Ref: 300300107

01 March 2020

Kelsey Godwin-Smith
Project Coordinator
Billard Leece Partnership
SYDNEY, NSW
Attention: kelsey@blp.com.au

Dear Kelsey,

NSW Department of Planning and Environment
New Primary School at Warnervale – Traffic Engineering Statement

Stantec has reviewed RMS response dated 13 November 2019 (SSD 9439: NEW WARNERVALE PUBLIC SCHOOL, LOT: 71 DP: 7091, 75 WARNERVALE ROAD, WARNERVALE) and has provided responses in the following response table. It is noted that this response letter should be read in conjunction with the Transport and Accessibility Report prepared by Stantec (dated 5 August 2019).

	Comments	Stantec's Response
	RMS	
1	The only state road intersection that has been assessed is Sparkes Road at Albert Warner Road; however, it can be assumed that impact may result on Sparkes Road at both Virginia Road and Minnesota Road, and Pacific Highway at Minnesota Road	Through consultation with Central Coast Council, the intersections along Warnervale Road at Virginia Road and Minnesota Road, and the intersection of Sparks Road and Albert Warner Drive were assessed. A summary of this assessment is described in table 9-4 below. This assessment analysed the traffic impacts of Scenario 1 (Base Case) and Scenario 2 (additional 562 peak hour vehicle trips generated by 460 students). As table 9-4 shows, the only increase to the Level of Service (LoS) at these intersections is at the unsignalised intersection of Warnervale Road and Virginia Road during the evening peak (from LoS 'A' to LoS 'B'), which can be considered a minor change. The minor change in intersection performance across these three main intersections showed that the immediate road network would be able to cater the trips generated from 460 students in the New Primary School at Warnervale. In addition, a trip distribution diagram has been prepared, showing route distribution for approaching and departing traffic. The diagram also shows the expected trip distribution at the intersection of Minnesota Road with Warnervale Road. Trips distributed to the wider road network towards Sparkes Road and Virginia Road and Minnesota Road, and the Pacific Highway at Minnesota Road is expected to be relatively minor, therefore not required to be assessed.

		Any future development application for increased capacity of the school will require an assessment of the impact on the wider road network Table 9-4: Intersection Performance for 2022 (SIDRA Results) **Intersection** / **Morning Peak** / **Evening Peak** Degree of Saturation (%) / Average Delay (secs) / Level of Service (LoS) / Degree of Saturation (%) / Average Delay (secs) / Level of Service (LoS) **Scenario 1** Sparks Road and Albert Warner Drive: 96.4% / 34.6 / C / 77.3% / 31.9 / C Warnervale Road and Minnesota Road: 69.5% / 24.5 / B / 67.7% / 21.4 / B Warnervale Road and Virginia Road: 18.0% / 11.0 / A / 24.0% / 11.0 / A **Scenario 2** Sparks Road and Albert Warner Drive: 92.2% / 37.9 / C / 89.6% / 33.7 / C Warnervale Road and Minnesota Road: 75.0% / 25.5 / B / 73.0% / 21.5 / B Warnervale Road and Virginia Road: 21.0% / 12.5 / A / 25.0% / 15.3 / B Catchment boundaries for respective schools surrounding the proposed development is attached within the appendix (prepared by the Department of Education).
2	An additional 556 peak hour trips is not considered insignificant as detailed in the reports.	Agreed, the additional 562 peak hour trips generated from the proposed development is not (and should not) be considered insignificant. There is no indication within the report that the additional 562 peak hour trips is considered insignificant.
3	The majority of vehicle traffic to the site is associated with student drop off and pick up.	Agreed. This has been accounted for within the Transport and Accessibility report (Section 9.1: Trip Generation)
4	Roads and Maritime are unaware of the catchment that this school will draw students from. For example, will there be an additional impact on the state road network by drawing students from north of Sparkes Road or south of the Pacific Highway, or is it expected that the trips will be generated from within the area described.	Through consultation with Kate Leonard and Marc Desmond of RMS, RMS requested the catchment area of the new Warnervale public school, noting that the intersection of Minnesota Road & Pacific Highway is of concern. Information of the catchment for the new school is not currently available from the Department of Education. The final catchment area will be affected by a number of factors such as the location of existing schools in the area, consultation with Principals of those existing schools, the location of new residential development in the

