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Mr D Osborne
Winton
PO Box 105526
Auckland 1143

14 October 2025

Copy via email: [redacted]

Dear David,

SPECIALIST COMMENTS RESPONSE – SUNFIELD PROJECT

Further to your recent instructions, we have reviewed comments received on 4 August 2025 and have responded to the transport matters raised.

I, Leo Hills of Commute Transportation Consultants, confirm that this memo was prepared in accordance with the Environment Court Practice Note 2023 (Code of Conduct for Expert Witnesses). Details of my qualifications and relevant experience has been provided to the Expert Panel previously.

1 EXTERNAL NEIGHBOURS

1.1 ITEM 2.1 – RUBY PEARCE (EXTERNAL NEIGHBOUR)

Comment:

A car free concept is good in theory, but just like the theory that our "carless days" would work in the 1979/1980 era, people circumvented the system and it just did not work. Kiwis love their cars, and it would involve already having trusted and existing infrastructure for this to work. Setting this up without the existing system is setting you up to fail, and the people impacted will be the tenants that rent homes from absent landlords that have brought into an affordable subdivision that will have multiple cars for each dwelling. Addison in Takanini is a prime example where 5 bedroom homes have 5+ cars for each occupant; multiple cars are parked outside, garages are full, off street parking is full to overflowing with the risk of blocking roads and illegal parking. Telling people they can't park there will not work, and enforcement may occur, but the incidents will continue. It just looks like a developer is trying to earn more $$$ by selling accommodation by not providing sufficient car parking spaces for each dwelling that it builds. At a minimum EVERY SINGLE DWELLING MUST HAVE AT LEAST ONE OFF STREET CAPARK. If this is not included in the Council zoning or urban plans then it should be. Once the infrastructure is developed, then and only then should you be in a position to allow this type of arrangement in an existing development.

I have not heard of one single high density development where this has worked. Parking will always be an issue if it is not allowed for right at the beginning. And if you say use public transport - the development is in a rural area - and saying you will create it, does not say that it works. Build the first few stages first that includes parking, create the public transport, and then start creating an environment that can support a car free area. And I haven't decided to mention visitors and where they will be parking in the 3000+ houses you plan to build. The main thing to think about for me is who are they planning to sell these homes to - is it only to investors, that will then rent them out to tenants; or do you want to sell these homes to first home buyers; families; retirees? They will all have cars even if they plan on using the public transport they will take up the car parks 24/7.

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Commute response:

We believe this query has been dealt with within the Sunfield Integrated Transportation Assessment (the "ITA") and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application.

Notwithstanding this, we note that:

I. The National Policy Statement for Urban Development no longer requires any on-site carparking to be made available for new development, except for accessible parking.

II. All future residents of the Sunfield development will be very aware of the limited parking and transport-oriented development. It is therefore expected that a low personal vehicle ownership rate will occur.

III. It is noted that from a traffic perspective, we agree in that there is potential for illegal parking, although this is seen as a lesser issue in the recently developed areas to the west of Sunfield where there is limited opportunity for parking due to the existing high uptake of available parks and a moderate degree of current parking restrictions in these areas. It is also noted that a higher than anticipated vehicle ownership rates will occur within Sunfield. In this regard it has been highlighted several times within the ITA that:

> *"It is recognised that this development is essentially a first for New Zealand. As a result, it is considered that carefully monitoring of initial stages of the development is needed to ensure the measures proposed have the desired result of significantly reducing private car travel (both internal and externally)."*

IV. The measures proposed to support a car-less outcome for the Sunfield development include:

- Design led restrictive pavements – pavement surfaces will be designed to avoid facilitating car parking spaces within the residential areas.
- Road marking and signage – no stopping marking and signage will be implemented in areas of no parking.
- Fully developed berm areas that don't afford locations to park vehicles off pavement.
- Provision for loading and unloading of goods and persons within each street and laneway.
- Provision for emergency vehicle access and hardstand areas in line with FENZ guidance to all areas of the development.
- Residents Society – there will be an over aching resident's society that will have the power to enforce parking restriction and remove parked vehicles from restricted areas.
- Incorporated Societies – each COAL will have an Incorporated Society attached that will have the power to enforce parking restriction and remove parked vehicles from restricted areas.
- Alternative mode support – alternative modes of transport will be provided or supported. There is a loop road within the centre of the development that supports a dedicated bus lane and provides links to the local transport hubs in Papakura and Takanini. There are local hubs that provide ride share pick up and drop off locations along with charging and storage stations for micro mobility and cycling modes.

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1.2 IITEM 11.1 – ROSANNE WILLS – TRAFFIC

Comment:

Traffic issues would be exacerbated in neighbouring streets like Old Wairoa Road. Already in the more recent subdivisions (I live in one) there are vehicle movement issues especially when cars are parked on either side of the road. There remains room for only one vehicle to move through. Drivers today don't know how to navigate a situation like this. Developers are being allowed to plan roads in new subdivisions with a minimal road width which I offer is not sufficient. This is happening in many subdivision around Auckland today, I offer very poor planning. How do emergency vehicles navigate this situation?

'Car-less' living - this proposed development is approximately three plus kilometres from my address ([redacted]) to the Papakura Train/Bus station. This development would be ideal if located beside the Auckland rail system. My concern is most Auckland properties have multiple vehicles which get parked on the road, as garages today are being used for many other uses than parking a vehicle, e.g home gym, cooking, storage. What is the proposed transport to this development? (sorry I haven't researched)

The development is advertised as a 'self-contained suburb' will this mean that everyone with a vehicle will park within the development?

I suggest it's not a totally self-contained suburb, this is an inaccurate description, what about a hospital, a cemetery, churches, tertiary education to name a few?

Commute response:

We believe this query has been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the response detailed in Section 1.1 above.

1.3 ITEM 16.6 – 897 ALPHA LIMITED – TRANSPORTATION (JOHN PARLANE)

Comment:

- *The assumed traffic generation is extremely low. It is lower than would normally be used for a residential development in the area and lower than might be used even in the Auckland CBD where there are jobs and activities within walking distance and where there is very good public transport. Surveys of Westminster Court, (an apartment complex in Central Auckland) show it generates 0.16 trips per household in the morning peak and 0.24 trips per household in the evening peak.*
- *The applicant is relying on parking constraint to achieve the extremely low trip rates. That could only work if there is a hard limit on parking in the entire precinct and in the areas surrounding the precinct where people might be able to park and walk to the precinct.*
- *We could expect any visitor parking in neighbouring areas to become de-facto parking for this precinct. Anyone using alternative parking means the low trip rate will not be achieved, instead trips will simply impact on neighbouring areas.*
- *There is the possibility of paid parking being made available within the precinct or adjacent to the precinct as a result of market demand.*
- *No sensitivity test has been carried out to demonstrate what will happen if the low trip rates are not achieved.*
- *The levels of service modelled at key intersections suggest there is little scope for the road network to cater for higher levels of traffic unless further road widening occurs. There are five*

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instances where the degree of saturation exceeds 0.95, five turns where the Level of Service is F and 17 places where the queue exceeds 100m. Intersections at Dominion Road with Papakura-Clevedon Roads and the future Airfield Road with Mill road will quite clearly be overloaded.

- *The assumed bus route could theoretically cater for commuter trips to and from work but this does not allow for travel to shops or recreational activities located away from the Frequent Transport Network.*
- *The additional level of delivery or service traffic required to service a residential area where almost everything has to be delivered to homes because cars are not available should be considered including the impact that additional service traffic would have on the road network.*
- *Is a low car ownership rate of 0.1 cars per household realistic in an area where the current average is 2.48 cars per household (neighbouring Takanini East is 2.19 cars/HH) and where the Auckland average is 1.9 cars per household?*
- *The analysis assumes every job in the area is carried out by a person living in the area. The current jobs in the Ardmore Statistical area actually generate trips from a much wider area as shown in by the 2023 Census (Figure 2).*

If the development were to proceed then there would need to be very strict conditions to prevent an increase in parking occurring once enough houses had been built for the parking problem to become apparent. This would need to be a fixed limit on parking spaces within the entire precinct. This would then likely impact the neighbouring area, as residents would simply park there.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking).

It should be noted that, NZTA has prepared further extensive traffic modelling relating to Mill Road Stage 2 ("MRS2A") with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

We note further:

- the National Policy Statement for Urban Development no longer requires any onsite carparking to be made available for new development, with the exception of accessible parking.

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- under Auckland Councils Future Development Strategy, Principle 1 states:
    - *Reduce greenhouse gas emissions: A compact urban form is a critical requirement for low carbon and climate resilient urban development as it largely determines the viability and practicality of different modes of transport. Both commuter and household vehicle trips generate significant greenhouse gas emissions. Compact urban growth (greater density, mixed-use) reduces car dependency and vehicle kilometers travelled (VKT) when the car is in use and enables people to live more locally and choose sustainable methods of mobility like walking and cycling. Key to supporting this is by having employment and where people live in close proximity and having services and facilities within easy reach. A reliable and frequent public transport network supports the other needs to travel across the region. Such a network cannot be achieved within a low-density urban form with limited mixed use.*
- Sunfield proposes and promotes a compact urban growth (greater density, mixed-use) reduces car dependency and enables people to live more locally and choose sustainable methods of mobility like walking and cycling. Key to supporting this is by having employment and where people live in close proximity and having services and facilities within easy reach. A reliable and frequent public transport network supports the other needs to travel across the region.

