

WILLOWTREE PLANNING

2 March 2022

REF: WTJ21 - 285

William Hodgkinson
NSW Department of Planning, Industry & Environment (DPIE)
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2124
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RE: RESPONSE TO SUBMISSIONS - PROPOSED SECTION 4.55(1A) MODIFICATION APPLICATION - SSD 9522 (MOD 2)

PROPERTY AT 657-769 MAMRE ROAD, KEMPS CREEK LOT 34 DP1118173, LOTS X & Y DP421633, LOT 1 DP 1018318 & LOT 22 DP258414)

Dear Will,

Reference is made in relation to the proposed modification application (MOD 2) to SSD 9522 and the request for additional information received from DPIE on 30 November 2021. Specifically, this letter seeks to respond to the following:

- Penrith City Council comments received 29 November 2021;
- Transport for New South Wales (TfNSW) comments received 3 December 2021 and 9 February 2022; and
- Central Western Team comments received 6 December 2021.

Following review of the Penrith City Council, TfNSW and Central Western Team comments in relation to the modification application, the matters raised have been taken into consideration and are accurately addressed in the response table below.

Having regard to the comments received by TfNSW, responses has been prepared by Ason Group and is provided in **Appendix 1 & 2**.

It is considered that this information now provides the NSW DPIE with all the necessary facts and relevant particulars in relation to the Proposed Development identified within the relevant comments; therefore, enabling assessment of this State Significant Development (SSD) Application to proceed.

We look forward to the NSW DPIE's feedback on the information provided and look forward to progressing with the SSD modification application further.

Should you wish to discuss further, please contact Cameron Gray on 0477003429 or cgray@willowtp.com.au.

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Yours Faithfully,



Andrew Cowan
Director
Willowtree Planning Pty Ltd
ACN 146 035 707



Summary of, and response to comments	
Comments	Response
Penrith City Council Comments	
1. Planning Considerations	
<p>(a) <u>Background</u></p> <p>On December 2020, development consent was granted for the development of the Kemps Creek Warehouse, Logistics and Industrial Facilities Hub (SSD-9522). The approval included the following:</p> <ul style="list-style-type: none"> – Construction of eight warehouses with a total Gross Floor Area of 162,355sqm over eight lots, – Associated loading docks, hardstands, car and truck parking, and landscaping, – Site wide bulk earthworks to create building pads, three estate basins, – Internal road network including a north-south distributor road connecting the southern neighbouring property, – Subdivision. <p>The development included the widening of Mamre Road and upgrades to an existing signalised 'T' intersection at Mamre Road and Bakers Lane to facilitate site access over two sequences (Sequence 1A and 1B).</p> <p>The Department has approved one modification to the consent. Modification application (MOD 1) approved:</p> <ul style="list-style-type: none"> – the reduction in warehouse buildings from eight to seven by amalgamating two warehouses into one, – increased overall Gross Floor Area from 162,355sqm to 186,123sqm (an increase in GFA of 23,768sqm), – an increase in car parking from 744 to 772 spaces (+28 spaces), 	<p>Noted.</p>

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<ul style="list-style-type: none"> – a reduction in landscaped setbacks along the North South Distributor – Road from 4m to 3.75m (in alignment with the site specific DCP), – amendments to the staging of the sequence 1A and 1B intersection upgrades, – relocation of the North-South Distributor Road to the east, – amendments to the cul-de-sac arrangements to lots 5-8, and – an increase in the largest vehicle permitted to access the site from a 26m B-Double to a 30m super B-Double heavy vehicle. <p>The reasoning provided as to the modification application was to accommodate the requirements of a specific tenant at proposed Lot 5.</p> <p>This modification application represents the second modification to the SSD consent.</p>	
<p>(b) <u>Strategic matters</u></p> <p>The Department's assessment of SSD 9522 considered a site-specific development control plan (SSD 9522 Development Control Plan 2020, Mamre Road Precinct (Kemps Creek Industrial Estate), dated 3 August 2020).</p> <p>Subsequently, Condition A10 of consent no. SSD 9522 was imposed and requires that the Applicant must lodge revisions to the Penrith Development Control Plan 2014 (PDCP) to incorporate the site-specific DCP with Council within 6 months of commencing development under the consent, which is dated 21 December 2020.</p> <p>Council advises that on 25 November 2021, correspondence was received requesting an amendment to PDCP 2014 as per the requirements of Condition A10 of consent SSD 9522.</p> <p>It is noted that the Mamre Road Precinct Development Control (DCP) Plan 2021 was adopted by the Group Deputy Secretary, Planning Delivery and Local Government (under delegation from the Secretary) of the Department of Planning, Industry and Environment (DPIE) on 17 November 2021 and came into force on Friday 19 November 2021.</p> <p>The Department is to confirm if the Mamre Road Precinct DCP (MRP DCP) applies to the SSD and any subsequent modifications or proposals on the site, noting that PDCP 2014 no longer applies to the Precinct, and that no savings and transitional provisions or arrangements apply as provided by Section 1.2.3 of the MRP DCP.</p>	
	<p>The built form approved under SSD 9522 and subsequent MOD 1 are subject to the site-specific Development Control Plan titled <i>SSD 9522 Development Control Plan 2020, Mamre Road Precinct (Kemps Creek Industrial Estate)</i> dated 3 August 2020 and prepared by Willowtree Planning Pty Ltd. It is noted that only minor changes</p>

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<p>The development shall comply with the DCP applying to the site and compliance must be detailed in an amended Section 4.55 report.</p>	<p>to the built form approved under SSD 9522 and subsequent MOD 1 is proposed as part of the subject modification application. The development as proposed remains generally consistent with the site-specific DCP.</p> <p>The explanatory note contained within SSD 9522 states that any new development applications would be subject to the Mamre Road Precinct DCP. As this application is a modification application to SSD 9522, the Mamre Road Precinct DCP does not apply.</p>
<p>(c) <u>Estate Roads</u></p> <p>As has been raised with DPIE in relation to other state significant development proposals within the Precinct, each warehouse is to be provided with direct frontage to an estate road. Warehouses 1A and 2 are battel-axe warehouse lots with poor to no street front presentation and the resulting cluttering of access handles and driveways connecting to Bakers Lane will reduce opportunities for street tree planting and will impact the ability to achieve consistent and high amenity green streetscapes</p>	<p>This comment is not relevant as no changes are sought to Warehouses 1A and 2 within this application, and should not delay determination of the modification application. There is no material change to the configuration of the Estate, only changes to the road widths and some additional warehouse area pertaining to lots 6 and 8.</p>
<p>(d) <u>Dedication of roads and nomination of open space edge road</u></p> <p>The applicant is encouraged to meet with TfNSW and Penrith City Council (not TfNSW in isolation) in relation to the design of roads, in particular roads which will be dedicated to Council and any related intersections.</p> <p>Plans (including bulk earthworks, architectural and landscape and subdivision plans) shall clearly identify the Open Space Edge Road compliant with the location and design requirements and objectives specified within the Mamre Road Precinct DCP. The Open Space Edge Road shall not be nominated as 'Unresolved land use' on plans, sections or details (also refer to engineering comments below).</p> <p>Sections and details of the Open Space Edge Road shall clearly describe the levels achieved in relation to the adjacent Open Space. Adjacent levels and any retaining walls or other structures shall not prohibit, obstruct or unduly impact its delivery.</p>	<p>Consultation has previously been undertaken with TfNSW and Council regarding the proposed road and intersection layouts. It is considered that sufficient information has been provided for an assessment to be undertaken. The Mamre Rd/Bakers Lane intersection design is being finalised by TfNSW and all other intersections details have been provided with the MOD 2 application for review and conditioning by Council. It is noted that the design is consistent with the relevant controls contained in the site-specific DCP, with the submission including all turning movements for various sized articulated vehicles, to fully satisfy condition B4.</p> <p>The Open Space Edge Road is not the subject of this modification application and is not a matter for consideration.</p> <p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development.</p>



