135	5.5	0.3	2.0	0.34	0.34	0.34	40.7	Approach		205	7.7	205	7.7	0.135	3.6	0.3	2.0	0.34	0.34	0.34	44.5	East: Lions Dr-E														4	L2	71	6.0	71	6.0	0.293	4.7	0.5	3.4	0.17	0.58	0.17	30.8	6	R2	235	0.4	235	0.4	0.293	6.3	0.5	3.4	0.17	0.58	0.17	43.0	Approach		305	1.7	305	1.7	0.293	5.9	0.5	3.4	0.17	0.58	0.17	42.0	North: Robertson St-N														7	L2	189	0.6	189	0.6	0.118	4.6	0.0	0.0	0.00	0.46	0.00	45.2	8	T1	29	0.0	29	0.0	0.118	0.0	0.0	0.0	0.00	0.46	0.00	45.2	Approach		219	0.5	219	0.5	0.118	4.0	0.0	0.0	0.00	0.46	0.00	45.2	All Vehicles		729	3.0	729	3.0	0.293	4.7	0.5	3.4	0.16	0.48	0.16	43.6
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Approach		195	1.6	195	1.6	0.112	2.1	0.2	1.2	0.23	0.19	0.23	47.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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	<p>Site: 101 [[PM 2036 DEV] Lions Dr- Robertson St] **Network: 3 [PM 2036 +SSD School +DA DEV]</p> <p>18472 St Matthews Catholic College, Mudgee PM PEAK: 2:45 - 3:45 PM Site Category: 2036 + SSD School Dev + Adjacent DA Dev Giveaway / Yield (Two-Way)</p> <table border="1"> <thead> <tr> <th colspan="14">Movement Performance - Vehicles</th> </tr> <tr> <th>Mov ID</th> <th>Turn</th> <th>Demand</th> <th>Flows</th> <th>Arrival</th> <th>Flows</th> <th>Deg Satn</th> <th>Average Delay</th> <th>Level of Service</th> <th>Aver Back of Queue</th> <th>Prop Queued</th> <th>Effective Stop Rate</th> <th>Aver No. Cycles</th> <th>Averag Speed</th> </tr> <tr> <th></th> <th></th> <th>veh/h</th> <th>HV %</th> <th>Total %</th> <th>HV %</th> <th></th> <th>v/c</th> <th>sec</th> <th>veh</th> <th>Distance m</th> <th></th> <th></th> <th>km/h</th> </tr> </thead> <tbody> <tr> <td colspan="14">South: Robertson St-S</td> </tr> <tr> <td>2</td> <td>T1</td> <td>59</td> <td>5.4</td> <td>59</td> <td>5.4</td> <td>0.079</td> <td>0.6</td> <td>LOS A</td> <td>0.1</td> <td>1.1</td> <td>0.30</td> <td>0.30</td> <td>46.8</td> </tr> <tr> <td>3</td> <td>R2</td> <td>67</td> <td>4.7</td> <td>67</td> <td>4.7</td> <td>0.079</td> <td>5.3</td> <td>LOS A</td> <td>0.1</td> <td>1.1</td> <td>0.30</td> <td>0.30</td> <td>41.3</td> </tr> <tr> <td colspan="2">Approach</td> <td>126</td> <td>5.0</td> <td>126</td> <td>5.0</td> <td>0.079</td> <td>3.1</td> <td>NA</td> <td>0.1</td> <td>1.1</td> <td>0.30</td> <td>0.30</td> <td>45.2</td> </tr> <tr> <td colspan="14">East: Lions Dr-E</td> </tr> <tr> <td>4</td> <td>L2</td> <td>91</td> <td>4.7</td> <td>91</td> <td>4.7</td> <td>0.256</td> <td>4.8</td> <td>LOS A</td> <td>0.4</td> <td>3.1</td> <td>0.23</td> <td>0.57</td> <td>23</td> </tr> <tr> <td>6</td> <td>R2</td> <td>192</td> <td>6.6</td> <td>192</td> <td>6.6</td> <td>0.256</td> <td>6.0</td> <td>LOS A</td> <td>0.4</td> <td>3.1</td> <td>0.23</td> <td>0.57</td> <td>43.2</td> </tr> <tr> <td colspan="2">Approach</td> <td>282</td> <td>6.0</td> <td>282</td> <td>6.0</td> <td>0.256</td> <td>5.6</td> <td>LOS A</td> <td>0.4</td> <td>3.1</td> <td>0.23</td> <td>0.57</td> <td>41.8</td> </tr> <tr> <td colspan="14">North: Robertson St-N</td> </tr> <tr> <td>7</td> <td>L2</td> <td>151</td> <td>0.7</td> <td>151</td> <td>0.7</td> <td>0.114</td> <td>4.6</td> <td>LOS A</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.38</td> <td>46.0</td> </tr> <tr> <td>8</td> <td>T1</td> <td>63</td> <td>1.7</td> <td>63</td> <td>1.7</td> <td>0.114</td> <td>0.0</td> <td>LOS A</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.38</td> <td>46.0</td> </tr> <tr> <td colspan="2">Approach</td> <td>214</td> <td>1.0</td> <td>214</td> <td>1.0</td> <td>0.114</td> <td>3.2</td> <td>NA</td> <td>0.0</td> <td>0.0</td> <td>0.00</td> <td>0.38</td> <td>46.0</td> </tr> <tr> <td colspan="2">All Vehicles</td> <td>622</td> <td>4.1</td> <td>622</td> <td>4.1</td> <td>0.256</td> <td>4.3</td> <td>NA</td> <td>0.4</td> <td>3.1</td> <td>0.16</td> <td>0.45</td> <td>43.9</td> </tr> </tbody> </table> <p>Again, as noted above, the meeting of 17 November 2020 has culminated in agreement from Council on 20 November 2020 of the adequacy of this intersection.