We do agree in that the assumed traffic generation is low compared to a more standard residential development, in this regard:

- It is recognised that this development is essentially a first for New Zealand.
- Traffic generation has been based on various assumptions as highlighted in Section 9 of the ITA including limited private vehicle usage and parking equating to about 10% of typical traffic generation rates.
- It is additionally highlighted throughout the ITA that car traffic generation is not likely to reduce completely to 10% of typical rates and a more reasonable assumption of between 10-25% of typical rates has been adopted.
- A sensitivity analysis of the traffic generation rates was conducted in Section 9.1.7 of the ITA, using a more conservative set of assumptions, as highlighted above, leading to traffic generation could be as high as 6,000 vehicles per peak hour.
- From a traffic perspective we accept that traffic generation and parking rates could reach the above level; however, as highlighted in the ITA *"It is recognised that this development is essentially a first for New Zealand. As a result, it is considered that carefully monitoring of initial stages of the development is needed to ensure the measures proposed have the desired result of significantly reducing private car travel (both internal and externally)."*
- As highlighted in the ITA and Section 1.3, we agree that extensive monitoring of the initial stages of the Sunfield development is critical to assess the development and ensure that the assumed traffic generation rates are met.
- In the case that monitoring of initial stages is not meeting the assumed traffic generation and parking rates, additional measures and mitigation strategies (including additional public transport, wider network upgrades) will need to be implemented in future stages to ensure compliance.

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2 TE AKITAI WAIOHUA SETTLEMENT TRUST (TAWST) AND TE AKITAI WAIOHUA WAKA TAUA INCORPORATED (TAWWTI)

2.1 ITEM 4.6 – TAWST AND TAWWTI – CAR-LESS COMMUNITY

Comment:

Pages 4 and 5 – Te Ākitai Waiohua supports aspirations for people to be less reliant on cars for their everyday needs. However, this is not necessarily a reality for all people. Many people must drive to work because there is no direct public transport route, and/or it doesn't operate when needed for shift work.

The provision of employment within the Project is acknowledged, but these jobs may not be suitable for nearby residents. It is unclear how the limited carparking will be assigned to residents, but one can assume that it will cost more. While it could be considered that Sunfield will be attractive to those who choose the lifestyle and do not want to own a car, it should be recognised that not all people have choices.

By relying on resource consents to approve the project, there is no guarantee that the outcomes will be maintained in the long term. New resource consents could be sought in the future to include additional roads and parking if early stages have been unsuccessful. The concept of car-less is therefore not considered a significant (or a significant enough) benefit.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the response detailed in Section 1.1 and 1.3.

3 AUCKLAND COUNCIL – KATE BRILL

3.1 PARKING AND TRIP GENERATION

3.1.1 ITEM 8 – CAR OWNERSHIP RATE

Comment:

The development proposes that 1 in 10 dwellings will have a parking space, which is about 10% of the 'typical' parking rate of 1 parking space per dwelling – however I am concerned that the car ownership rate of future residents is likely to exceed 1 car per 10 dwellings. There is a high likelihood that residents will try to park on berms, within the 6m wide trafficable laneways, kerbside parking on internal roads and overflow parking into neighbouring suburbs.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking).

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation

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assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

We also note that:

- the National Policy Statement for Urban Development no longer requires any onsite carparking to be made available for new development, with the exception of accessible parking.
- under Auckland Councils Future Development Strategy, Principle 1 states:
    - *Reduce greenhouse gas emissions: A compact urban form is a critical requirement for low carbon and climate resilient urban development as it largely determines the viability and practicality of different modes of transport. Both commuter and household vehicle trips generate significant greenhouse gas emissions. Compact urban growth (greater density, mixed-use) reduces car dependency and vehicle kilometers travelled (VKT) when the car is in use and enables people to live more locally and choose sustainable methods of mobility like walking and cycling. Key to supporting this is by having employment and where people live in close proximity and having services and facilities within easy reach. A reliable and frequent public transport network supports the other needs to travel across the region. Such a network cannot be achieved within a low-density urban form with limited mixed use.*
- Sunfield proposes and promotes a compact urban growth (greater density, mixed-use) reduces car dependency and enables people to live more locally and choose sustainable methods of mobility like walking and cycling. Key to supporting this is by having employment and where people live in close proximity and having services and facilities within easy reach. A reliable and frequent public transport network supports the other needs to travel across the region.

Notwithstanding this, the proposed measures to support a car-less outcome at Sunfield include:

- Design led restrictive pavements – pavement surfaces will be designed to avoid facilitating car parking spaces within the residential areas.
- Road marking and signage – no stopping marking and signage will be implemented in areas of no parking.
- Fully developed berm areas that don't afford locations to park vehicles off pavement.
- Provision for loading and unloading of goods and persons within each street and laneway.
- Provision for emergency vehicle access and hardstand areas in line with FENZ guidance to all areas of the development.
- Residents Society – there will be an over aching resident's society that will have the power to enforce parking restriction and remove parked vehicles from restricted areas.
- Incorporated Societies – each COAL will have an Incorporated Society attached that will have the power to enforce parking restriction and remove parked vehicles from restricted areas.
- Alternative mode support – alternative modes of transport will be provided or supported. There is a loop road within the centre of the development that supports a dedicated bus lane and provides links to the local transport hubs in Papakura and Takanini. There are local hubs that

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provide ride share pick up and drop off locations along with charging and storage stations for micro mobility and cycling modes.

Finally, each of the Sunfield neighbourhoods have been reviewed in relation to the comments received (including in relation to the parking provisions). As a result, the parking provisioning within the initial neighbourhoods has been increased in response to more limited alternatives to private vehicles being available within the initial stages of the Sunfield development. These neighbourhoods will have an initial ratio of 0.7-0.8 carpark per dwelling and an eventual parking ratio of 0.5 carpark per dwelling. These ratios include all available parking (being lot, shared and visitor).

3.1.2 ITEM 9 – ILLEGAL PARKING

Comment:

The ITA recommends that physical obstructions are put in place to ensure parking is not possible in these areas, such as bollards, planting or fencing, however these measures are not shown on the plans, nor in the draft conditions. It is not considered sufficient to rely on continuous enforcement from AT as resourcing may not allow for the higher level of enforcement required for this type of development. I recommend the Architecture and / or Landscaping Plans demonstrate physical obstructions in all the areas where parking is not permitted such as berms, laneways and carriageways. This should occur throughout the development including the residential, industrial and employment areas. Alternatively, the applicant should demonstrate that parking management can be undertaken by alternative means via Resident / Incorporated Societies as described in Item 2.3.1 in Commute's letter dated 17 July 2025.

Commute response:

We believe this query has been dealt with within the Sunfield Integrated Transportation Assessment (ITA) and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this, see the responses detailed in Section 1.1 and 1.3.

Further to this:

- the applicant is not proposing that AT enforces parking restrictions within Sunfield
- the applicant has developed a detailed design for each of the Sunfield neighbourhoods (to a level suitable for Engineering Approval) which demonstrates the functional testing of each neighbourhood, specifically:
  - controlled parking areas in line with assumed modelling parameters, with parking generally in "hubs" rather than on individual properties.
  - individual properties being linked to the road network via pedestrian laneways rather than public roads.
  - minimum on-street parking in line with modelling parameters (noting the comment in item 8 above).
  - fully developed berm areas that don't afford locations to park vehicles off pavement.
  - provision for loading and unloading of goods and persons within each street and laneway.
  - provision of car-share opportunity in the main hubs.

The detailed design of each Sunfield neighbourhood accompanies this response.

3.1.3 ITEM 10 – TRIP GENERATION

Comment:

Transport modelling of key intersections has been undertaken assuming a significantly lower trip generation rate than the industry accepted rate, due to the lower parking rate of 1 car park per 10 dwellings. In the event that more than 10% of residents own cars and park in areas where it is not intended, the trip generation of the development will be higher than the transport modelling forecasts.

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The ITA states that movements at several intersections are expected to operate at a Level of Service (LOS) F, which is generally not considered acceptable when it impacts the through movement on busy arterial roads. In the event that more than 10% of residents own cars and park in areas where it is not intended, the trip generation will be higher, potentially resulting in key intersections being over capacity.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking).

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

3.1.4 ITEM 11 – MODELLING

Comment:

The draft conditions (Conditions 120 and 123) address when the intersections need to be upgraded. However, the modelling assessment in the ITA only demonstrates the operation of the intersection after the upgrade. There is no assessment determining when the current intersection would trigger an upgrade. It is recommended that a detailed modelling assessment is undertaken to demonstrate at which stage of development would trigger the need for an intersection upgrade before the application is approved. I have included this in the draft conditions in the event the modelling assessment is not undertaken prior to the application being approved.

Commute response:

We believe that the draft conditions adequately deal with this proposed issue. We do however agree that the exact timing of these upgrades could be linked to dwellings rather than stages.

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport

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and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

3.2 EMERGENCY SERVICES AND OTHER SERVICE VEHICLES

3.2.1 ITEM 12 – EMERGENCY VEHICLE ACCESS

Comment:

It is not clear from the proposal how emergency services, moving trucks and other service vehicles will access dwellings. The ITA states they will utilise service hubs which may be up to 75m distance from a dwelling. This could result in difficulties for moving furniture, repair work, and for emergency services access.

Commute response:

We believe this query has been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, the proposed emergency vehicle access has been assessed in Section 12.5 of the ITA. It is considered that requirements from the NZ Fire Service "emergency vehicle access guidelines" and "NZ Fire Service firefighting water supply code of practice" can be met.

Further to this, the applicant has now developed a detailed design for each of the Sunfield neighbourhoods (to a level suitable for Engineering Approval) which demonstrates the functional testing of each neighbourhood, specifically:

- emergency access and fire truck service strategy.
- location of rubbish collection points.
- which routes can be serviced by public and private waste collection (together with communal bin storage location).
- location of loading bays and service delivery bays.

As noted previously, the detailed design of each Sunfield neighbourhood accompanies this response.

3.2.2 ITEM 13 – ILLEGAL PARKING

Comment:

The low provision of car parking may result in illegal parking, which in turn can lead to problems accessing the site for emergency services. This issue has been encountered in the adjacent Addison subdivision and is discussed in Auckland Council's research report "Living in Addison: An investigation into the lived experience of a master planned housing development in Auckland", November 20191. It is recommended that the applicant identify how the issues identified in Council's review of the Addison development will be avoided for the Sunfield development.

Commute response:

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We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the responses detailed in Section 1.1.

The applicant notes that it reviewed the 'Living in Addison' research report as part of it research into the development of the Sunfield masterplan community, and believes that the Sunfield proposal adequately deals which each of the identified issues / challenges identified (as detailed below) within the report through the design of Sunfield and the draft conditions.