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<p>including the ability for the roadway to be constructed at the required finished levels having regard to its purpose and relationship with the adjacent open space (refer Figure 16 of MRP DCP).</p> <p>The width of the Open Space Edge Road shall be consistent through Lot 13 and the Lot nominated as Stage 1, Subdivided Lot 2.</p>	<p>Sufficient details have been provided with the MOD 2 submission to enable the determination of the modification application. The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development.</p>
<p>(e) <u>Proposed narrowing of roadway widths</u></p> <p>The Mamre Road Precinct DCP includes at Section 1.6 Precinct Vision, that the Mamre Road Precinct will be a <u>world-class</u> industrial area and that Western Parkland City principles will be implemented through the blue and green grid, and that ambitious landscaping requirements which contribute to the Greater Sydney Region Plan target of 40% tree canopy across Metropolitan Sydney.</p> <p>It is further noted that development in the precinct is expected to be <i>high quality and that public domain will deliver a pleasant, safe and efficient working environment with attractive places for pedestrians and cyclists as well as being safe for cars and trucks.</i></p> <p>Council does not agree with the justification for the reduced roadway widths provided by Willowtree in Section 5 of the Section 4.55(1A) Modification Application letter, dated 19 October 2021, specifically the statements at dot points 3, 4, 5, 6, and 7.</p>	<p>Noted.</p> <p>Noted</p> <p>No justification has been provided as to why Council does not agree with the relevant statements. Further commentary on points 3-7 is provided below:</p> <ul style="list-style-type: none"> ▪ <i>The road widths proposed will continue to support large scale warehousing, industrial and logistics operations within the Estate by accommodating the maximum size vehicles required.</i> <p>The road widths as proposed maintain compliance with the Mamre Road Precinct DCP and will not alter the maximum size vehicles that the roads can accommodate.</p> <ul style="list-style-type: none"> ▪ <i>The reduced road widths do not compromise the quality of the landscaped outcomes within the Estate and ensures that the underlying objectives, as envisaged under the Western City District Plan in this</i>



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	<p>respect are maintained in terms of contributing to mitigating the heat island effect.</p> <p>As above, the road widths as proposed maintain compliance with the Mamre Road Precinct DCP for roads widths and the site-specific DCP for landscaping setbacks and will continue to provide compliant landscaped areas.</p> <ul style="list-style-type: none"> <i>If the road widths as approved under SSD 9522 were maintained, it is considered that this would result in the inefficient utilisation of industrial zoned land. The reduction in this respect ensures that there are some minor configurations to certain industrial development lots which provides for greater efficiency and in some instances minor building footprint expansions (0.7% increase in GFA) to enhance employment generating operations. This aligns directly with the zone objectives in terms of employment creation.</i> <p>As above, the road widths as proposed maintain compliance with the Mamre Road Precinct DCP for road widths and the site-specific DCP and will continue to provide a compliant built form.</p> <ul style="list-style-type: none"> <i>The changes as noted above in terms of the building footprints will have no detrimental or adverse impact on the visual outcomes as anticipated within the original approval. Specifically, the visual impacts of the Estate when viewed from the adjoining South Creek area and RE1 zoned land would not be materially affected.</i> <p>Given the nominal increase in GFA (0.7%) with no changes to building height, the proposed modifications will not result in any additional visual impacts.</p> <ul style="list-style-type: none"> <i>The changes to the proposed road widths, some development allotments and building footprints, will have no adverse material impact on the stormwater quantity and quality outcomes per the original approval. The stormwater infrastructure is appropriately sized to accommodate the development on this basis.</i>



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<p>Council's requirements for wide landscaped medians were considered in the Department's assessment report attached to MOD 1 and the applicant amended the site plan to meet Council's minimum standards.</p> <p>No valid justification is provided for the deletion of the central landscaped medians, and it is noted that GFA is increased again under this Modification from 186,123sqm to 187,378sqm (a further increase of 1,255sqm on top of the 23,768sqm GFA increase approved under MOD 1 (total 25,023sqm)).</p> <p>It is raised for Department's strong consideration that there are significant negative cumulative impacts resulting from:</p> <ul style="list-style-type: none"> – The continued increase in Gross Floor Area, – the reduction in landscaping opportunities, – incorporation of battle axe warehouse lots and warehouse amalgamation, and, – increased car parking numbers, hardstands and hard surfaces, coupled with, decreased landscaped setbacks, and – the deletion of estate wide landscaped central medians, is significantly eroding the quality of the development's contribution to the design quality of the Precinct and the site's contribution to canopy tree cover targets. 	<p>No change to the approved stormwater infrastructure is proposed and as advised, in the Civil Engineering documentation submitted, the stormwater infrastructure is appropriately sized to accommodate the nominal increase in GFA.</p> <p>Noted.</p> <p>The proposed modifications are generally consistent with the cross sections nominated in the site-specific DCP and the Mamre Road Precinct DCP where road cross sections have been nominated.</p> <p>The proposed increase in GFA is nominal (0.7%) and will not result in any additional impacts to the precinct or surrounding land.</p> <p>The development as modified will continue to provide areas for landscaping which are generally consistent with the approved development and site-specific DCP.</p> <p>The general configuration remains unchanged under this modification application and as such this matter is not considered relevant.</p> <p>The development as modified will continue to provide areas for landscaping which are generally consistent with the approved development and site-specific DCP. Where appropriate, landscaped setbacks in excess of the requirements have been provided to compensate for any minor carpark intrusion into the landscape setbacks required by road curves. The overall quantum of landscaping is increased. The proposed modifications to the central medians are generally consistent with the site-specific DCP and the Mamre Road Precinct DCP where cross sections have been nominated.</p>



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<p>In its assessment of MOD 1 and the original SSD application, the Department relied on detailed landscape plans, visual impact analysis and photomontages which indicated central median planting.</p> <p>The planting is considered an essential component of the design of the approved development, and it is recommended that this be retained and protected through to delivery.</p> <p>The applicant must make clear on all plans and sections (including landscape and architectural plans), where the future boundary to the final alignment of Mamre Road is and what the ultimate setback and landscape treatment will be (compliant with the DCP).</p>	<p>Noted.</p> <p>In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p> <p>Landscape Plans were included with the proposed modification application which included sections (Section A-A to F-F) that included details of the ultimate setback and landscape treatments consistent with the site-specific DCP.</p>
<p>(f) <u>Addition of car parking spaces</u></p> <p>Council does not support the proposed addition of five car spaces within the entry driveway to Lot 6.</p> <p>Council does not support any encroachments into the already reduced (4m to 3.75m under MOD 1) landscaped setback to Estate Roads.</p>	<p>The proposed additional parking is consistent with the Mamre Road Precinct DCP and site-specific DCP car parking requirements, as well as AS2890.1 and will not result in any additional traffic or parking impacts, as described in the submitted Traffic Report.</p> <p>Where appropriate, landscaped setbacks in excess of the requirements have been provided to compensate for any minor carpark intrusion into the landscape setbacks required by road curves. The overall quantum of landscaping is increased.</p>
<p>(g) <u>Landscaped blisters</u></p> <p>Landscaping must be provided in accordance with the requirements of the Mamre Road Precinct DCP. It is requested that landscaped setbacks be increased to comply with the MRP DCP.</p> <p><i>As per the requirements of the MRP DCP, tree planting in the form of island planter beds shall be provided at a rate of one planter bed per 10 car spaces (preference is 1 every 6 spaces) within car parks to reduce the heat island effect of hard surfaces that are a minimum 1.5m wide</i></p>	<p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development.</p> <p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development.</p>



