

22 December 2022

Te Tupu Ngātahi
Supporting Growth
PO Box 105218
Auckland 1143

Todd Elder and Jo Hart
Auckland Council
135 Albert Street
Auckland
Private Bag 92300, Auckland 1142

Dear Todd and Jo

Re: Response to soft lodgement requests for further information - North West HIF – Redhills Arterial Transport Network and Trig Road Corridor Upgrade Projects

Thank you for engaging with Te Tupu Ngātahi prior to lodgement of the above Projects. This letter contains our responses to the questions and comments provided by Auckland Council's specialists through the soft lodgement process. Refer to points 1 – 6 below.

The documentation has been updated in response to feedback where possible. Due to programme constraints some feedback has been responded to in this letter, which therefore should be considered part of the supporting documentation for the NORs.

The requests for information are set out in Table 1 below. Please let us know if any correspondence is not listed below.

Table 1: Requests for Information

Date	Topic
12 October 2022	<p><i>Supporting Growth Northwest Soft-lodgement – Response 1</i></p> <ul style="list-style-type: none"> Built Heritage Archaeology and Historic Heritage Arboriculture
26 October 2022	<p><i>RE: SGA NW Local - Soft Lodgement</i></p> <ul style="list-style-type: none"> Transport
28 October 2022	<p><i>Healthy Waters - Initial comments</i></p> <ul style="list-style-type: none"> Stormwater and Flooding

Date	Topic
31 October 2022	<i>Supporting Growth NW - HIF planning review (Notices of requirement)</i> <ul style="list-style-type: none">• Planning
14 December 2022	<i>NoR NW HIF Redhills and Trig Rd: Urban Design Comment</i> <ul style="list-style-type: none">• Urban Design

Yours sincerely



Bridget O'Leary

Planning Lead, North West HIF – Redhills and Trig Road

info@supportinggrowth.nz

0800 4769 255

Response to soft lodgement requests for further information

1. Planning and General Matters

Ref	NOR Request	Response	Relevant Document / Section
1	All Statutory Assessment I haven't been able to do a full statutory assessment for either Redhills or Trig Road HIF as Appendix B has not been included with the draft AEE and technical documents.	Noted.	Redhills and Trig Road: AEE Appendix B
2	All Conditions <ul style="list-style-type: none"> While I can see the types of conditions/management plans that are anticipated, a draft set of conditions has not been included Will there be an OPW condition which sets out the management plans that need to be submitted Will there be a condition which relates to the amendment of the designation boundary post construction to remove areas of the designation which are no longer required. 	<ul style="list-style-type: none"> Refer to Redhills - AEE Appendix C and Trig Road – AEE Appendix E for proposed designation conditions. Proposed consent conditions for Trig Road are contained in AEE Appendix D. Management plan requirements are set out in proposed designation conditions 6 and 7. Proposed designation condition 3 requires review and amendment of the designation boundary post-construction. 	Redhills: AEE Appendix C Trig Road: AEE Appendix E
3	All Memo – HIF Gap Analysis In regards to planning review, it sufficiently identifies parts of the AEE that need to be updated.	Noted.	
4	Trig AEE <ul style="list-style-type: none"> Section 4.2 Planning context - Designation 4667 (Ministry of Education – Trig Road Primary School) will need to be included Section 9 Section 171(1)(d) Any other matters - Should the Hauraki Gulf Marine Park Act also be included? The definition of catchments means any area of land where the surface water drains into the Hauraki Gulf. Map in act includes Whenuapai/upper reaches of the Waitematā Harbour. 	<ul style="list-style-type: none"> Designation 4667 included in Section 5.2 Planning Context. Refer to Sections 13.2.4 and 13.3 of the AEE. 	AEE Section 5.2 AEE Section 13.2.4 and 13.3