Living in Addison Challenges:

- *Street widths: Many roads are only 5.5–7.5 meters wide, which becomes problematic when cars are parked on both sides.*
- *Emergency and service vehicle access. Narrow streets and illegally parked cars hinder access for rubbish trucks, ambulances, and fire engines.*
- *Broken yellow lines: Auckland Transport began implementing these to improve access and safety, but this reduces already limited parking.*
- *Porchester Road congestion: As the main arterial road, it experiences heavy traffic, especially during peak hours.*
- *Rat-running: Drivers cut through narrow residential streets to avoid congestion, creating safety hazards.*
- *Lack of collector roads: The development lacks a clear roading hierarchy, with few mid-level roads to distribute traffic effectively.*
- *Walkability and Pedestrian Safety*
- *Obstructed footpaths: Cars parked on footpaths, overgrown trees, and uneven surfaces hinder pedestrian movement.*
- *Lack of crossings: Residents requested more pedestrian crossings, especially on Porchester Road and near schools.*
- *Safety concerns: Poor lighting and traffic volumes make walking, especially at night, feel unsafe for some residents.*
- *Public Transport Limitations*
- *Unrealised transit-oriented development: A planned train station (Glenora) was never built, undermining the original design intent.*
- *Limited bus service: Only one bus route runs along Porchester Road, with low usage reported.*

3.3 INTERNAL LANEWAYS AND SERVICE HUBS

3.3.1 ITEM 14 – PARKING WITHIN SERVICE HUBS

Comment:

The application does not provide details of access, vehicle tracking or parking provision within the service hubs or laneways. More detailed information is required to understand if the operation of the laneways and service hubs are workable.

Commute response:

As noted above, the applicant has now developed a detailed design for each of the Sunfield neighbourhoods (to a level suitable for Engineering Approval) which demonstrates the functional testing of each neighbourhood, specifically the vehicle tracking compliance for:

- 8m long fire truck.
- 10.3m public rubbish truck vs 6.3m van (in lanes / roads served by public collection).
- 8m long rubbish truck vs car on lanes with private collection.

As specified within the draft conditions, the applicant will provide further vehicle tracking curves for each stage as required to comply with the Engineering Approval requirements.

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The applicant has liaised with a private rubbish collection company and confirmed the proposed private accessway layouts are suitable to smaller private sector rubbish collection. This letter was provided as part of the Sunfield Substantive Application. It is noted that as a result of feedback from Auckland Council, and considering the proposal further, the waste collection proposal has been amended. As illustrated within the neighbourhood plans, sites with frontage onto vested roads will be serviced by the Council collection services, and those sites without such frontage would be supported by a communal bin storage area and a private collection.

3.4 MONITORING MODAL SHARE

3.4.1 ITEM 15 – MODAL SHARE

Comment:

Continuous monitoring is recommended, if the application is approved, to ensure the highly ambitious modal share is achieved for the development, including a robust set of monitoring conditions of consent to ensure that mitigation is provided if the number of trips exceed the trip generation anticipated in the ITA. This level of monitoring has been used in places such as Auckland's Wynyard Quarter or the Beach lands South Precinct Plan (Precinct I458 in the Auckland Unitary Plan). The draft conditions suggest that a Travel Plan should be in place for the industrial workplaces. I consider monitoring / travel plans should apply to all activities within the development including residential and employment areas.

Commute response:

Agreed, please refer to Section 3.1.3 of the ITA.

3.5 TRANSPORT EFFECTS COVERED BY AT

3.5.1 ITEM 16 – TRANSPORT EFFECTS

Comment:

As discussed above, the effects on the external road network including proposed roading projects undertaken by others (e.g. Mill Road) and linkages to Public Transport and Walking / Cycling facilities have been covered by AT. I am in agreement with AT's reporting and conclusions on these matters.

Commute response:

Noted.

3.6 CONCLUSION

3.6.1 ITEM 17-18 – CONCLUSION

Comment:

17. *As matters stand, I do not support the application in its current form, as it does not adequately address the transport effects identified during the Section 67 process. There remain a number of material information gaps, which need to be addressed to enable a proper assessment of the proposal (i.e. intersection modelling to determine when upgrades are required; measures such as physically restricting parking to ensure the assumed trip generation is adopted). There*

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is a risk that adverse traffic effects will be significant in the event that the development does not achieve the ambitious trip generation assumed in the ITA.

18. *As noted already, my review has been limited to the internal operation of the Sunfield development, and should be read alongside the broader assessment undertaken by AT.*

Commute response:

We believe that the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application together with the additional traffic modelling included in Appendix A and the testing of Neighbourhoods, deals with each of the issues / queries which have been raised.

3.7 COMMENT ON PROPOSED CONDITIONS

3.7.1 ITEM 19-20 – CONDITIONS

Comment:

19. *The draft transport conditions are not considered sufficient to mitigate the proposal's adverse transport effects or address the information gaps.*
20. *I offer some initial comments on conditions below. Revision of Conditions 123 and 125 are recommended as well as several additional conditions.*

Commute response:

Noted.

3.8 CONDITION 123

3.8.1 ITEM 21 – CONDITION 123

Comment:

Condition 123 specifies the stage of development key intersections will require an upgrade. However, the modelling assessment undertaken in the ITA does not provide the basis for the staging i.e. the modelling does not demonstrate the stage when an intersection upgrade would be required. More detailed modelling is required to determine the triggers / stages for the intersection upgrades.

Commute response:

As detailed above at Section 3.1.4, we believe that the draft conditions adequately deal with this proposed issue.

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with

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a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

3.9 RECOMMENDATIONS

3.9.1 ITEM 22 – RECOMMENDATIONS

Comment:

22. I recommend that the following information is demonstrated prior to the application being approved:

a) *Produce a comprehensive monitoring schedule to ensure that the trips generated by the Sunfield development do not exceed the trip generation assumed by the modelling undertaken in the ITA. The Monitoring schedule should include mitigation measures in the event that trip generation exceeds the forecasted trips. This should be monitored throughout the stages of development, and continue after full development.*
b) *Produce a comprehensive monitoring schedule to ensure the number of vehicles parked within the development aligns with the intended provision of parking. This should be monitored throughout the stages of development, and continue after full development.*
c) *A modelling assessment is undertaken to determine the stage/s of development which trigger the intersection upgrades.*
d) *Demonstrate vehicle tracking of an appropriately sized vehicle for any road or accessway used by heavy vehicles including rubbish trucks, emergency vehicles and service vehicles.*
e) *Produce plans showing physical measures to prevent illegal parking on roads, berms, accessways, service hubs and laneways. Alternatively, provide more information on the validity of parking management methods described in Item 2.3.1 in Commute's letter dated 17 July 2025.*
f) *Provision of a compliance assessment of Chapter E27 - Auckland Unitary Plan (Operative in Part).*

Commute response:

Please see the previous responses to the specific queries detailed above. The applicant believes that the proposed Sunfield design and draft conditions adequately deal with these issues. We generally agree to all of the above points, and specifically note:

a) Agree, note the proposed additional condition outlined in Section 1.3 being *"that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield".*
b) Agree in part recognising the new intersection modelling condition and a new condition for a rolling Masterplan which includes providing information on implemented car-parking numbers and locations.
c) Please refer to the response in Section 1.3. It should be noted that the applicant and AT are proceeding with meetings to discuss issues including staging / timing.

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d) Agree, additional testing of the Sunfield neighbourhoods has been undertaken and re-checked as part of conditions.

e) Agree, please refer to the response in Section 3.1.1.
This was responded to in the Section 67 Response noting the application is a non-complying activity meaning all transport related matters can be considered, and have therefore been assessed within the original planning report and ITA.

4 AUCKLAND COUNCIL WASTE PLANNING – JENNIFER JACK

4.1 ITEM 6 – WASTE PROPOSAL SUMMARY

Comment:

As outlined in the provided AEE document, the Sunfield development will have neighbourhood Service Hubs within each neighbourhood. These will provide spaces for rubbish collection (in addition to shared parking, pick up zones and post and courier services), to ensure efficient use of land by co-location. The service hubs are located off standard roads or shared spaces within the development. The Local Hubs will be within walking distance of the 15 residential neighbourhoods and 3 aged care facilities.

Commute response:

This statement is noted.

4.2 WASTE ASSESSMENT

4.2.1 ITEM 7 – WASTE COLLECTION

Comment:

The applicant proposes a private waste collection for the development. Shared residential communal bins and waste storage areas will be used for the units within the wider development, which will include 15 neighbourhood hubs.

Commute response:

This statement is noted.

4.2.2 ITEM 8 – WASTE COLLECTION

Comment:

Among the current information provided with the application, a letter has been provided from Rubbish Direct with initial waste management advice for the Cosgrave Block waste collection. This advises that from the proposed neighbourhood layout, the site is generally suitable for trucks to service in a forward manner within the layout proposed.

Commute response:

This statement is noted.

4.2.3 ITEM 9 – WASTE COLLECTION

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Comment:

While a full Waste Management Plan / report has not been provided at this stage, conditions have been put forward in this regard.

Commute response:

This statement is noted.

4.2.4 ITEM 10 – WASTE COLELCTION

Comment:

The waste proposal will require sufficient space on-site for bin storage in the communal bin storage areas provided for the development. The location and sizes of the bin storage areas will need to be suitable, with these to be visually contained with appropriate screening. The storage areas are to have formed accessways provided from dwellings. The bin areas need to be located to be accessible on the site for residents to easily access and use. The waste collection frequencies also need to be suitable for the number of bins and amount of waste to be produced.

Commute response:

This statement is noted.

4.2.5 ITEM 11 – WASTE COLLECTION

Comment:

For the bins that are to be stored communally, the storage area/s will need to be managed and maintained by a suitable body (e.g. body corporate) for the site as appropriate. The bin areas should also have appropriate and ventilation.

Commute response:

This statement is noted.

4.2.6 ITEM 12 – WASTE COLLECTION

Comment:

For any additional assessment relating to traffic for waste servicing trucks, please defer to the traffic engineer including to check vehicle tracking and loading as required.