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<p>Landscaped blisters are not in compliance with the newly adopted DCP.</p> <p>Consideration shall be given to the staggering of landscaped blisters where appropriate, to increase shade coverage.</p> <p>Re-vegetation statistics are not to include trees located in areas where trees will be removed in the future (for development, OSD engineering, road widening and the like) and shall be set as required targets within the consent conditions to be confirmed through the submission requirements at existing Condition B86.</p>	<p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development.</p> <p>In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p>
<p>(h) <u>Staff and Communal Areas</u></p> <p>The provision and design of staff communal areas is to be in accordance with Section 4.2.4 of the MRP DCP.</p>	<p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development. No change to this aspect of the built form is proposed as part of this modification application.</p>
<p>(i) <u>Signage Estate Entry</u></p> <p>Signage and Estate Entrances is to be in accordance with Section 4.2.8 of the MRP DCP.</p> <p>The applicant is to explain the proposed deletion of the Acoustic barrier shown on Landscape plans Issue S, dated 28.05.2021.</p>	<p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development. No change to the signage is proposed as part of this modification application.</p> <p>The Acoustic Barrier remains as per the approved plans and Condition B54 of SSD 9522.</p>
<p>2. Development Engineering and Traffic Considerations</p> <p>(a) <u>Condition B4</u></p> <p>The removal of the Condition B4 is not supported. It is suggested that the condition be modified as per the below, to align with the recently adopted Mamre Road Precinct Development Control Plan:</p> <p><i>Prior to the issue of a Subdivision Works Certificate for the estate roads, the Certifying Authority shall ensure that access to the development, the internal road intersections and access to each development lot are:</i></p>	

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<p>(a) designed for 30m Performance Based Standards (PBS) Level 2 Type B vehicles and tested for a 36.5m PBS Level 3 Type A vehicles.</p> <p>(b) consistent with the most recent version of Austroads Guide to Road Design and TfNSW specifications</p> <p>Design plans including turn path templates demonstrating compliance, shall be submitted with the application for a Subdivision Works Certificate.</p> <p>This will ensure that future applications or modification applications achieve compliance, and that compliance is demonstrated at Subdivision Works Certificate stage.</p> <p>(b) <u>Condition B6</u></p> <p>The proposed table for the Estate Road Cross Sections align with the recently adopted Mamre Road Precinct DCP regarding road reserve widths, pavement widths and verge widths.</p> <p>Noting Council's strong objection to the deletion of the central median planting, should DPIE support the reduction of widths resulting in deletion or amendment to central medians, it is recommended that an absolute minimum 1.2m wide central median (minimum width to shelter a small sign - Austroads Guide to Road Design Part 4A) be provided at the following locations:</p> <ul style="list-style-type: none"> • Along the full length of Bakers Lane extending from the intersection with Mamre into the North-South Collector Road to approximately Ch 620. The median is required to prevent right turn access into Lots 1-4. • Along the North-South Collector Road at the intersection of Access Road 1 and Access Road 3 (tangent point to tangent point). • Along the North-South Collector Road at the intersection of Access Road 1 and Access Road 2 (tangent point to tangent point). 	
	<p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development.</p> <p>Medians have been provided in accordance with the Mamre Road Precinct DCP, noting generally medians are not required for any roads within the Estate (based on the confirmed road hierarchy) except at intersection locations.</p> <p>For the north-south road (Road 1), confirmed as a Typical Collector Road (Mamre Road Precinct DCP Figure 12), medians of 0.8m width are required at intersection locations (per Mamre Road Precinct DCP Table 9). The submitted intersections designs for Road 1 and 3, and 1 and 2, have provided 0.8m wide medians in accordance with the Mamre Road Precinct DCP.</p>



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<p>(c) <u>Open Space Edge Road</u></p> <p>Penrith City Council strongly advise that DPIE consider how the Open Space Edge Road will be delivered in accordance with the vision of the DCP, and it is raised that a mechanism shall be put in place to ensure that Development (including the subject proposal) deliver an Open Space Edge Road within the lands identified in the Stage 2 subdivision plan as 'Unresolved Land Use' in accordance with the Mamre Road Precinct Development Control Plan: Part 3.4 Transport Network - Control 25 and designed in accordance with Figures 12 & 16 and Table 9 of the DCP.</p>	<p>The approved development is subject to the site-specific DCP and the controls contained in the Mamre Road Precinct DCP are not relevant to the subject modification application or approved development. The Open Space edge road is not the subject of this modification application.</p>
<p>3. Waterways Considerations</p> <p>It is not understood that any changes are proposed with respect to the approved stormwater treatment systems. Notwithstanding this, the following matters are raised in relation to water quality:</p> <ul style="list-style-type: none"> Clarification is required in relation to the need for the development to comply with the water quality controls in the Section 2.4 of Mamre Road Precinct DCP, as it is noted that the approved strategy does not. The Mamre Road Precinct DCP has been adopted without savings provisions and in this respect compliance with the Water Management controls in the DCP shall be sought. Submitted documentation indicates that road cross section widths will be reduced resulting in the loss of the 5m central median which is not supported (also addressed above) owing to the loss of opportunity for canopy vegetation and other negative impacts. <p>Council advises that, in the context of the objectives and vision for the Parkland City, the removal of the central median will result in a loss of opportunities to provide canopy coverage throughout the estate. It is requested that DPIE require the retention of the central median and landscaping.</p>	<p>No change to the approved stormwater treatment systems or infrastructure are proposed as part of this modification application. The approved stormwater infrastructure has been appropriately sized to accommodate the proposed modifications, as addressed in the Civil Engineering documentation provided.</p> <p>Medians have been provided in accordance with the Mamre Road Precinct DCP, noting generally medians are not required for any roads within the Estate (based on the confirmed road hierarchy) except at intersection locations.</p> <p>For the north-south road (Road 1), confirmed as a Typical Collector Road (Mamre Road Precinct DCP Figure 12), medians of 0.8m width are required at intersection location (per Mamre Road Precinct DCP Table 9). The submitted intersections designs for Road 1 and 3, and 1 and 2, have provided 0.8m wide medians in accordance with the Mamre Road Precinct DCP.</p>
<p>4. Landscape Considerations</p> <p>(a) <u>Submitted Plans</u></p> <p>The applicant shall be required to provide a higher level of detail in support of the application. Detailed and larger scale sections through all boundary interfaces (internal and external) are to be provided for the Department's consideration.</p>	<p>The landscaping details are generally unchanged from the approved development, as the same landscaping setbacks remain.</p>