2. Transport

Ref	NOR	Request	Response	Relevant Document / Section
1	All	<p>Scope of Stakeholder Engagement</p> <ul style="list-style-type: none"> Has engagement been undertaken with Royal New Zealand Defence Force (RNZDF), with regards to proximity and resulting transport effects of NOR proposals on the Whenuapai Airbase area? Are there any height or obstacle limitation controls in the vicinity of the airbase which impact upon the NOR proposals? 	<ul style="list-style-type: none"> Engagement has been undertaken with the Ministry of Defence and the designs shared with them. The key matter raised during engagement was the potential bird strike risk at Trig Road if stormwater ponds were to contain standing water. In response a dry stormwater pond has been selected for attenuation of peak stormwater flows, mitigating this risk. Overall the Ministry of Defence were broadly comfortable with the Projects. Whenuapai airbase controls on landuse and subdivision are set out under their Designation 4311 Whenuapai Airfield Approach and Departure Path Protection and Chapter D23 of the AUP:OIP. Designation 4311 conditions state that restrictions do not apply to obstacles under 9m. The NOR designs do not include fixtures such as lighting, however, these would be built as per the AT Transport Design Manual which notes that lighting masts are up to 6m in height. These detailed matters will be confirmed at delivery and detailed design. On this basis there are no height or obstacle limitation controls that will impact on the NORs. 	<p>Trig Road: AEE Section 11.2.4</p> <p>Trig Road: AEE Section 3.1.4.2.1</p>
2	All	<p>Assessment of Transport Effects – Introduction (Chapter 2)</p> <ul style="list-style-type: none"> Paragraph 2 of the Introduction refers to the Whenuapai area being expected to be development ready by 2018-2022 with approximately 400 hectares to accommodate 6,000 dwellings. As the above timescale has already lapsed, please confirm, or update the above statement accordingly 	<ul style="list-style-type: none"> The Whenuapai area is expected to be staged for delivery. Whenuapai (SHA) was programmed to deliver approximately 1,150 dwellings in 2012, and Whenuapai Stage 1 between 2018 -2022. This area was planned to be released as part of Proposed Plan Change 5 as proposed by Council. This has recently been withdrawn. The overall expectation is that while this land release has been delayed, the longer-term intention for urbanisation remains and as such does not impact on the transport assessment. 	
3	All	<p>Assessment of Construction Traffic Effects</p> <ul style="list-style-type: none"> All Assessments of Transport Effects refer to the requirement for Auditing, monitoring and reporting requirements relating to traffic management activities to be undertaken in accordance with Waka Kotahi's incoming Code of Practice for Temporary Traffic Management. Please can this reference be updated to refer to the NZ Guide to Temporary Traffic Management (NZGTTM)? 	<ul style="list-style-type: none"> The standard referred to is still under development. See https://www.nzta.govt.nz/roads-and-rail/new-zealand-guide-to-temporary-traffic-management/. 	

4	All	<p>Assessment of Construction Traffic Effects Consideration of options to implement dynamic lanes</p>	<p>The necessity or requirement for dynamic lanes will be considered as part of future implementation business cases. The request links this to the assessment of Construction Traffic Effects. If dynamic lanes are considered appropriate to manage traffic during construction this will be detailed as part of the Construction Traffic Management Plan (condition 15).</p>	<p>Redhills: AEE Appendix C</p> <p>Trig Road: AEE Appendix E</p>
5	Redhills	<p>Scope of Assessment in Assessment of Transport Effects Report, Section 2.1 Scope of key transport features does not cover proposed improvements to Don Buck Road/ Royal Road, which are included in NOR1 (Redhills North-South Arterial Corridor). Please include these.</p>	<p>The intersection of Don Buck Road and Royal Road is included. The scope of works on Royal and Don Buck is related to intersection tie ins – rather than dedicated upgrades to these corridors. The corridor of Don Buck Road is included within the North West Local Redhills Riverhead Package. Royal Road is currently not proposed to be designated.</p>	
6	Redhills	<p>Scope of Assessment in Assessment of Transport Effects Report, Section 2.1 The south-eastern end of NOR1 adjoins NORs for RE1 (Don Buck Road) and for Royal Road. Clarity is required in relation to key transport characteristics and consistency in form with adjoining upgrade works.</p>	<p>There is no adjoining design for Royal Road at this stage. The indicative design has been developed to integrate back with the existing Royal Road corridor. The final design of these transitions will be confirmed prior to implementation and will be detailed in the Urban Landscape Design Management Plan (ULDMP) (condition 9). The facilities on Don Buck Road will tie in with the existing corridor to the south of the Royal Road intersection. To the north of the Royal Road intersection, the tie in point with RE1 is a midblock location. This point has been provided to enable either the NOR1 Royal Road intersection upgrade to occur first, or the Don Buck Road upgrade (RE1).</p>	<p>Redhills: AEE Appendix C</p>
7	Redhills	<p>Scope of intersection performance assessment in Assessment of Transport Effects Report Table 10 Please expand intersection performance assessment in Table 10 to additionally cover the proposed signalised intersections of:</p> <ul style="list-style-type: none"> • Dunlop Road (extended) / Baker Lane (extended) / East-West arterial corridor • East-West arterial corridor / North-South arterial corridor 	<p>Refer to attached memo (Appendix 1).</p>	
8	Redhills	<p>Table 10 of Assessment of Transport Effects Report indicates forecast LoS D at intersection of Royal Road / Don Buck Road</p> <ul style="list-style-type: none"> • Please undertake further assessment of adverse effects and how these can be appropriately managed or mitigated against and confirm if queue clears in one traffic phase. • Both roads are required to facilitate strategic movements by public transport and freight. While it is understood that AT may tolerate a Level of Service at low as D, further 	<p>The intersection of Don Buck Road and Royal Road has been assessed utilising peak commuter flows. This has been balanced against direction from the Urban Street and Road Design Guide – Design Hour which specifies that consideration is also to be given to the needs of users and functions for the rest of the day. Addressing only the performance of the peak hour can lead to very wide streets with excess capacity for the residual periods in the day.</p> <p>In addition to this, the impact of widening an intersection to provide for capacity has been balanced against urban design outcomes and</p>	