Commute response:

This statement is noted.

4.2.7 ITEM 13 – WASTE PROPOSAL SUMMARY

Comment:

While not specifically an AUP(OP) or RMA matter, it is generally advised and recommended that proposals meet the required waste carry distance. This is required under the Building Act, and is assessed as part of any building consent application (Building Code Clause G15). The carry distance is the maximum distance residents must carry their waste between a unit and a designated waste area and should not be more than 30m (excluding any vertical distance).

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Commute response:

This statement is noted.

4.2.8 ITEM 14 – WASTE PROPOSAL SUMMARY

Comment:

Overall, the proposed waste management is suitable for the site and development.

Commute response:

This statement is noted.

4.3 COMMENT ON PROPOSED CONDITIONS

4.3.1 ITEMS 15 AND 32 – PROPOSED CONDITIONS

Comment:

15. The conditions proposed are generally suitable for the development. Some small amendments are proposed in red below.

Waste Management Plan (WMP)

32. Prior to the commencement of built form construction, a Waste Management Plan (WMP) shall be submitted to the Council for certification in accordance with Conditions 7 to 13. The WMP must contain sufficient detail to address the location of refuse bins and other bins during storage and collection, the frequency of service, and the volume of waste to be provided for.

    Advice Notice: The Consent Holder is reminded that a waste management plan (WMP) is required to be prepared for any multi-unit development, comprising ten or more residential and/or commercial units, under the Auckland Council Solid Waste Bylaw -2019 ('the Bylaw'). Assistance in determining the contents of the WMP as required by the Bylaw can be found within the Auckland Design Manual located at this link:

    http://www.aucklanddesignmanual.co.nz.

Commute response:

Noted and agreed, please see proposed amendments in red.

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5 AUCKLAND TRANSPORT – NEIL STONE

5.1 EXECUTIVE SUMMARY

5.1.1 ITEM 9 – SUMMARY

Comment:

It is considered that the proposed development would result in significant adverse impacts that are disproportionate to its benefits (regional or otherwise) and cannot be adequately avoided, remedied, mitigated, offset, or compensated through conditions or modifications. Independent modelling by Beca and modelling collaboration between Beca and the Auckland Forecasting Centre confirms that if more realistic trip generation rates eventuate, significant additional intersection upgrades will be required beyond those proposed by the applicant, with some requiring land acquisition outside current road reserves. Therefore, under section 85(3) of the Fast-track Approvals Act 2024 (FTAA), the Panel should consider declining consent. The Applicant has overstated the regional benefits, and development ahead of supporting infrastructure is likely to lead to poor transport outcomes both in this area and in other areas where development is expected but might be delayed if this proposal proceeds. Key adverse impacts include reduced productivity and efficiency of the surrounding road network, especially the Cosgrave Road – Mill Road corridor and associated intersections, as well as key linkages along Great South Road leading to the Takanini rail station, the Papakura rail station, and the State Highway 1 interchange. This productivity reduction will affect both freight and commercial vehicles as well.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking).

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

It is considered that these issues are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.1.2 ITEM 10 – SUMMARY

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Comment:

The main issues and areas of concern identified include:

- *The underlying assumptions, specifically the trip generation rate relied on in the Commute transport assessment, are considered aspirational and unlikely to eventuate. The result is the applicant underestimating the infrastructure required to support this proposal, specifically active modes and intersection upgrades. Although the applicant proposes some intersection upgrades, AT expects significant future congestion on existing roads and intersections that do not anticipate future traffic from this development. For more information, please refer to Annexure 1 – Beca report. As Beca note, there is a risk of significant impacts on the safe and efficient operation of the wider transport network if the assumptions adopted in the ITA do not eventuate, which will not be appropriately mitigated. Beca conclude that:*
    - *"… there is high risk that the assumptions applied in the ITA are not achievable and if the development proceeds, then there is likely to be significant adverse effects (and, in terms of section 85 of the FTAA, significant adverse impacts) on transportation safety and efficiency."*

  Beca's independent analysis using more realistic trip generation rates identifies eight specific intersections that will require upgrades, including two not assessed by the applicant: Mill Road/Popes Road and Mill Road/Alfriston Road. Several proposed upgrades will require additional land acquisition and more extensive works than the applicant has provided for.
- *Concerns with the operation of a large, privately funded public transport service that is required to ensure the feasibility of the proposal.*
    - *Concerns with the ability of the existing public transport service to cater to the demand of the proposal before a frequent service is in place.*
- *Major gaps in the stormwater and flooding assessment provided by the applicant. AT's concern is road safety and asset damage, flooding effects both within the site and on adjacent neighbourhoods.*
- *Detailed engineering design issues that must be addressed as part of the Fast Track application in order to avoid significant future delays and potential required amendments to the application. More details on these are provided in the Progressive Transport Solutions report included as Annexure 2.*
- *The transport assessment has not been updated since the applicant acknowledged the proposed alignment of NZTA's Mill Road Stage 2.*

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application.

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are

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required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

It is considered that these issues are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.1.3 ITEM 11 – INFRASTRUCTURE

Comment:

In the absence of a proper plan change process to address zoning, land use, and infrastructure services, it is expected that the development should address larger cumulative issues and effects resulting from the development. In this case, however, the proposal has not addressed major concerns in relation to the provision of appropriate infrastructure. Recommendations are made in the main body of this report for further assessment and modelling by the Applicant. The applicant's s67 response dated 17 July 2025, provides brief responses to AT's queries but does not provide additional assessment, including with regard to the matters noted in point 10 above. This response does not address the majority of AT's concerns, and no changes are proposed to the application.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the responses detailed in Section 1.1, 1.3 and within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

It is considered that these issues are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.1.4 ITEM 12 – TRIP GENERATION

Comment:

The s67 response dated 17 July 2025 does, however, note that the applicant is working with NZTA and looking to provide additional assessment and transport modelling, although this will be received (if provided) after AT's due date for a response to the Fast Track Panel. It is considered that expert conferencing on certain matters, such as transport modelling, infrastructure upgrades, road flooding, and required conditions, is highly desirable.

Commute response:

This statement is noted.

5.1.5 ITEM 13 – TRIP GENERATION

Comment:

The following sections explain the significant adverse impacts identified by AT in its assessment.

Commute response:

This statement is noted.

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5.2 MILL ROAD

5.2.1 ITEM 14 – MILL ROAD STAGE 2

Comment:

As noted, NZTA has lodged Stage 2 of the Mill Road project as a NoR on 13 June 2025. This stage of the project includes approximately 21km of road, extending from the Redoubt Road interchange on SH1 in Manukau to the proposed Drury South Interchange on SH1 in Drury. The project involves a new corridor, comprising a mix of new roads and roading upgrades. This will include upgrades to numerous existing intersections and potentially involve work on existing local roads that will intersect with the new corridor. The project is expected to occur over the next decade, with construction earmarked for 2026.

Commute response:

This statement is noted and as previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

5.2.2 ITEM 15 – MILL ROAD BENEFITS

Comment:

The Mill Road route is a government-approved road of national significance and a listed fast-track project. The following benefits of this road are highlighted:

- *The Mill Road project will provide a crucial north/south roading link for transport provision to cater for the region's rapid housing and business growth, which includes unlocking certain sites for development.*
- *The project will improve congestion and safety in the wider area and will act as an alternative route to the congested Southern Motorway and Great South Road, improving efficiency and resilience for both commuters and freight traffic.*
- *The project also integrates with the NZTA Papakura to Bombay project.*
- *Mill Road is also considered to provide alternative options for inter-regional travel and has substantial bus network benefits.*
- *Mill Road will also allow other corridors to be focused on place-making and local functions, reducing their emphasis as primary movement corridors.*

Commute response:

This statement is noted, and it is acknowledged that Mill Road is:

- of significant benefit, and
- a 'Road of National Significance'. *'The Roads of National Significance are a package of major transport projects that, will support economic growth and productivity, reduce congestion, improve safety, support housing development, and provide a more resilient roading network'.*

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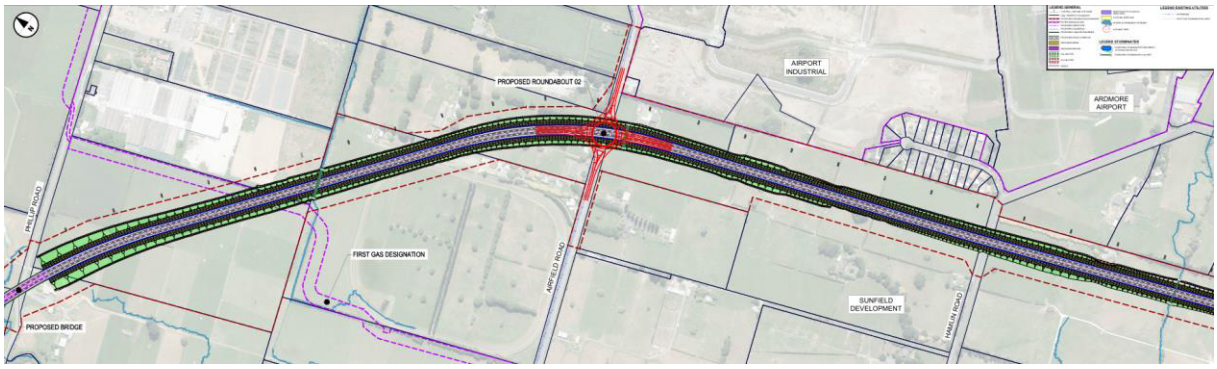
Figure 1: General Arrangement Plan



5.2.3 ITEM 16 – MILL ROAD EFFECTS

Comment:

The s67 response dated 17 July 2025 acknowledges that the application's Transport Assessment needs to be updated with regard to Mill Road Stage 2's layout. However, the s67 response (dated a month after the Nor lodgement) has not provided any updates on the matter. The effect of Mill Road Stage 2 on the proposal from a transport perspective remains unclear, especially on the following matters:

a) *Trip generation and internalisation due to the loss of sections of the employment precinct.*
b) *Stormwater (specifically flooding) matters due to the loss of sections earmarked for stormwater purposes in the original proposal.*

Commute response:

The total area of the Notice of Requirement which applies to the Sunfield landholding is 19.4 hectares, of which 7.8 hectares relates to a reduction of land within the employment precinct. It should be noted that a section of the Sunfield stormwater solution is to be construction within the Notice of Requirement Area.