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	<p>In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p>
<p>(b) Mamre Road</p> <p>The boundary interface with the upgraded Mamre Rd is not resolved, particularly in relation to level changes, associated materials (retaining walls) and potential for damage to setback plantings during upgrade works.</p> <p>The setback treatment must be informed by preliminary designs for Mamre Road as well as a cut and fill strategy for the road corridor.</p> <p>The DCP should have addressed these points and the Department should therefore develop this landscape character and provide this information to relevant parties.</p> <p>Further, to ensure consistency of landscape character and visual amenity, the setback along the Mamre Road corridor requires a coordinated planting design (including species) that informs each SSD application. It is recommended that this be the case for any other significant road corridor that passes through a number of precincts.</p>	<p>The Mamre Road landscaping details are unchanged from the approved development.</p> <p>In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p>
<p>(c) Southern Link Road</p> <p>The road and verge arrangement of both the future Southern Link Road and Bakers Lane is not clear. Trees are proposed however there is a lack of information about verge widths, their relationship to other infrastructure proposed in the verge and how these translate to the Southern Link Rd further east (Oakdale precincts).</p> <p>Completed and approved tree species further east should inform this design with a view to achieve a consistent landscape character corridor.</p>	<p>The landscaping details are generally unchanged from the approved development. The verge widths are documented on both the civil engineering and on the landscape drawings submitted.</p> <p>In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p>
<p>(d) Streetscapes</p> <p>It is vital that the applicant provide high quality landscape plans and details for consideration by the Department, and specifically that the applicant provide greater detail in relation to street tree planting and streetscapes.</p> <p>The high importance of street tree planting in Western Sydney shall be illustrated and be evident in the Department's assessment (and any determination) of the application.</p>	<p>The landscaping details are generally unchanged from the approved development. In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p> <p>The landscaping details are generally unchanged from the approved development.</p>

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<p>Strong regard is to be had of what this development's contribution to canopy cover, heat island impacts, sustainability and streetscape amenity will be.</p> <p>In relation to street tree planting and streetscapes, it is recommended that the Department directly address and quantify the proposal's contribution to the aims and objectives of the overarching strategic planning policies and guidelines requiring elevated streetscape design and minimum targets for canopy cover in this Precinct and for greater Western Sydney.</p> <p>Continuous street tree canopy must be provided in accordance with the adopted DCP as an absolute minimum.</p> <p>Street tree species for each street have not been specified and the applicant's landscape architect is required to liaise with Council's Tree Assets department to agree on species for each road type, according to available rootzone soil volume and likely soil profile and composition.</p> <p>Species diversity for resilience and wayfinding and maximum canopy spread relative to the available rootzone soil volume with mediums sized tree height are Council requirements. The species are to be agreed for all streets in the precinct to enable consistency in the landscape design for each subsequent Warehouse application.</p> <p>Front setbacks and boundary interfaces with the public domain should provide maximum screening and cooling canopy to support street trees that may be smaller due to available rootzone soil volumes.</p> <ul style="list-style-type: none"> • The front setback to Stage 1 Subdivided Lot 2 (cross section FF) does not demonstrate adequate setback planting height – this should be amended from 6m high trees to 10-15m high trees. • The interface with open space along the southern boundary requires resolution, particularly in relation to screening, maintenance access and responsibility. • The boundary and setback planting is not provided along Mamre Road for Lot 9 which is not supported. The planting treatment including width should be continuous along the Mamre Road frontage. 	<p>In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p> <p>The landscaping details are generally unchanged from the approved development. In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p> <p>The Estate will achieve a canopy cover of 16.87% which complies.</p> <p>The landscaping details are generally unchanged from the approved development. In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p> <p>The landscaping details are generally unchanged from the approved development. In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p> <p>The landscaping details are generally unchanged from the approved development. In accordance with Condition B86 of SSD 9522, the detailed Landscape Plan will be prepared in consultation with Council in accordance with the approved development. The proposed modifications will not alter compliance with this.</p>



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<ul style="list-style-type: none"> Similarly, this should be applied to the northern side of Bakers Lane. All street trees should be planted as per Council's online Street and Park Tree Management Plan (as is required by the Mamre Road Precinct DCP). A detailed street tree plant schedule is to be provided and is to be prepared and submitted to DPIE for assessment and inclusion. <p>(e) <u>Maintenance and operational details</u></p> <p>Details of maintenance access have not been provided and are required.</p> <p>It is raised for the Department's consideration that a plant establishment period of 52 weeks is considered minimum industry practice, not 26 weeks.</p>	
<p>(f) <u>Other landscape matters</u></p> <p>The percentage of canopy coverage for the site (public and private domains) and how this contributes to the 40% target should be calculated and a breakdown provided in the landscape report. This must for part of DPIE's assessment. This information should be provided and built upon for subsequent Warehouse applications.</p>	The Estate will achieve a canopy cover of 16.87%. Including Stage 1 Lots 3, 4 & 5 and the RE1 Recreation zone, the Estate will achieve a total canopy cover of 24.67%.
<p>TfNSW Comments (3 December 2021)</p> <p>It is noted that the report has analysed the traffic impacts for the Estate-wide traffic based on the Gross Floor Area (GFA) being 421,820 m² and some potential developments to the south of Mamre South Precinct (MSP) (also called the 'Southern Lots'). Whilst it is stated that the report has included the 'southern lots' in the analysis, it is unclear what the 'southern lots' assumed GFA is and whether this was included in the overall assessment of the intersections.</p> <p>Clarification is required to understand what the assumed GFA is of the 'southern lots' and whether the traffic yield was included in the model.</p>	<p>The assumed GFA for the 'southern lots' is 20,000m², as referred in the Response to Submissions traffic addendum supporting the approved Concept Plan (SSD-9522) submission.</p> <p>Traffic associated with this Southern Lots yield was included in the model for years 2026, 2031 and 2036 for Sequence 1A.</p>
<p>The TIA states that at the request of DPIE modelling has been undertaken for the approved Modified Sequence 1A for the years of 2026, 2031 and 2036. Whilst TfNSW appreciates the modelling applied to date, it is unclear what growth rate was applied to the future year models.</p> <p>It is recommended that further clarification is provided as to what growth rates were applied for the years of 2026, 2031 and 2036.</p>	<p>The following background growth rates have been adopted for the purpose of the future year models:</p> <ul style="list-style-type: none"> 2% per annum on Mamre Road; and 1% per annum on Bakers Lane (and Southern Link Road (SLR) in latter access Sequences). <p>The traffic profiles for the above growth rates have been within figures 5 - 7 of the submitted Technical Note by Ason Group (P1780r01v7 TN_Kemps Creek SSD-9522 MOD 2).</p>