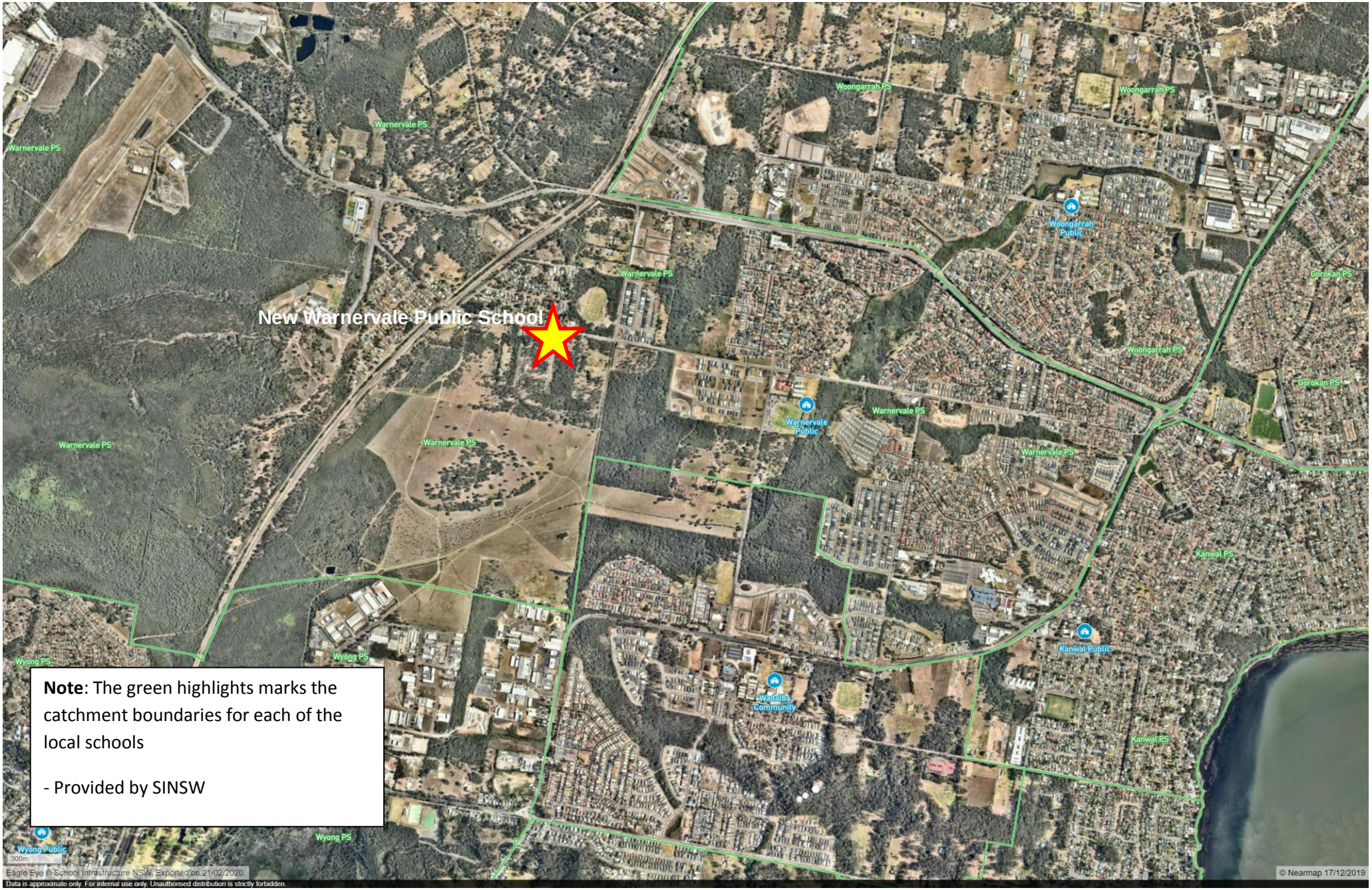
		neighbourhood of the new school, and natural or man-made barriers to travel to the new school. When the catchment boundary for the New Primary School at Warnervale is determined, the resultant impact on the intersection of Minnesota Road & Pacific Highway will be relatively minor because the new catchment will not include any area where students will need to travel past either Wadalba Community School or Warnervale Primary School on their way to the New Primary School at Warnervale.
5	The traffic report comments that ultimately the school could cater for 1,000 students, however no Masterplan has been provided showing the ultimate scenario and resultant impact on the state road network.	The current application does not include facilities for 1000 students. Any future development application that includes increased capacity at the school will provide an assessment of the impact on the wider road network.
6	The distribution of network trips has not been shown diagrammatically.	The proposed development of the New Primary School at Warnervale will effectively increase the trip generation of the site compared with the anticipated residential development by about 562 vehicle trips during the morning and afternoon, respectively. A diagram, consisting of route distribution for approaching and departing traffic is shown with Figure 2 of the Appendix. As shown within the diagram, vehicles trips are primarily expected to arrive from the west approach at the intersection of Sparks Road / Albert Warner Drive and south approach at the intersection of Minnesota Road / Warnervale Road. Noted within item 4, the determination of the catchment boundary of the new school will ensure that a student will not be required to travel past an existing school (i.e, Warnervale Primary School or Wadalba Community School to arrive at their designated school.