The applicant has amended the Sunfield Substantive Application to integrate Mill Road stage 2 into the Sunfield master planned community.

In terms of traffic generation, the following provides an update of section 9.1.,2 of the ITA:

The site also now has 46.1 ha of employment land down from 53.9 hectares in the ITA (14% reduction) will also generate traffic outside the site (the town centre and hubs should not typically generate external traffic as they will serve Sunfield.

The following has been assumed in this assessment, based on the proposed masterplan for the warehouse distribution and office facilities which has been developed for the property:

- Site coverage of 60% (being 270,600 sqm in total)
- 37,884 sqm of office (being 14%), and
- 232,716 sqm of warehouse distribution (being 86%).

A standard employment peak hour trip rate would be 2 trips / 100 sqm for office and 0.75 trips per 100 sqm for the manufacturing. If this were a standard site it would therefore generate in the order of 758 trips for the office and 1,745 trips for the warehouse distribution or 2,503 in total (compared to 3,022 total in the ITA).

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As mentioned in the ITA, the parking provided for the employment zone is also proposed to be carefully managed to limit private vehicle usage. This will encourage workers to live in the area and promote public transport / active modes.

Again, the parking rates have been assumed to be approximately 10% of typical. As per residential, with parking constraint to 10%, it is considered that the car traffic generation rate is not going to reduce completely to 10% of typical due to:

- It being more likely that the cars provided will be more utilised than a typical subdivision;
- Uber, etc. will also be used by employees thereby creating traffic in the peak periods (and these create two trips of one entering and one exiting); and
- Freight will still need to occur via truck / road.

The site is however located so that the residents of Sunfield are more likely to work in Sunfield. As such external traffic (i.e. that outside Sunfield) will also significantly reduce. It is therefore considered that a more reasonable assumption is that the office peak hour traffic generation will be 20-25% of a typical development. Further as is detailed later in this assessment, it is envisaged that a Traffic Plan be created for the employment zone. A key part of this Traffic Plan would be the requirement for 75% of the movements relating to the warehouse distribution operation to be confined to off-peak only (being the hours outside of Monday to Friday 7-9am and 4-6pm).

It is therefore considered that a more reasonable assumption is that the warehouse distribution peak hour traffic generation will be 13-18% of a typical development. The total for the employment precinct is therefore 325-450 movements in the peak hour. This is 69-95 **less** than that in the ITA.

There may be a slight loss of internalisation with the removal of 14% of the employment land, however this is likely to be minimal and more than offset in the general loss of area.

5.2.4 ITEM 17 – MILL ROAD STAGE 1

Comment:

AT obtained designations for Stage One of the Mill Road project in 2016, encompassing the northernmost 7.1km of the corridor between the SH1 Redoubt Road interchange and the Mill Road-Alfriston Road intersection (top end of the designation shown in red in Figure 3 below). This Designation (1836) is in the process of being transferred to NZTA as the delivery agency.

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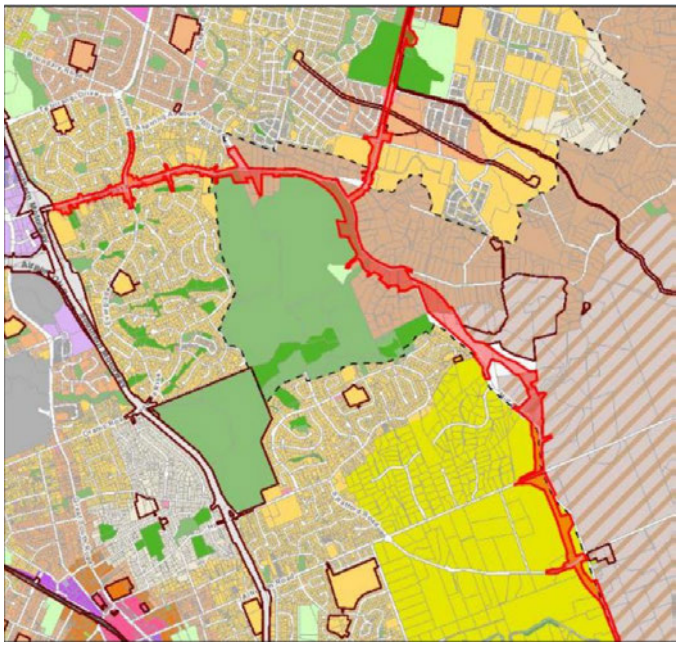

Commute response:

This statement is noted.

5.2.5 ITEM 18 – MILL ROAD UPGRADE TIMING

Comment:

It is important that development does not proceed ahead of the upgrade/construction of the required transport network, which includes Mill Road Stage 2. Without Mill Road Stage 2, the development relies on the existing transport network, which, as discussed in the Beca Report – Annexure 1, results in significant network congestion that has not been identified as requiring mitigation by the applicant.

Commute response:

The ITA and the Sunfield Section 67 Response demonstrate that Sunfield can be developed without the construction of Mill Road stage 2 providing traffic generation is limited in the area as per item 1,1 and 1.3 previously. As noted previously:

- It is our opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking).
- The applicant is proposing significant network upgrades of surrounding intersections including seven signalised intersection upgrades, four of which are removed from the immediate vicinity of the development.
- As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs

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1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

5.3 PUBLIC TRANSPORT

5.3.1 ITEM 19 – FREQUENT PUBLIC TRANSPORT SERVICE

Comment:

There is a strong emphasis on public transport within the transport assessment, as the proposal is premised on very low car ownership (1 car per 11.5 dwellings). A frequent public transit service will be required for any significant development on this site. AT does not have the funding for this service and will not provide this service, and it remains uncertain when and if AT will have funding for any future bus services through or close to this site.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application and the draft conditions.

5.3.2 ITEM 20 – PUBLIC BUS SERVICE

Comment:

The applicant's s67 responses by both Tattico and Commute now confirm that the applicant is proposing to fund and operate a public bus service which will operate on their proposed dedicated busway and link the site to both the Papakura and Takanini train stations. It is understood from the Commute ITA that this service requires an average headway of 400m between services.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application and the draft conditions. We note that the 'average headway' comment relates to when the full development of Sunfield has occurred over an approximate 15 year period.

5.3.3 ITEM 21 – BUS SERVICE PROVISION

Comment:

There is however outstanding information regarding the provision, operation, and supporting infrastructure requirements of such a bus service as well as what exactly what the applicant means but a public service (i.e., will it stop at bus stops along the way to the Papakura and Takanini trains stations, and how will ticketing work, etc). This remains a significant concern if not adequately addressed and secured through this application.

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Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application and the draft conditions.

5.4 FUNDING AND CONTRACTING

Items 22 to 28 are related to funding and contracting which are not traffic engineering matters and therefore, we have not prepared a direct response.

5.5 TIMING OF SERVICE

5.5.1 ITEM 29-31 – BUS SERIVCE TIMING

Comment:

29. *The Commute transport assessment, at section 14, and condition 123 indicate that the service will be provided at 890 dwellings constructed (445 occupied), which is noted as the conclusion of stage 3. By contrast, the offered Condition 114 indicates that the service will be provided "as part of stage 4".*
30. *It is considered that, to ensure the service is provided at the right time, the trigger should relate to a specific dwelling number and recommends that the occupation of dwelling 445 be the trigger point for the requirement of this service to be functional as opposed to a stage.*
31. *The information provided on this service does not indicate what level of service is required during various stages of the development. As currently presented, the full 44 bus service at a headway of 400m seems to be proposed for more than 890 (445 occupied) dwellings.*

Commute response:

We agreed that a trigger point is needed but prefer to have it relate to the number of dwellings constructed as this is more measurable, as such:

- Condition 123 has been updated to ensure an appropriate trigger for when the Sunbus service will be provided which factors in staging, ease of monitoring / implementation, and mitigating adverse effects. It is therefore proposed that the bus service is provided once 890 dwellings have been constructed.
- Proposed condition 114d) outlines that a roll-out plan for the Sunbus EV Fleet or alternative in line with the Staging Plan for the project is required. This is anticipated to capture the level of service required for each respective stage of development.

5.6 PUBLIC TRANSPORT INFRASTRUCTURE REQUIREMENTS

5.6.1 ITEM 32 – INTRODUCTION

Comment:

The assessment of effects and mitigation described in the ITA relies on assumptions around mode share and car use that cannot be achieved with the current proposal and its associated conditions offered by the applicant. The infrastructure requirement for a public transport service understated and requires additional work and commitment by the applicant. The following paragraphs provide an overview of this concern.

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Commute response:

We note this statement and also note that additional modelling has been completed (which uses a less restrictive traffic generation of 3,000vph) and the results are included within the memo in Attachment A.

5.6.2 ITEM 33 – RAIL STATION CAPACITY

Comment:

The Takanini and Papakura Rail stations' capacity to accommodate additional bus services needs to be investigated. AT has not been consulted in this regard and notes that both these stations will have bus capacity issues in the peak hours.

Commute response:

The applicant is happy to consult with AT as required.

5.6.3 ITEM 35 – PUBLIC TRANSPORT

Comment:

The Commute s67 response, at item 1.8, notes that the residents of the development, prior to 890 dwellings being constructed (445 occupied), will make use of the existing public transport. The response also mentioned AT's planned service #364. It is acknowledged that this service is planned to be provided in 2026 and will be able to cater to some of the public transport demand from the site. However, this service can only serve dwellings in close proximity to the southwestern portion of the site and will require these residents to walk 650m–900m. This distance is considered on the cusp of an acceptable walkable catchment and will not encourage significant uptake in public transport for the residents of this site. The Commute s67 response notes that the first stages of the proposal are within this southwestern portion of the site. It is recommended that this be included as a condition of consent, i.e., that Stages 1, 2, and 3 must be completed before the occupation or use of any further stages.