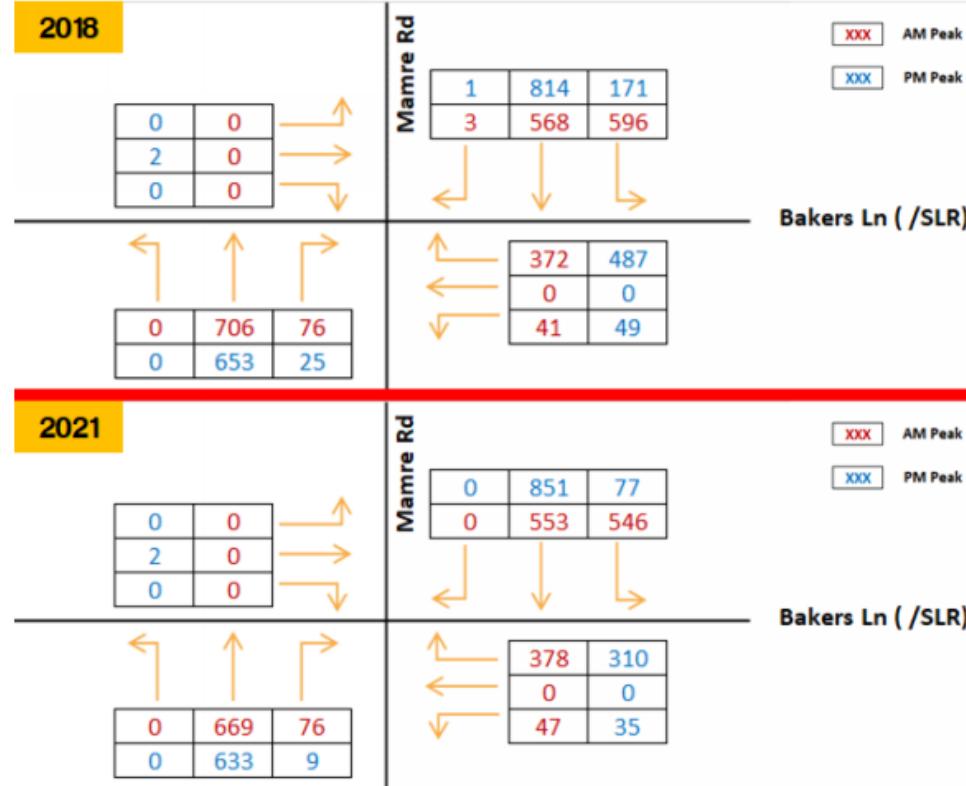


Summary of, and response to comments	
Comments	Response
	<p>The adopted growth rate is consistent with what has been done previously within the approved SSD-9522 Ason Group TA and the approved SSD-9522-MOD 1 Ason Group Traffic Impact Assessment.</p>
<p>The TIA provides some modelling summary tables however it is unclear from these summaries what the model inputs are. There is no SIDRA movement summaries which provide summarised information in reviewing models. However TfNSW were provided the SIDRA (sid.) files and outputs based on the TIA dated 6 September 2021.</p>	<p>After the meeting with TfNSW held on 14 October 2021, Ason Group provided TfNSW with the SIDRA modelling results (as a zipped file) for the years 2025, 2026, 2031 and 2036 for Sequence 1A.</p> <p>(A copy of the modelling outputs is again provided in Attachment A following changes to model labels, per separate comments below).</p>
<p>In this regard TfNSW provides the following comments on the model provided from the abovementioned TIA:</p> <p>i. The SIDRA movement summaries show that not all demand in the AM peak are able to pass through the network as indicated by the highlighted values. The actual delays / DoS / queues may be worse if they were accounted for. The primary issue appears to be the substantial number of vehicles travelling along Mamre Road. There appears to be almost 1900 vehicles at the North Approach of Mamre Road / Bakers Lane. To provide some perspective, accounting for the 17% HV on this approach would result in a mid-block LoS of E (or even F) at 80km/h using density based LoS from the HCM for freeways. It is suggested that the consultant determine whether the capacity of the road is even able to sustain the forecast demand using HCM / AustRoads prior to modelling.</p>	<p>It is acknowledged that mid-block demands will increase over time and, accordingly, TfNSW has identified the need to widen Mamre Road to 4 lanes in the near future with the provision of up to 6 lanes in the longer term. Broader upgrades to Mamre Road and delivery of other key connections like the Southern Link Road are welcomed in acknowledgement of the future demands forecast.</p> <p>However, delivery of these broader road upgrades is ultimately a matter for TfNSW in its role as the roads authority and is not something that a single Applicant should be reasonably burdened with. Rather than forming a requirement for this specific development in isolation, it is proposed that these broader upgrades to Mamre Road being undertaken as part of the staged infrastructure delivery to support the broader Mamre Road Precinct.</p> <p>Importantly, the removal of Sequence 1B does not compromise the operation of the approved Sequence 1A intersection.</p>
<p>ii. Further to the abovementioned point, as there are clear Mid-block capacity constraints, further justification is needed to understand why the removal of the midblock widening under Sequence 1b is no longer considered necessary.</p>	<p>In addition to the comment above with regards to the infrastructure development under Sequence 1B, it is noted that there are significant challenges and costs associated with widening Mamre Road towards the north as there is an existing Sydney Water Pipeline along with other existing infrastructure within the surrounding area. Due to the high costs of delivery, it is proposed that this cost be reasonably distributed across the Mamre Road Precinct development, so that a single Applicant is not unreasonably burdened by this upgrade, which serves not just the Mamre Road Precinct and this Site but also the broader area noting the regional role that Mamre Road serves. Importantly, the removal of Sequence 1B does not compromise the operation of the approved Sequence 1A intersection.</p> <p>The removal of that commitment from the Applicant is reasonable. However, those upgrades should still be progressed in a timely manner to support future network</p>



Summary of, and response to comments	
Comments	Response
iii. The SIDRA model labelling should be updated to include labels for each lane movement for clarity. In addition model headings should accurately detail what model is being presented.	<p>traffic growth.. Any such upgrade should be reasonably apportioned for the delivery at a broader precinct level as opposed to this one development.</p> <p>The SIDRA model has been amended, as per TfNSW's request and has been shown within Attachment A for review.</p> <p>It is noted that this includes renaming of the models to aid review but no material changes to the model inputs.</p>
iv. The cycletimes shown in the movement summary are not consistent. The cycletimes in this area are linked and therefore should be modelled with this consideration. In this regard as per previous discussions TfNSW would accept a maximum cycletime of 120 seconds for this area. Fixed Time Coordinated / Isolated / optimum etc cycletimes will not be supported.	<p>It is noted that the cycletimes provided within the modelling supporting the approved Sequence 1A (for the year 2025) have not been changed for the future years 2026, 2031 and 2036.</p> <p>As the proposed models for year 2026, 2031 and 2036 are consistent with the approved Sequence 1A (for the year 2025) – with the exception of the background growth factor – additional modelling (with changed cycletimes) for years 2026, 2031 and 2036 is not required. Importantly, the removal of Sequence 1B does not compromise the operation of the approved Sequence 1A intersection.</p>
It is recommended that SIDRA referred to in the TIA dated 6 October 2021 be provided for review (including the Base models). In addition should the SIDRA analysis be consistent with the outputs provided in 6 September 2021 the model is to be updated to consider the above.	<p>After the meeting with TfNSW held on 14 October 2021 (where the review process for the Ason Group TIA dated 6 October 2021 had taken place), Ason Group provided TfNSW with the SIDRA modelling results (as a zipped file) for years 2025, 2026, 2031 and 2036 for review. Importantly, the removal of Sequence 1B does not compromise the operation of the approved Sequence 1A intersection.</p> <p>Nevertheless, further SIDRA models are provided as part of this response – with updated model names per Item 6 – to aid review.</p>
This should include SIDRA output and raw SIDRA (.sip) files. This will enable our modelling and traffic teams to undertake a detailed review of the model to ensure that the inputs are accurate and supported. Further comments can be provided following the review of the models which may require the assessment to be updated.	<p>Previous SIDRA files and SIDRA modelling outputs have been provided to TfNSW for review.</p> <p>The updated SIDRA modelling output results (with the amended labelling) will be provided to TfNSW within Attachment A for review, with the updated SIDRA output files provided separately to TfNSW within an email.</p>
TfNSW Comments (9 February 2022)	
TfNSW has reviewed the designs of both Sequence 1A Modified and Sequence 1B to understand what the risks are should Sequence 1B not be constructed. TfNSW raises the following issues to the Department with Sequence 1A Modified which would be eliminated with the provision of Sequence 1B:	<p>It should be noted that the detailed design for Modified Sequence 1A has been developed in accordance with the Austroads Guide and relevant TfNSW Supplements and Specifications. A Road Safety Audit (RSA) has also been conducted on the detailed design, in accordance with TfNSW Guidelines to Road Safety Audit Practices, with incorporations of the appropriate corrective actions.</p>