		<p>assessment is required to understand whether the intersection and wider network can still facilitate efficient movements of both freight and public transport. Further assessment may include analysis of journey and delay times, further analysis of queue lengths on individual approaches and performance during interpeak periods in addition to peak periods.</p> <ul style="list-style-type: none"> Also, please confirm whether the SIDRA models made allowances for pedestrian and cycle movements. 	<p>proposed impacts. Additional capacity will also be counter to wider objectives to encourage mode shift to walking, cycling and public transport.</p> <p>As such, it is considered that the performance of the intersection provides an appropriate balance of vehicle efficiency and a safe and attractive environment for cyclists and pedestrians.</p> <p>In addition to the above, the intersection of Royal Road and Don Buck Road has been designed to provide sufficient space for public transport priority measures.</p> <p>As noted in the Transport Assessment (refer Volume 4), whilst queuing for private vehicles is predicted at this intersection in the future, it is also experienced at the current roundabout. With projected growth levels, no improvement to the intersection would further exacerbate this current poor performance, and buses would also experience poor reliability and longer travel times.</p> <p>There will be periods in the peak commuter hour, where vehicles may not clear the intersection in one phase. As mentioned in the Transport Assessment, this is not unexpected in the peak hour and not considered to be a significant delay. Performance in the interpeak is expected to be better than in the peak hour.</p> <p>The SIDRA models have made allowances for pedestrian and cycle movements.</p>	<p>Redhills: Volume 4</p>
<p>9</p>	<p>Redhills</p>	<p>Project Interdependencies</p> <ul style="list-style-type: none"> The Assessment of Transport Effects does not identify any projects with interdependencies upon the subject NORs. Please identify and assess projects with interdependencies, such as NORs for upgrade works on adjoining sections of road. Interdependent projects could result in key transport effects upon the subject NORs and vice versa, which need to be understood. It may be appropriate to align timing and phasing of upgrade works on associated with adjoining NORs. 	<p>Two main interrelationships exist for the Redhills network in terms of network delivery. These exist at the main intersection points where the new offline network integrates with the existing online network at Fred Taylor Drive and Don Buck Road. The implementation of these intersections will be necessary to connect with the existing road network. These have been designed to include a designation footprint sufficient to integrate with the roading network, should the staging mean the new corridors occur before or after the existing road upgrades. There is also in particular a condition of the ULDMP (condition 9) to provide appropriate walking and cycling connectivity to, and interface with, existing or proposed adjacent land uses, public transport infrastructure and walking and cycling connections.</p> <p>At a wider network level, upgrades to Royal Road were identified as part of the North West DBC to provide future connectivity to the North West Rapid Transit Corridor. This interdependency was considered to be integral to the form and function of Royal Road, and as such further</p>	<p>Redhills: AEE Appendix C</p>