Commute response:

The applicant acknowledges the statement that AT is increasing the provision of public transport in the immediate vicinity of Sunfield in addition to the existing public transport which is already in operation and that the residents of Sunfield will be able to use this public transport service from 2026 onwards.

As noted in section 4.5.2 of the ITA:

- the first stages of development will be within walking distance of existing Bus Route 372, a connection service to the wider network.
- several neighbourhood service hubs will be constructed and will provide storage and charging for micro mobility transport along with limited parking for private vehicles.
- the local hub will initially provide an at grade car park for private vehicles until the internal public transport network is available.

5.6.4 ITEM 36 – PUBLIC TRANSPORT

Comment:

It remains unclear how residents of the initial 890 dwellings will travel, particularly if the development aspires to "car-less" living, given the initial lack of public transport and potentially inadequate walking

and cycling facilities. Consequently, private vehicle trip rates are likely to be higher during initial development stages, making the applicant's aspiration of a 60% public transport mode share is unachievable for a long period of time.

Commute response:

This comment seems to be in contradiction to the statement in Section 5.6.3 above whereby it is acknowledged that there are existing public transport options suitable for residents at Sunfield and that from 2026 additional public transport option will be available

As noted previously, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking). As noted previously, additional modelling has been completed (which uses a less restrictive traffic generation of 3,000vph) and the results are included within the memo in Attachment A.

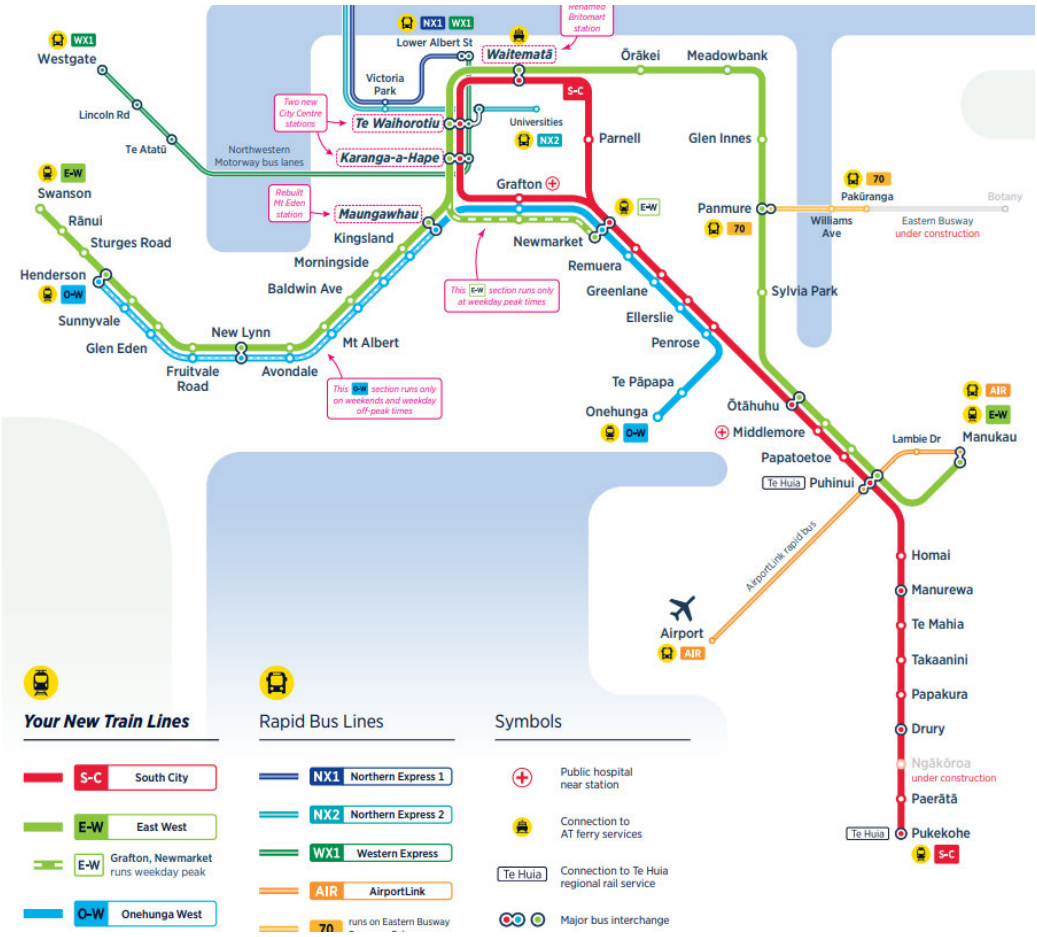
It is additionally noted that the City Rail Link (CRL) project in on track to be completed in 2026[1] which will increase capacity of the network, provide more options for travel, and greater service frequency.

It is anticipated that a key public transport route (Southern Line) will operate at a 10-minute frequency connecting Takanini with New Market, Britomart, and Grafton. The CRL "*will have the capacity to move the equivalent 16 extra traffic lanes into the city – that's a lot of cars off our roads*."

The Sunbus will enable direct / frequent connection from the site to the southern rail line utilising the benefits of CRL.

[1] https://at.govt.nz/projects-initiatives/city-centre-projects-and-initiatives/city-rail-link-auckland-s-new-network-in-2026/benefits-of-the-city-rail-link-crl

Figure 2: City Rail Link Map



5.6.5 ITEM 37 – NZTA APPROVAL

Comment:

In terms of the applicant's proposal to provide private bus services, these can generally operate on public roads; however, this will require the relevant registration approvals from NZTA. Additionally, the requirements of operating autonomous vehicles on the public road need to be verified with NZTA.

Commute response:

This statement is noted.

5.6.6 ITEM 34 – SUNFIELD LOOP

Comment:

The proposed bus lanes within the 'Sunfield loop' will need to be legally established for the intended purpose through the appropriate resolution process. This process will need to address the legalisation of autonomous vehicle use, and the applicant will need to demonstrate that these vehicles can safely

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and efficiently function on AT's network. Particular attention should be paid to locations where the dedicated bus lane intersects with other vested roads, specifically concerning the intersection of autonomous vehicles with general traffic.

a) *The applicant's s67 response confirms that they do not own all the land required to provide the proposed 'Sunfield loop'. They note that turning facilities are provided for vehicles and buses in this regard. AT is concerned with the lack of continuity for all modes of this missing link if the 'loop' is not provided. This would result in less reliance on active modes and public transport due to longer travel times.*

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application.

5.7 ACTIVE MODES NETWORK

5.7.1 ITEM 39 – ACTIVE MODE

Comment:

It is noted that the roading plans provided are large files, extensive that do not specifically focus on actives modes to the extent expected for such a significant proposal. A dedicated active modes plan showing proposed upgrades on the periphery of the site and on the existing transport network is recommended. This plan should provide certainty on what exactly is proposed where and should ensure that the required upgrades are captured for delivery in subsequent stages.

Commute response:

Please refer to the Cycle/Active Mode network plan which accompanies this response.

5.7.2 ITEM 40 – INTERNAL WALKING AND CYCLING DESIGN

Comment:

Please refer to Appendix 2 for a review of the internal walking and cycling network design. Additional commentary from a planning perspective is provided below.

Commute response:

This statement is noted.

5.7.3 ITEM 41 – ROAD TO ROAD VESTED ACTIVE MODES

Comment:

Road to road vested active modes connections internal to the site do not seem to be provided. The application drawings seem to indicate certain locations where these are possible, but these are not labelled. Figure 4 below shows in red the locations where it is considered that vested road to road accessways should be provided as part of the road network. This is considered a requirement of any large subdivision application, especially since the proposal has significantly reduced reliance on general vehicle travel. The proposal, as presented, does not indicate an efficiently connected neighbourhood, rather isolated residential blocks that do not allow for a connected and efficient layout of street patterns (legally).

Commute response:

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Please refer to the Urban Design Masterplan Report.

5.7.4 ITEM 42 – ROAD TO ROAD ACCESSWAYS

Comment:

In this regard 8m wide road to road accessways (as per AT's design standards) is recommended. The recommended road to road accessway locations is provided in the red lines on Figure 4 below. The connections offer significantly reduced travel time around the neighbourhood and key destinations. The yellow lines in Figure 4 below indicate where these connections could be beneficial, where the applicant can investigate providing a connection through an accessway or easement.

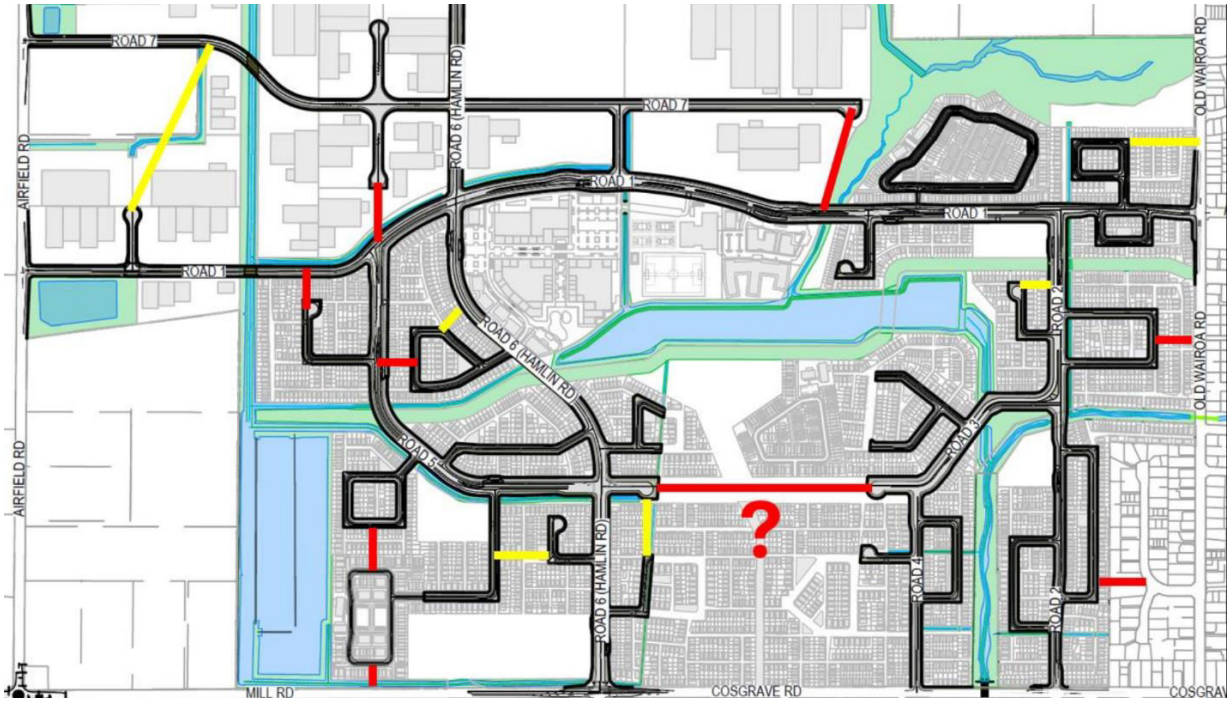
Commute response:

Please refer to the Urban Design Masterplan Report.