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<p>i. The “one lane to two lanes” and “two lanes to one lane” merging and diverging manoeuvres in close proximity to one another have been shown to create queuing. (examples are westbound on the G.W.H. west of Katoomba and eastbound on the G. W. H. approaching Mount Victoria/Blackheath also the M1 north and south of Sydney during the holiday periods).</p>	<p>TfNSW's design review comments have also been incorporated in the development of the design (currently in the 100% detailed phase).</p> <p>The baseline traffic volumes on the Mamre Road / Bakers Lane intersection for the surveyed year 2018 and 2021 are shown in the figure below.</p>  <p>2018</p> <table border="1"> <thead> <tr> <th></th> <th colspan="2">Mamre Rd</th> <th colspan="2">Bakers Ln (/SLR)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>814</td> <td>171</td> <td>372</td> <td>487</td> </tr> <tr> <td>3</td> <td>568</td> <td>596</td> <td>0</td> <td>0</td> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>41</td> <td>49</td> </tr> </tbody> </table> <p>2021</p> <table border="1"> <thead> <tr> <th></th> <th colspan="2">Mamre Rd</th> <th colspan="2">Bakers Ln (/SLR)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>851</td> <td>77</td> <td>378</td> <td>310</td> </tr> <tr> <td>0</td> <td>553</td> <td>546</td> <td>0</td> <td>0</td> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> <td>47</td> <td>35</td> </tr> <tr> <td>0</td> <td>669</td> <td>76</td> <td>0</td> <td>0</td> </tr> <tr> <td>0</td> <td>633</td> <td>9</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Based on the figure above, the total traffic volumes heading northbound / southbound on Mamre Road are summarised as follows:</p>		Mamre Rd		Bakers Ln (/SLR)		0	814	171	372	487	3	568	596	0	0	0	0	0	41	49		Mamre Rd		Bakers Ln (/SLR)		0	851	77	378	310	0	553	546	0	0	0	0	0	47	35	0	669	76	0	0	0	633	9	0	0
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	<p>In this regard, it is important to give consideration to the existing capacity of Mamre Road with one lane, regardless of the development traffic. With reference to Section 4.2.3 of the TfNSW (formerly RTA) Guide to Traffic Generating Developments, the existing link Level of Service (LoS) along Mamre Road is shown in below table:</p> <table border="1"> <thead> <tr> <th colspan="3" style="text-align: center;">Existing Link LoS</th></tr> <tr> <th>Peak Hour / Direction</th><th>NB</th><th>SB</th></tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">2018</td></tr> <tr> <td>AM Peak</td><td>E</td><td>C</td></tr> <tr> <td>PM Peak</td><td>E</td><td>D</td></tr> <tr> <td colspan="3" style="text-align: center;">2021</td></tr> <tr> <td>AM Peak</td><td>E</td><td>C</td></tr> <tr> <td>PM Peak</td><td>D</td><td>D</td></tr> </tbody> </table>		Existing Link LoS			Peak Hour / Direction	NB	SB	2018			AM Peak	E	C	PM Peak	E	D	2021			AM Peak	E	C	PM Peak	D	D
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	<p>The following table also confirms the baseline VoC on Mamre Road in the immediate vicinity of Bakers Lane:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Capacity Ratio Formula (Mamre Road)</th> </tr> <tr> <th>Peak Hour / Direction</th> <th>NB (veh)</th> <th>SB (veh)</th> </tr> </thead> <tbody> <tr> <td align="center" colspan="3">2018</td></tr> <tr> <td>AM Peak</td><td>1.078</td><td>0.609</td></tr> <tr> <td>PM Peak</td><td>1.140</td><td>0.863</td></tr> <tr> <td align="center" colspan="3">2021</td></tr> <tr> <td>AM Peak</td><td>1.047</td><td>0.580</td></tr> <tr> <td>PM Peak</td><td>0.943</td><td>0.886</td></tr> </tbody> </table> <p>As noted in the above table, the existing traffic volumes heading northbound exceed the Mamre Road Lane capacity for 2018 during the AM and PM Peaks and 2021 during the AM Peak. Traffic volumes heading southbound in 2018 and 2021 during the PM Peak indicate that Mamre Road is operating near capacity as well. Therefore, it is evident that the link capacity issues along Mamre Road is an existing concern which does not relate to the Kemps Creek Estate development. This issue has been discussed with TfNSW in the early stages of the project and identifies the need for upgrading Mamre Road to two lanes even without this development.</p> <p>It is acknowledged that the JV has agreed to upgrade Mamre Road to two lanes from the northern boundary of the Site to the Mamre Road / Distribution Drive intersection. However, it does not necessitate the fact that the issue of the link capacity is only relevant to this development. It is also noted that by the 2025 / 2026 future assessment years, the background growth (again without the development traffic) exacerbates this issue.</p>		Capacity Ratio Formula (Mamre Road)			Peak Hour / Direction	NB (veh)	SB (veh)	2018			AM Peak	1.078	0.609	PM Peak	1.140	0.863	2021			AM Peak	1.047	0.580	PM Peak	0.943	0.886
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	<p>Based on the approved TA, the development traffic with 421,820m² GFA ONLY adds a net increase to the overall traffic on Mamre Road by 14% (NB) to 15% (SB) during the AM Peak and 22% (NB) to 17% (SB) during the PM Peak on Mamre Road, north and south of Bakers Lane by 2026 and really does not trigger upgrade for two-lanes in each direction by itself.</p> <p>Following the original SSD approval and upon further review of the project scope, it was established that upgrading Mamre Road to two lanes from the Site boundary to Distribution Drive, as stipulated in Condition B11, is not feasible which triggered the need for the MOD 2 application. Accordingly, the JV requested Ason Group to review opportunities for the localised upgrade at the Mamre Road / Bakers Lane signal.</p> <p>This, in fact, means that the Proposal intends to accommodate all of its vehicular demand as well as Southern Lots traffic to / from Mamre Road without any additional and material impact onto the surrounding road network (Modified Sequence 1A).</p> <p>We again emphasise that the design and modelling of Modified Sequence 1A has already been approved as part of MOD 1 and the current MOD 2 only requests removal of Sequence 1B on the basis that the approved Modified Sequence 1A can carry the development traffic without Sequence 1B in the longer-term future (refer to Attachment A for approved SIDRA modelling results). As such, consideration should mainly be given to the existing lane capacity issues for these signals to remain as a matter for TfNSW and other developers to review and discuss as part of other wider traffic studies.</p> <p>With regards to the above, it is important to compare the overall modelling results of Sequence 1B and Modified Sequence 1A with the development traffic for the modelling horizon 2026. A summary of the results are shown in the table below with detailed results outlined in Attachment B of Appendix 2.</p>