Please do not hesitate to contact us for further queries.

Yours sincerely

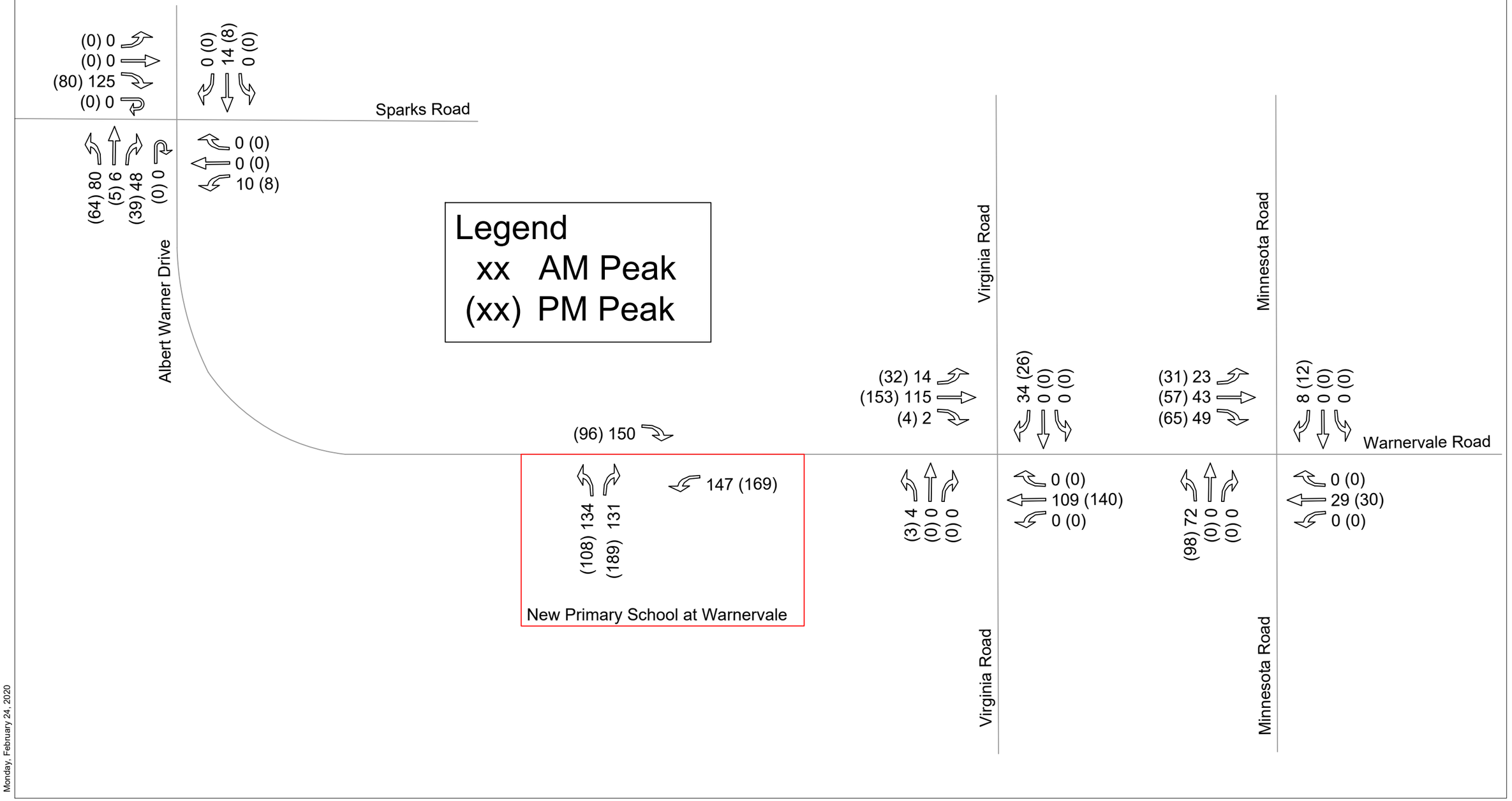
Ang, Desmond
Traffic Engineer
Stantec Australia Pty Ltd

Kirk Martinez
Senior Traffic Engineer
Stantec Australia Pty Ltd



Note: The green highlights marks the catchment boundaries for each of the local schools

- Provided by SINSW



Monday, February 24, 2020

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New Primary School at Warnervale

Trip Distribution of Additional Traffic

AM and PM peak

DRAWN: DA	---	---
DATE: 24-02-20	STATUS: ---	
SCALE: 1:100 @ A3		
DWG NO:15536 - 03A - 200224		

Stantec

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