			<p>design to inform a potential NOR has been delayed until further design detail for the NWRTC is available. The proposed designation for the intersection of Royal Road and Don Buck Road as such integrates back into the existing Royal Road corridor.</p> <p>No other specific interdependencies have been identified, and the other operational assessments in the Transport Assessment assume that the long-term full network is in place. It is noted that the rate and sequencing of land use growth, wider growth pressures and timing of individual projects will change and evolve. This means that at the time of implementation the project will need to demonstrate how it will integrate with the prevailing urban form and surrounding road network.</p>	Redhills: Volume 4
10	Redhills	<p>Road Design Speeds Please can you confirm the design and posted speed limits of relevant roads.</p>	The design speed used to inform the indicative design was 60kph, with a posted speed of 50kph on all corridors. This is provided in Section 2.1 of the Transport Assessment.	Redhills: Volume 4
11	Redhills	<p>Assessment against AT Roads & Streets Framework (RASf)</p> <ul style="list-style-type: none"> The Assessment of Transport Effects does not include an assessment of the southern section of Trig Road against AT's RASf, with regards to 'Place' and 'Movement' functions and modal priorities. Please provide assessment. An assessment against the RASf would be consistent with the scope of assessment undertaken for the other NORs and would be expected to confirm whether place, movement and transport functions are consistent with those for adjoining NOR upgrade proposals. 	<p>A RASf assessment that considers place and movement has been completed for the corridors and included in Section 6.6 of the Transport Assessment.</p> <p>A modal priority assessment, a separate component of the RASf, has not been completed for these corridors. It is noted that a full RASf assessment is based on information available at the time of the assessment, and that the assessments are intended to also respond to land use context. As such, the modal priority assessments will be completed prior to implementation, and iteratively updated as land use becomes more certain. The RASf assessment is a live process.</p> <p>Within the context of the designation, the indicative cross section enables space for the implementation of a corridor that can respond to a range of modal priorities.</p>	
12	Trig	<p>Forecast LoS D at intersections of Trig Road / Hobsonville Road / Luckens Road in Table 10 of Assessment of Transport Effects</p> <ul style="list-style-type: none"> Please undertake further assessment of adverse effects and how these can be appropriately managed or mitigated against. Both Trig Road and Hobsonville Road are required to facilitate elements of usage by public transport and freight. While it is understood that AT may tolerate a Level of Service as low as D or E, further assessment is requested to understand whether the intersection and wider network 	<p>The intersection of Trig Road and Hobsonville Road has been assessed utilising peak commuter flows. This has been balanced against direction from the Urban Street and Road Design Guide – Design Hour which specifies that consideration is also to be given to the needs of users and functions for the rest of the day. Addressing only the performance of the peak hour can lead to very wide streets with excess capacity for the residual periods in the day.</p> <p>In addition to this, the impact of widening an intersection to provide for capacity has been balanced against urban design outcomes and proposed impacts.</p> <p>As such, it is considered that the performance of the intersection provides an appropriate balance of vehicle efficiency and a safe and</p>	

		<p>can still facilitate efficient movements of both freight and public transport.</p> <ul style="list-style-type: none"> Further assessment may include analysis of journey and delay times, further analysis of queue lengths on individual approaches and performance during interpeak periods in addition to peak periods. 	<p>attractive environment for cyclists and pedestrians. Additional capacity will also be counter to wider objectives to encourage mode shift to walking, cycling and public transport.</p> <p>In addition to the above, the intersection of Trig Road and Hobsonville Road has been designed to provide sufficient space for public transport priority measures, as such delays in the peak period will be experienced by private vehicles rather than public transport. Performance in the interpeak is expected to be better than in the peak hour.</p> <p>The SIDRA models have made allowances for pedestrian and cycle movements</p>	
13	Trig	<p>Assessment against AT Roads & Streets Framework (RASf)</p> <p>The Assessment of Transport Effects does not include an assessment of the southern section of Trig Road against AT's RASf, with regards to 'Place' and 'Movement' functions and modal priorities. Please provide assessment.</p>	<p>A RASf assessment that considers place and movement has been completed for the corridors and included in Section 6.6 of the Transport Assessment.</p> <p>A modal priority assessment, a separate component of the RASf, has not been completed for these corridors. It is noted that a full RASf assessment is based on information available at the time of the assessment, and that the assessments are intended to also respond to land use context. As such, the modal priority assessments will be completed prior to implementation, and iteratively updated as land use becomes more certain. The RASf assessment is a live process.</p> <p>Within the context of the designation, the indicative cross section enables space for the implementation of a corridor that can respond to a range of modal priorities.</p>	Trig Road: Volume 4
14	Trig	<p>Future Safety Performance</p> <p>What are the existing personal and collective safety risk ratings along the Trig Road Corridor and how are these expected to change as a result of the proposed upgrade works?</p>	<p>It is considered that an assessment of the existing personal and collective safety risk ratings provides limited value in the context of providing an assessment of safety effects. This is largely due to the significant land use change and the use of indicative designs.</p> <p>The current design will be subject to the ULDMP condition (condition 9), which requires that prior to construction, the detailed design of the project will consider the road design matters such as walking and cycling facilities, median widths and treatments and other matters which will influence the personal and collective safety risk. The requirement for the ULDMP to be in accordance with appropriate design standards will also ensure that the safety benefits are realised.</p> <p>Notwithstanding this, Auckland Transport have mapped existing collective risk for the whole network, and these can be found on Future Connect. https://mahere.at.govt.nz/FutureConnect/</p>	Trig Road: AEE Appendix