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	<p style="text-align: center;">SIDRA Modelling Results (Attachment B)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5">Sequence 1B – Mamre Rd / Bakers Ln (80 sec cycletime) with Development Traffic</th> </tr> <tr> <th>Time</th> <th>Queue (m)</th> <th>DoS</th> <th>LoS</th> <th>AVD</th> </tr> </thead> <tbody> <tr> <td>AM</td> <td>193.3</td> <td>0.947</td> <td>C</td> <td>37.9</td> </tr> <tr> <td>PM</td> <td>271.6</td> <td>1.016</td> <td>D</td> <td>51.9</td> </tr> <tr> <th colspan="5">Modified Sequence 1A - Mamre Rd / Bakers Ln (80 sec cycletime) with Development Traffic</th> </tr> <tr> <th>Time</th> <th>Queue (m)</th> <th>DoS</th> <th>LoS</th> <th>AVD</th> </tr> <tr> <td>AM</td> <td>193.3</td> <td>0.947</td> <td>C</td> <td>37.9</td> </tr> <tr> <td>PM</td> <td>271.6</td> <td>0.959</td> <td>D</td> <td>45.2</td> </tr> </tbody> </table> <p>As noted above, the overall results for Sequence 1B and Modified Sequence 1A are similar during the AM Peak. However, Modified Sequence 1A operates at a better DoS and AVD in the PM Peak, when compared to its counterpart. Furthermore, it is noted that the queues from both Sequence 1B and Modified Sequence 1A does not encroach upon the merging lanes.</p> <p>Furthermore, with regards to item 15, the queue lengths at the specific right-turn movements for Modified Sequence 1A (modelling horizon 2026) with development traffic (for the Mamre Road / Bakers Lane intersection in isolation) is as follows:</p>					Sequence 1B – Mamre Rd / Bakers Ln (80 sec cycletime) with Development Traffic					Time	Queue (m)	DoS	LoS	AVD	AM	193.3	0.947	C	37.9	PM	271.6	1.016	D	51.9	Modified Sequence 1A - Mamre Rd / Bakers Ln (80 sec cycletime) with Development Traffic					Time	Queue (m)	DoS	LoS	AVD	AM	193.3	0.947	C	37.9	PM	271.6	0.959	D	45.2
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ii. The access to the Sydney Water Pipeline from the northbound carriageway will be located soon after the end of the two lanes to one merge. The existing nearside shoulder in the vicinity of the pipeline is only 2m wide thereby requiring Sydney Water maintenance vehicles wishing to access the pipeline to decelerate partly in the through lane. This would not be desirable given that northbound drivers who have accelerated to operating speed and concentrated on merging safely could then have to contend with a maintenance vehicle slowing in front of them to access the pipeline.	<p>It is noted that the above queues can be well accommodated by the following right turn bay pockets:</p> <ul style="list-style-type: none"> ▪ Right-turn bay at northern leg: 220.0m; ▪ Right-turn bay at eastern leg: 120.0m; ▪ Right-turn bay at southern leg: 200.0m; and ▪ Right-turn bay at western leg: 150.0m. <p>The access to the WaterNSW pipelines is approximately 180m from the end of taper. The Stopping Sight Distance for a design speed of 90km/h is 107m, in accordance with Austroads. Therefore, this comment is not deemed a safety issue (noting that this has not been identified in the Road Safety Audit). In addition, the visibility at this location is good due to the straight geometry of the road and the position of the pipeline access at a crest.</p> <p>It should be noted that maintenance vehicles accessing the pipelines that are decelerating in the through lane is an existing condition. Improving access to the pipeline is outside the scope of this development.</p>																			



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iii. Street lighting will be required in the vicinity of the two lanes to one merge on the northbound carriageway north of Bakers Lane.	This is addressed in the detailed design. The 100% Detailed Design had been submitted to the PV for review and will be passed on to TfNSW for subsequent review.
iv. The 80% detailed design drawings for Sequence 1A Modified show that there are two driveways adjacent to the diverge from one lane to two south of the pipeline. Drivers travelling at operating speed and concentrating on whether they needed to diverge to the offside lane to access the Bakers Lane right turn lanes or remain in the nearside lane could then have to contend with a vehicle slowing in front of them to access one of the driveways.	<p>Safety issues have been addressed in the detailed design development including the incorporation of corrective actions from the Road Safety Audit findings, HSID workshop and design review comments from TfNSW.</p> <p>It is not anticipated that the comment raised would be a significant issue. It should be noted that this is an existing condition on a single lane approach. The diverging lane on the design is expected to make this condition better by providing the opportunity for overtaking.</p>
v. There is no runout area in the vicinity of the two lanes to one merge on the southbound carriageway north of the Sydney Water pipeline for drivers who have had difficulty merging.	Shoulder widening for errant merging vehicles have been designed in both directions, in accordance with Austroads and relevant standards and specifications. These were shown in the 80% Detailed Design and retained in the 100% Detailed Design submission.
The abovementioned safety concerns would be eliminated with the provision of Sequence 1B. In this regard TfNSW recommends that Condition B11 be retained to ensure a safer long term option is provided as the traffic increases as a result of this development.	Refer to responses detailed above.
The cycletime provided in the report should reflect a more realistic approach and worst case scenario should modelling be provided to justify the removal of Sequence 1B. The 80/90 second cycletimes are not realistic. The optimum SCATS Cycle Length for the corridor should consider a cycletime of 120 seconds (at a minimum). It should be noted, experience has revealed that if there is a Double Diamond Overlap (D.D.O.) intersection in the corridor, a 120 second may even be too low. This is the case if one or more of the four "Alternative Phases" (i.e. "B", "C", "F1" or "F2") are introduced. This will normally be the case in peak periods.	<p>It is noted that the cycletimes provided within the model supporting the approved Sequence 1A has not been changed for the additional scenarios reviewed for future years 2026, 2031 and 2036.</p> <p>Notwithstanding, to address this comment, we have undertaken option testing for the Mamre Road / Bakers Lane intersection for Modified Sequence 1A in isolation to showcase the modelling results for the 120 second cycletime.</p> <p>The results of this option testing are shown within Attachment C with SIDRA files provided along with this memo.</p> <p>The results of this option testing indicate the following:</p> <ul style="list-style-type: none"> ▪ AM Peak (with development traffic): <ul style="list-style-type: none"> - LoS C (with no legs operating at LoS F); - DoS < 0.900 (including all legs); and - All queues can be stored within the respective pockets.



Summary of, and response to comments	
Comments	Response
	<ul style="list-style-type: none"> ▪ PM Peak (with development traffic): <ul style="list-style-type: none"> - LoS D (with no legs operating at LoS F); - DoS < 0.900 (including all legs); and - All queues can be stored within the respective pockets. <p>The results within Attachment C of Appendix 2 also indicate that even with the Kemps Creek development traffic at 421,820m2 plus the Southern Lots, there are minor changes to the overall LoS, queue lengths and DoS.</p>
TfNSW does not consider the justification that the 80/90 second cycletime was used to determine the approved Sequence 1A Modified as a supported reason.	<p>Noted.</p> <p>Hence, we have undertaken the above additional option testing to assess the 120 second cycletime. Furthermore, the results contained within Attachment C demonstrate that Modified Sequence 1A will achieve an acceptable LoS and DoS with the higher cycletimes.</p>
TfNSW has concerns that reducing the footprint of road upgrades to Sequence 1A Modified only, may lead to worse results than what has been represented in the model to date.	<p>Refer to response to Item 8.</p> <p>It was concluded that the footprint does not lead to worse results as has been described above.</p>
TfNSW recommends that all the models be updated to reflect the abovementioned cycletime. This should be rectified to enable a robust review of the modelling results and for it to be representative of realistic operation of the corridor.	<p>Refer to response provided within Item 8 and results shown within Attachment C of Appendix 2.</p> <p>Furthermore, it is concluded that the 120 second cycletime analysis does not impact on the operation of the intersection (Modified Sequence 1A), as approved.</p>
Although it is stated the 'the removal of Sequence 1B does not compromise the operation of the approved Sequence 1A intersection', this statement does not account for the impacts upstream/downstream in the vicinity of this intersection. SIDRA movement summaries should be provided for Sequence 1B to understand what the impacts are to these intersections.	<p>It is noted that the impacts upstream / downstream on Mamre Road is an existing issue regardless of this development. The link capacity constraints, north and south of Bakers Lane have been discussed with TfNSW during the course of this project. Notably, as the timing for Stage 2 of the Mamre Road upgrade work is yet to be determined, we suggest that a minimum localised widening would be required to access the Site. This has satisfactorily been achieved under Modified Sequence 1A with almost similar operations and with no additional impact outside the signalised intersection proposed by JV.</p> <p>Furthermore, TfNSW has identified the need to widen Mamre Road to 4 lanes in the near future with the provision of up to 6 lanes in the longer term, to cater for the additional vehicles heading on this road. Certainly, broader upgrades to Mamre Road and delivery of other key connections like the Southern Link Road are welcomed in acknowledgement of the future demands forecast.</p>