</p> <p>Robertson Road / Bruce Road For the Robertson Road / Bruce Road intersection, both signage and line-marking is proposed to be supplied in accordance with Ausroads guidelines. It is not proposed to upgrade the pavement, which is as per the above for Lions Drive / Robertson Road intersection. This is on the basis of the agreed position on light traffic only through this intersection.</p> <p>Again, as noted above, the meeting of 17 November 2020 has culminated in agreement from Council on 20 November 2020 of the adequacy of this intersection.</p> <p>Bruce Road to Spring Flat Road As per Council's commentary on Bruce Road to Spring Flat Road above, it has been agreed that the s7.12 contribution will be used for these works. See Council's agreed position as set out earlier:</p> <p>Section 7.12 Contributions <i>The applicable Section 7.12 contribution for the proposed development is \$362,740. Council confirms that further discussions have taken place in relation to the upgrade of Bruce Road beyond the school boundary and it has agreed to the proponent's request that the full amount of Section 7.12 contributions be applied directly to these works.</i></p> <p>We understand this to be agreed and resolved.</p>	Movement Performance - Vehicles														Mov ID	Turn	Demand	Flows	Arrival	Flows	Deg Satn	Average Delay	Level of Service	Aver Back of Queue	Prop Queued	Effective Stop Rate	Aver No. Cycles	Averag Speed			veh/h	HV %	Total %	HV %		v/c	sec	veh	Distance m			km/h	South: Robertson St-S														2	T1	59	5.4	59	5.4	0.079	0.6	LOS A	0.1	1.1	0.30	0.30	46.8	3	R2	67	4.7	67	4.7	0.079	5.3	LOS A	0.1	1.1	0.30	0.30	41.3	Approach		126	5.0	126	5.0	0.079	3.1	NA	0.1	1.1	0.30	0.30	45.2	East: Lions Dr-E														4	L2	91	4.7	91	4.7	0.256	4.8	LOS A	0.4	3.1	0.23	0.57	23	6	R2	192	6.6	192	6.6	0.256	6.0	LOS A	0.4	3.1	0.23	0.57	43.2	Approach		282	6.0	282	6.0	0.256	5.6	LOS A	0.4	3.1	0.23	0.57	41.8	North: Robertson St-N														7	L2	151	0.7	151	0.7	0.114	4.6	LOS A	0.0	0.0	0.00	0.38	46.0	8	T1	63	1.7	63	1.7	0.114	0.0	LOS A	0.0	0.0	0.00	0.38	46.0	Approach		214	1.0	214	1.0	0.114	3.2	NA	0.0	0.0	0.00	0.38	46.0	All Vehicles		622	4.1	622	4.1	0.256	4.3	NA	0.4	3.1	0.16	0.45	43.9
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<p>The revised SIDRA modelling provided also indicates that only 4% of traffic will utilise Castlereagh Highway / Burrundulla Road / Lions Drive intersection. This figure appears lower than what is likely to be actual traffic numbers and some consideration should also be given for contribution toward any intersection upgrade that may be required by TfNSW.</p>	<p>Any upgrade or contribution arising from school-related traffic at this intersection is not warranted based on the traffic modelling provided and is further not supported.</p> <p>As noted in the Figure 8.2 set out above supporting the right-turn movement into Lions Drive from Broadhead Road, once the traffic arrives at the Castlereagh Highway this is 18% of traffic (not 4%). This has not</p>																																																																																																																																																																																																																																