3. Arboriculture

Ref	NOR	Request	Response	Relevant Document / Section
1	All	Under the S92 please provide an arborist report identifying all protected trees to be affected and methodologies and control measures in place with recommended suite of conditions. I am sure that community facilities need this under the TOA as well.	<p>An arborist report is not being provided as part of the NORs.</p> <p>No notable trees (as identified in the AUP:OIP) will be affected by the NORs.</p> <p>In respect to Trig Road, there is a group of three notable trees (ID 1974) located within the front boundary of the property at 8 Luckens Road, West Harbour. This site is not subject to the NOR and will not be affected by tie-in works to be undertaken within the existing road corridor. Works in the road corridor immediately in front of the property will comprise line marking only.</p> <p>Trees in the FUZ or road reserve adjacent to the FUZ are not protected under the AUP:OIP. The Projects will not affect trees within open space zones.</p> <p>Trees in roads over height/girth requirements that are affected are likely to change in the time between NOR and implementation (due to growth, removal or addition). Therefore, an arboriculture assessment of the environment at this time is of limited value.</p> <p>Instead, a Tree Management Plan condition is proposed for each NOR. This sets out how any notable and protected trees will be managed, measures to mitigate effects including tree protection measures and tree replacement planting. Refer to condition 22 (Redhills) and condition 20 (Trig).</p> <p>The Tree Asset Owner Approval (TAOA) is not being sought, nor is it required at this time. Any required TAOA will be sought closer to implementation, the rationale being similar to that above, in that it is likely to be of limited value until closer to implementation.</p>	<p>Trig Road: AEE Section 5.2 and 7.4.1</p> <p>Redhills: AEE Appendix C</p> <p>Trig Road: AEE Appendix E</p>
2	All	More specifically I need all notable trees identified and verification that there are no others affected.	<p>Refer to point 1 above.</p> <p>The Tree Management Plan conditions will ensure that adverse effects on any notable or protected trees that exist at the time of implementation are avoided, remedied or mitigated.</p>	<p>Redhills: AEE Appendix C</p> <p>Trig Road: AEE Appendix E</p>

3	Trig	Under brief review I believe the only site may be: site #1980 Pohutukawa (2) Kauri at 104a Hobsonville Road	These trees are located over 1 kilometre east of the Project area and are therefore not affected by the NOR.	
4	All	Under the arborist report justify why the only alternative is the removal of one notable tree and what are the effects on the adjacent notable tree and how they will be managed/controlled.	No notable trees are to be removed as a result of the Projects.	

4. Archaeology and Historic Heritage

Ref	NOR	Request	Response	Relevant Document / Section
1	All	Regards the two HIF assessments (for Redhills and Trig Road(s) – these are for smaller areas but they provide detailed research and a better indication of the risk as this company has done the bulk of the work in this environment. These will be acceptable.	Noted.	
2	Trig	The built heritage team cannot complete this stage of the soft lodgement. Attached is a study list of 'Built Heritage in Whenuapai'. Can you please check to see if any of the sites are affected by the NoRs.	<p>One site on the 'Built Heritage in Whenuapai' Study List is subject to the proposed designation for the Trig Road Project; item number 5, "Quail Hollow", located at 40 Trig Road, Whenuapai.</p> <p>The Study List identifies this site as Cultural Heritage Inventory (CHI) site 3705. Recent correspondence with the Council's Built Heritage Team has confirmed that the record has been removed from the CHI due to insufficient heritage information to warrant its retention. The Built Heritage Team advised that as part of their ongoing work to improve the quality of the data in the CHI, records which contained very little, and often uninformative information are being investigated and systematically removed from the CHI. This record was part of a rough identification of places for a study list by Waitakere City Council in the late 1990's.</p> <p>The site is not subject to any heritage protection under Chapters D17 or D18 of the AUP:OIP. As stated in Section 7.1 of the Historic Heritage Assessment (refer Volume 4), there are no archaeological sites recorded within or in close proximity to the Project area.</p> <p>The first ~9m of the site at 40 Trig Road is subject to the proposed designation. This area comprises the front yard, including the driveway and manoeuvring area. The existing dwelling and garage at the property are located outside of the proposed designation. The space within the front yard is required to enable the construction of a retaining wall located along the current property boundary. Any landscaping, paving</p>	Trig Road: Volume 4