Summary of, and response to comments	
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	<p>However, delivery of these broader road upgrades is ultimately a matter for TfNSW in its role as the roads authority and is not something that a single Applicant should be reasonably burdened with. Rather than forming a requirement for this specific development in isolation, it is proposed that these broader upgrades to Mamre Road being undertaken as part of the staged infrastructure delivery to support the broader Mamre Road Precinct.</p> <p>For a more detailed discussion regarding the existing upstream / downstream traffic volumes on Mamre Road, refer to the discussion detailed within item 2.</p>
<p>It is recommended that the SIDRA movement summaries for Sequence 1B are provided for review and comparison. All movement summaries should be provided for any updated modelling.</p>	<p>The SIDRA movement summary for Sequence 1B has already been provided to TfNSW for review.</p> <p>However, this movement summary has been attached again within Attachment D of Appendix 2.</p>
<p>It is difficult to compare the results and determine whether there is any significant impacts to the signal operation should Condition B11 be removed. The following observations are made in abeyance of the requested model:</p> <p>2026 Modified Sequence 1A</p> <p>i. Mamre Rd & Bakers Ln</p> <ul style="list-style-type: none"> ▪ Intersection of Mamre Road & Bakers lane appears to perform worse without Sequence 1B (based on 2025 Sequence 1B with SL); ▪ AM Peak – ▪ Right turn lane on north leg is operating at LOS F, 0.917 degree of saturation (DOS), and average of 1.37 cycles to depart; ▪ Right turn lane on east leg is operating at LOS F, 0.899 DOS, and at with average of 1.34 cycles to depart; ▪ PM peak – ▪ Most right turn movements are operating at LOS F ▪ North leg through movement is at LOS D at 0.839 DOS and drivers required on average 1.03 cycles to pass through the intersection; 	<p>It is important to clarify that as acknowledged by TfNSW, this intersection would operate at a LoS C or D at the AM and PM Peaks respectively for the modelling horizon, 2026.</p> <p>In this regard, Section 4.2.2 of the TfNSW (formerly RTA) Guide to Traffic Generating Developments states that for signalised intersections:</p> <p><i>“The best indicator of the level of service at an intersection is the average delay experienced by vehicles at that intersection. For traffic signals, the average delay over all movements should be taken.”</i></p> <p>Furthermore, the modelling results show that Mamre Road, a major north-south connection, will operate at a satisfactory LoS, with reasonably low delays on through movements. This is an ideal outcome for the broader network travel times and is typical of the priority afforded to a Classified Road.</p> <p>Notwithstanding, the Modified Sequence 1A results (with 80 second cycletime) shown within Attachment B in Appendix 2 indicate that there are minor differences within the AVD and LoS, with and without the development traffic at</p>



Summary of, and response to comments	
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<p>Despite the overall intersection LOS of D, having LOS F on individual movements, especially with high levels of queuing and number of cycles to depart, has an increased risk of drivers running the red light</p> <p>ii. Appendix 8 – TIA (P1780r01v7 TN_Kemps Creek SSD 9522 MOD 2)</p> <ul style="list-style-type: none"> The SIDRA Network layout in Figure 8 appears to indicate that under Modified Sequence 1A, the section of Mamre Road between Distribution Drive (Mamre West precinct access) and James Erskine Drive is two lanes in each direction. However, the existing section is only one lane in each direction. This needs to be updated to reflect the actual lane arrangement. 	<p>all the legs for both the AM and PM Peaks. Therefore, as noted within item 2, the issue lies with the amount of existing vehicles on Mamre Road with background traffic growth being a result of all developments within the precinct.</p> <p>It is important to emphasise that under the Stage 2 Mamre Road upgrade work, this section of the road (from Distribution Drive to James Erskine Drive) is expected to be upgraded by TfNSW (not as part of the SSD approval conditions). Hence, it makes sense to model this section as two lanes, noting future upgrades in the area. However, since the timing for the Stage 2 upgrade work has not been determined yet, we have undertaken an Option Testing to address this comment.</p> <p>Accordingly, the SIDRA Network layout has been amended to reflect TfNSW's request and the relevant movement summaries have been shown within Attachment E of Appendix 2.</p> <p>Furthermore, as shown within Attachment E, the additional options testing indicates that Modified Sequence 1A (with one lane in both directions) operates at an acceptable LoS.</p>
<p>It is recommended that all SIDRA movement summaries for Sequence 1B (and 1A Modified) are provided for review and comparison. All movement summaries should be provided for any updated modelling.</p>	<p>The following revised SIDRA modelling results (for the Mamre Road / Bakers Lane intersection in isolation) have been attached to Appendix 2:</p> <ul style="list-style-type: none"> Attachment A: Approved SIDRA modelling results for Sequence 1B and Modified Sequence 1A with 80 second cycletime (2025) with and without development traffic; Attachment B: SIDRA modelling results for Sequence 1B and Modified Sequence 1A with 80 second cycletime (2026) with and without development traffic; Attachment C: SIDRA modelling results for Modified Sequence 1A with 120 second cycletime (2026) with and without development traffic; Attachment D: SIDRA movement summary for approved sequence 1B (2025) with and without development traffic; Attachment E: SIDRA movement summary of amended Modified Sequence 1A (two lane approach at Distribution Drive) with and without development traffic; and Attachment F: SIDRA movement summaries of Sequence 1B and Modified Sequence 1A with 80 second cycletime (2026) and Modified Sequence 1A with 120 second cycletime (2026) with and without development traffic



Summary of, and response to comments	
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	Revised electronic SIDRA files will be emailed to TfNSW to review, along with this memo.
Central Western Team Comments	
Road widths and design proposed by SSD-9522 Mod 2 must comply with the Mamre Road Precinct Development Control Plan 2021.	The road widths as proposed maintain compliance with the Mamre Road Precinct DCP
The proposed revised road widths should ensure that the buildings within the development comply with the landscaped setbacks established within the Mamre Road Precinct DCP 2021.	The development as modified will continue to provide areas for landscaping which are generally consistent with the approved development and site-specific DCP. Where appropriate, landscaped setbacks in excess of the requirements have been provided to compensate for any minor carpark intrusion into the landscape setbacks required by road curves. The overall quantum of landscaping is increased.
DPIE's Chief Engineer should be consulted with respect to road safety and the design of the north-south road.	The complete road design has been provided within the submission of the modification application for review by DPIE's Chief Engineer if required.