5.7.5 ITEM 43 – SUNFIELD LOOP

Comment:

The missing link in the 'Sunfield loop' significantly detracts from achieving a connected development.



Commute response:

Please refer to the response in Section 5.6.6.

5.7.6 ITEM 44 – LINKS TO TOWN CENTRES

Comment:

The Commute transport assessment section 11.2 states that part of the vision includes linking the site with Papakura town centre and rail station, and the Takanini town centre and rail station. The Commute s67 response point 1.11 similarly notes the site connects to AT's future cycling network.

Commute response:

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No request for additional information or clarification is made here. The applicant is open to discussing the provision of cycling network.

5.7.7 ITEM 45 – ACTIVE MODE UPGRADES

Comment:

However, the Commute Transport Assessment section 7.1.2 only includes minor active modes upgrades to achieve this link, please refer to Figure 5 below. It is considered that the approach will not achieve the stated vision or reduce reliance on private vehicles. It is also noted that this proposal was not considered in any of AT's future plans, given that the majority of this site sits within rural land, and therefore AT's future cycling plans are not relevant to this proposal. The proposal must provide the active modes network that would have been in place by the time the site might have become development ready. In this regard, AT considers that the following active modes upgrades referenced in the below paragraphs need to be provided by the applicant.

Commute response:

It is considered that the appropriate cycle connections have been addressed as part of the ITA given the nature of the surrounding transportation network and destination points.

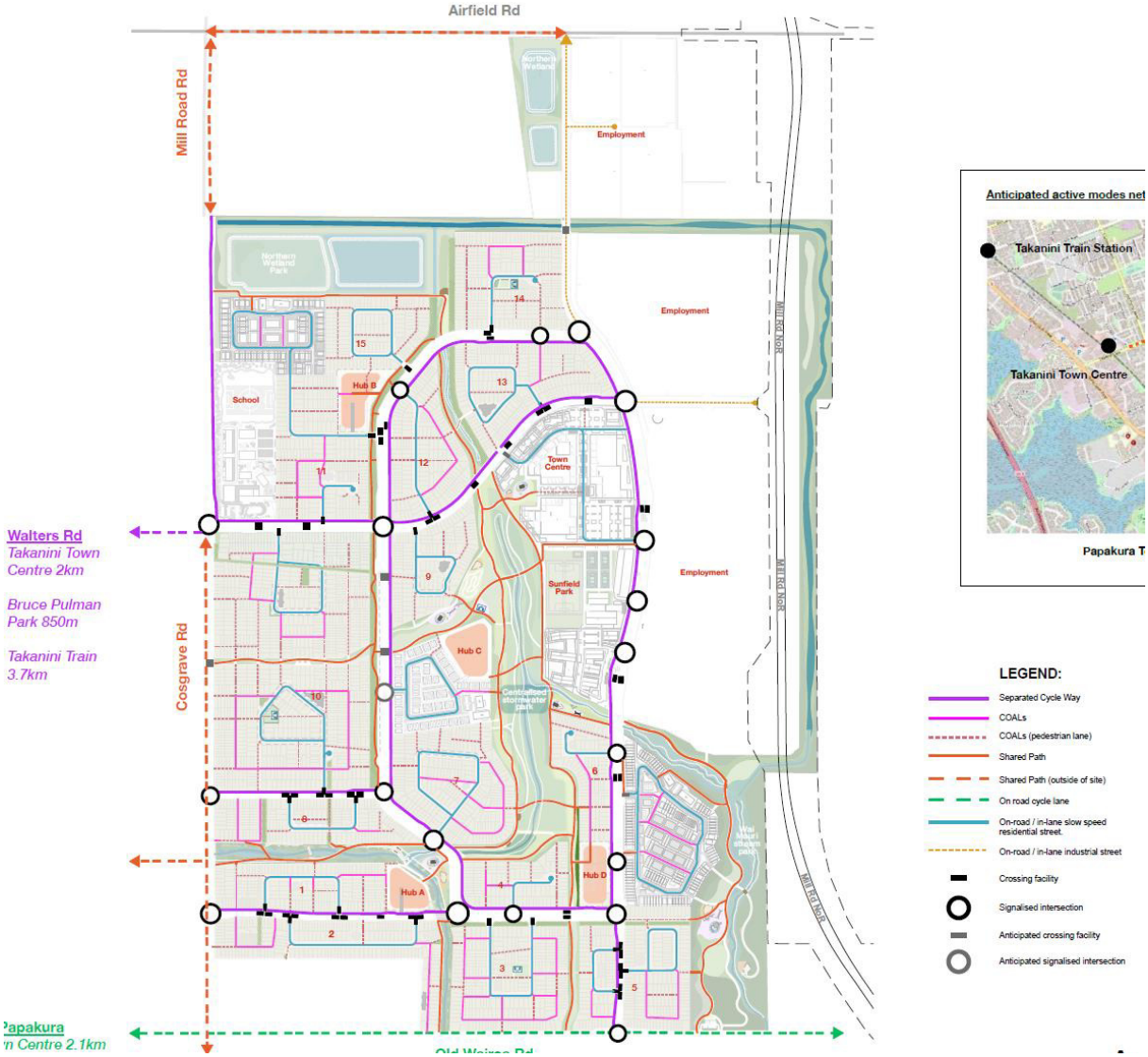
There will likely be other private connection (e.g. the school on Cosgrave Road) in additional to those shown in Figure 7.2 of the ITA. It is noted that Figure 7.2 of the ITA does not show a fourth connection which is proposed being Road 6 (Hamlin Road) which is proposed to now have a separated cycleway on the northern side of the road.

Figure 3 highlights the proposed internal active mode connections, which are planned to connect with the proposed partly developer constructed cycle connections providing adequate active mode connections to the wider network.

The comments below outline specific comments to the suggestions.

Please refer to the Cycle/Active Mode network plan which is detailed below and accompanies this response.

Figure 3: Internal Active Mode Connections



5.7.8 ITEM 46 – TAKANINI TRAIN STATION

Comment:

The transport assessment notes that the Takanini Train Station needs to be upgraded for sheltered bike storage. The draft conditions proposed by the applicant do not include this as a requirement, and the designs provided also do not seem to address this required upgrade as well. The transport assessment should identify the bike storage location and design (minimum number of bikes to be accommodated within the facility) and include its implementation as a condition.

Commute response:

The applicant is open to discussing the provision of bike storage at the Takanini train station with AT noting that the ultimate provision of bike storage at trains station is the responsibility of AT.

5.7.9 ITEM 47 – ACTIVE MODE FRONTAGE UPGRADES

Comment:

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It is unclear to what extent the applicant proposes to upgrade the site's frontage in terms of active mode upgrades. The applicant plans show limited sections of frontage upgrades – generally where the red dashed lines are presented in Figure 5 below. However, with the site not being earmarked for development, it is required that this site provide upgrades along the entire site 'block' to connect the site to the surrounding network, as this is required but unlikely to be provided by any other parties.

Commute response:

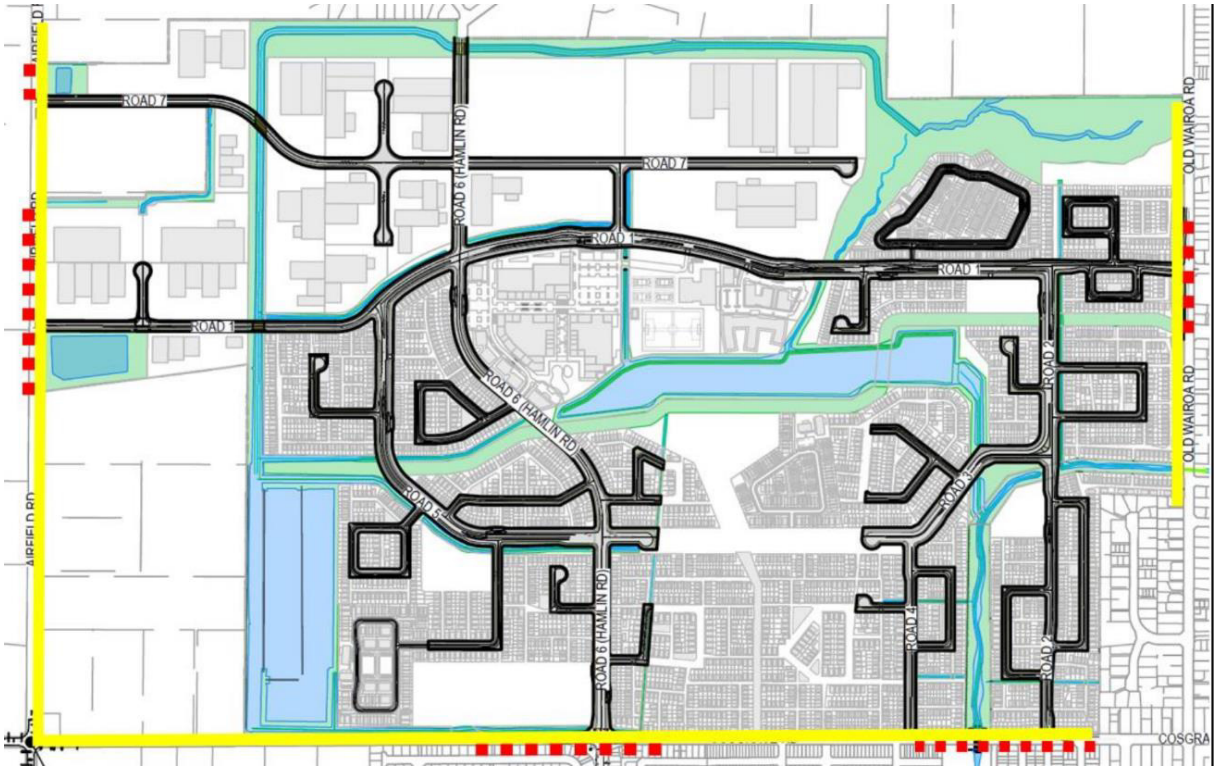
The applicant is open to discussing the issue raised, noting our specific comments below.