Agency Comments	Response
	been underestimated as asserted. As noted numerous previous times in the EIS, TIA, RtS and above, this intersection maintains Levels of Service of 'A' and 'B' and no upgrades are warranted in this regard.
<p>Pick up / drop off – parking and circulation The access for Pick up / Drop off areas, car parking and bus bay a bus turning areas appear generally satisfactory.</p> <p>However, a left turn entry lane to the car park and Pick up / Drop off areas should be considered to provide improved sight distance for exiting vehicles whose sight distance might be restricted by vehicles queuing to enter.</p> <p>There are some concerns regarding internal directional marking and potential conflict for exiting vehicles that can be clarified at the time of detailed design. This might include measures such as line-marking, signage and channelized kerbing.</p>	<p>Sight distance matters are addressed within commentary by, and in response to, TfNSW above. The detailed design phase will resolve this and the linemarking matters raised.</p> <p>We note Council has agreed to retract commentary with respect to car parking at the site. This formed part of the agreement on 20 November 2020.</p> <p>Notwithstanding, the capacity of the car park is supported in the prior commentary made by Council (as set out immediately above in this table).</p> <p>Accordingly, we understand no changes are required to the plans and there is no further intention to refine these plans.</p>
<p>The plan shows the car parking area to provide for 82 car parking spaces. Council does not support any on-street car parking and accordingly it is suggested that an additional area be provided on site to provide for overflow parking.</p> <p>Car parking areas must be sealed and line-marked with car parking spaces dimensioned in accordance with relevant and applicable Australian Standards (AS2890.1)</p>	
<p>In summary, any approval / consent that might issue should contain conditions requiring detailed design documentation supported by relevant and appropriate calculations, addressing the matters detailed above, to be submitted and approved prior to the commencement of any construction work.</p>	<p>Detailed design conditions are accepted as commonplace, however, any roadworks beyond that previously agreed with Council are not accepted.</p>

Should you have any questions or seek further information please do not hesitate to contact me on 0437 259 581.

Yours Sincerely



Oliver Klein
Director
_planning Pty Ltd

Attached:

- Minutes of meeting with Council (dated 13 August 2020)
- Traffic Scenarios 1-4 Input Data and Movement Results (TTPP)
- Swept Path Analysis (Triaxial)
- Intersection Upgrade Plans – Sheets 1 and 2 (Triaxial)