			<p>and fencing impacted by construction works will be reinstated as required by the ULDMP condition (condition 9). The formed road corridor will not encroach into the site.</p> <p>Overall, given the proposed works will not affect the existing buildings located at 40 Trig Road, and as any built heritage values associated with these buildings have not been confirmed, it is considered that any adverse effects on built heritage values will be less than minor. Further, in the unlikely event that an unknown archaeological site is exposed during construction, the AUP:OIP Accidental Discovery Rule (E12.6.1), will be adhered to, mitigating any potential adverse effects on historic heritage values.</p>	Trig Road: AEE Appendix E
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5. Stormwater and Flooding

Ref	NOR	Request	Response	Relevant Document / Section
1	Trig	The Trig Road document provides significantly more information on specific stormwater management to be provided for the upgrade to the road. I am happy that what has been provided by SGA in the document is a realistic representation of the land take required to provide the necessary stormwater management. Information is provided within the document of device sizing, and this will be refined through the design process.	<p>Noted.</p> <p>For clarity, a greater level of stormwater detail has been provided in respect to the Trig Road Project as the resource consents required to implement the Project are being sought now, in addition to the NOR.</p>	

6. Urban Design

Ref	NOR	Request	Response	Relevant Document / Section
1	Trig	I note there is no Urban Design Assessment for Trig Road but the AEE does contain a section within the AEE. Will an Urban Design Assessment be provided for this?	No standalone Urban Design Assessment will be provided however the relevant matters are addressed in the AEE. Proposed designation condition 9 requires the preparation of an Urban Landscape and Design Management Plan (ULDMP) that will ensure that the detailed design of the corridor responds to and integrates with the surrounding landscape and urban context.	Trig Road: AEE Appendix E

2	Trig	Is there going to be a connection provided to the existing pedestrian pathway located at 91 Hobsonville Road, shown in a red circle below. This land is within the Conservation Zone and provides a pedestrian connection to Mona Value cul-de-sac.	The intention is to provide a connection to the existing pathways and there is space within the proposed designation for that connection to be made. This will be secured through the ULDMP (designation condition 9).	Trig Road: AEE Appendix E
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Appendices

Appendix 1: North West – Redhills Arterial Transport Network Intersection Performance

Memorandum

To:	Auckland Council
From:	Michelle Seymour, Transport Planner, Te Tupu Ngātahi
Date:	16 December 2022
Subject:	North West Redhill Arterial Transport Network: Request for further information

The following memo has been prepared to provide additional information as requested as part of the soft lodged documentation for the North West Redhill Arterial Transport Network.

Request: Scope of intersection performance assessment in Assessment of Transport Effects Report Table 10

Please expand intersection performance assessment in Table 10 to additionally cover the proposed signalised intersections of:

- Dunlop Road (extended) / Baker Lane (extended) / East-West arterial corridor
- East-West arterial corridor / North-South arterial corridor

The performance of these intersections is summarised in the below table.

Intersection	Peak Period	Overall Level of Service	Degree of Saturation (worst Movement)	Maximum Queue Distance
Dunlop Road (extended)/Baker Lane (extended) /East West Corridor	Morning Peak Period	B	0.427	89.3 (East West Arterial approach)
	Evening Peak Period	B	0.463	70.5 (East West Arterial approach)
East West Corridor/North South Corridor	Morning Peak Period	C	0.500	85.7 (East West Arterial - East Approach)
	Evening Peak Period	C	0.657	144.1m (East West Arterial - East Approach)

In terms of performance, the intersections are shown to perform to a satisfactory level, with sufficient overall capacity in the peak periods in 2048. It is noted that these traffic volumes have been based on the land use assumptions with the wider models, and as further certainty is available regarding land use, refinements to the intersection layouts are likely. This is also provided for in Condition 9, where the Urban Design and Landscape Management Plan will review road design elements including intersection form and pedestrian and cycling infrastructure.

It is also confirmed that walking and cycling movements have been allowed for on all movements at these T-intersections.

Name:	Michelle Seymour
Title:	Transport Planner