5.7.10 ITEM 48 – UPGRADE FORM

Comment:

It is difficult to ascertain exactly what forms these upgrades should take. However, when attempting to link the development into the surrounding site, the following are recommended as a minimum:

- *Shared path on Airfield Road (3m wide minimum)*
- *Separated cycling and walking facilities or shared path on Mill Road and Cosgrave Road.*
- *Separated cycling and walking facilities on Old Wairoa Road is preferred and will need to link in with the proposed path on Okawa Avenue and the existing on-street cycleway in Old Wairoa Road north of PA karaka Drive.*



Commute response:

The applicant agrees with the proposed upgrades detailed above, with the exception being the shared path on Airfield Road. This comment is made on the basis that:

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- it would be better for mode share to be concentrated within the Sunfield development especially around the residential neighbourhoods so that it can link to the proposed cycle/Active Mode network which is outlined in the plan which accompanies this response.
- as per the Notice of Requirement lodged by NZTA for Mill Road stage 2, Mill Road will connect to Airfield Road via a roundabout.

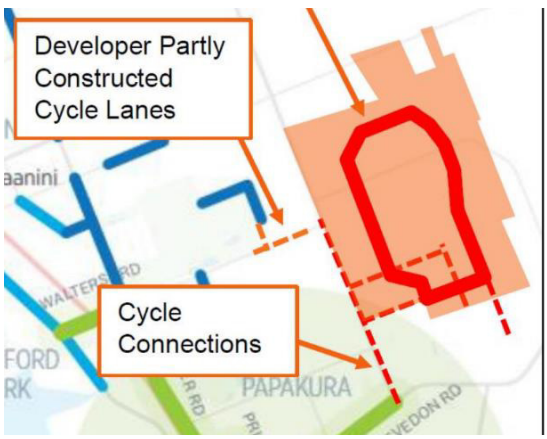
It is considered that these issues are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops. The applicant is open to discussing the extent of active mode provisioning in support of the Sunfield development.

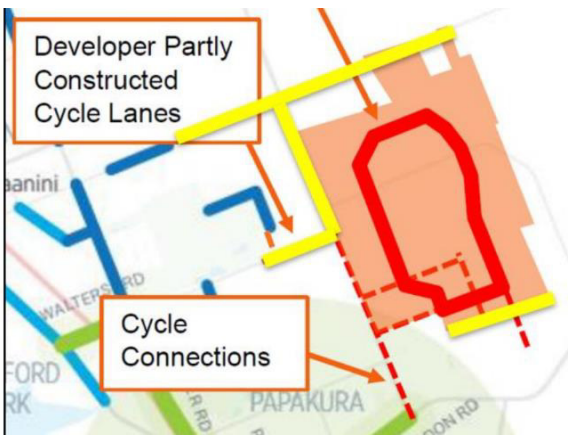
5.7.11 ITEM 49 – ACTIVE MODE CONNECTIONS

Comment:

With regard to connecting the site to the wider road network from an active modes perspective, as mentioned above, the statement that the proposal attempts to align with AT's cycling strategy for the area is considered less relevant. Transport strategies for this area does not take into account that this (unanticipated) development will occur. Figure 6 below (Commute transport assessment figure 7-2) shows the proposed active modes links (dark orange dashed lines) provided by the applicant. In this regard, AT considers the following:

a) *The active modes links on Pakaraka Drive and Cosgrave Road are acceptable and considered to assist in integrating with the neighbourhoods to the south and west. Connecting to the Papakura Rail station is preferred, but extensive and not required.*
b) *No active mode links are provided on the northern side of the site. It is assumed that this is the case due to the lack of existing infrastructure on that end of the site. However, as mentioned throughout this document, the lack of infrastructure is expected in this area as this site is not earmarked for development in Council's FDS. As such, the applicant should provide the infrastructure that would have been in place by the time this site becomes developable.*
c) *Based on the above, it is required the applicant to ensure active mode connectivity between their site and Takanini Train Station. This must be provided to assist in the reduction of private vehicle reliance for the residential and employment precincts.*
d) *The recommended upgrades include active modes facilities on Airfield Road (south side), along the site boundary up to the northwestern boundary of 139 Airfield Road, where this facility will link into existing facilities.*
e) *The recommended upgrades also include active modes facilities on Mill Road, between Airfield Road and Walters Road.*
f) *The upgrades as per items d. and e. above are illustrated in yellow in Figure 7 below*





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As noted in section 5.7.7, the applicant agrees with the proposed upgrades detailed above with the exception being the shared path on Airfield Road.

5.7.12 ITEM 50 – INTERSECTION UPGRADES

Comment:

Significant concerns are raised regarding the ability of the proposed upgrades to allow sufficient land for active modes facilities and berms. For example, the Airfield Road/ Mill Road intersection will require more land (on all approaches) to cater for walking, cycling and berm requirements. AT is unlikely to accept intersections at design and traffic resolution stage that do not sufficiently cater for all modes of transport.

Commute response:

We agree that the Airfield Road / Mill Road intersection is currently constrained in regard to boundaries. This intersection currently has no pedestrian / cycling facilities and the Sunfield development is unlikely to noticeably increase demand in this regard as there are no destinations in / around this area. We consider it more appropriate to provide these walking / cycling facilities as the surrounding area develops (noting it is FUZ and rural land so unlikely in the short / medium term to be development) when surrounding boundaries can be adjusted.

5.8 PARKING

5.8.1 ITEM 51 – PARKING RATIO

Comment:

The proposal includes a parking ratio of approximately two spaces for every dwelling (one for residents and one for visitors) to align with the intention of creating a low vehicle trip generation development. The Commute transport assessment at section 12.2 identifies the potential for illegal parking and proposes three ways to mitigate this, see below:

a) *Design internal roads so that berm parking is impossible.*
b) *Residential parking scheme to be implemented by Council.*
c) *Imposing covenants on homeowners/residents that restrict private car ownership.*

However, the Tattico s67 section 2.3.2 (other) indicates that points b and c above as per Commute's transport assessment are not proposed. The s67 response notes that design solutions include internal (body corporate) and external (Public Road) parking restrictions.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

5.8.2 ITEM 52 – PARKING ENFORCEMENT

Comment:

Although it is noted that roads can be designed to prevent berm parking, it is expected that this will result in a significant increase in enforcement requirements from AT, at the general ratepayers' expense. This is especially the case since typical and relatively wide berms of one or both sides of the

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proposed roads are provided. Measures to avoid berm parking are identified in the Commute Transport Assessment – sections 12.2 and 12.3 – including bollards, fences, planting, and parking restrictions. The Commute s67 response at item 1.4 expands this list by adding "design led restrictive" pavements and notes that this parking restriction will be enforced by the incorporated society that is formed for each individual Joint Owned Access Lot. None of the provided measures are detailed or indicated on the roading drawings in the application, nor secured via the draft conditions, and therefore considered not to be effective.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the response detailed in Section 1.1.

5.8.3 ITEM 53 – SPILL-OVER PARKING

Comment:

The applicant also acknowledges that spill-over parking will likely occur in the adjacent neighbourhoods. The Commute transport assessment at section 12.2 notes that Council can look to implement residential parking restrictions. In this regard, AT considers that the applicant must mitigate the effects associated with spillover and not rely on Council or AT to do so. Furthermore, residential parking zones were largely discontinued in 2007 by the legacy Auckland Council. These zones were intended for areas adjacent to the city and locations that did not allow on-site car parking, such as heritage buildings. They are not intended for new greenfield developments, and it is unlikely that AT or the local residents of surrounding communities will agree to support such a proposal. If this development is reliant on restricting parking in other neighbourhoods, it is considered that the residents of these affected neighbourhoods are parties adversely affected by this proposal. It is not supported that a development mitigates its effects by creating adverse effects on other adjacent sites.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the response detailed in Section 1.1.

5.8.4 ITEM 54 – COVENANTS

Comment:

Covenants were initially suggested by the Commute transport assessment but subsequently dismissed by the Tattico s67 response in section 2.3.1.

Commute response:

This statement is noted.

5.8.5 ITEM 55 – PARKING CONTROLS

Comment:

It is considered that with the current draft conditions devoid of specific and restrictive car parking controls that can be enforced by AT, there is a high likelihood of uncontrolled parking creating safety and amenity effects on internal and nearby external roads. Furthermore, it is considered that the extent of parking restrictions required is unrealistic and would require substantial parking restriction infrastructure, operational expenditure (by AT) and commitment by private entities (individual incorporated societies) and monitoring review by the applicant and Council. It is not considered that

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the proposal could achieve the envisaged 1 car per 11.5 dwellings, regardless of the measure proposed by the applicant.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the response detailed in Section 1.1.

5.9 VEHICLE TRIP GENERATION, MODELLING, AND EFFECTS

5.9.1 ITEM 56 – SUMMARY

Comment:

The transport assessment is predicated on an unprecedentedly low level of vehicle trip generation. It is considered (and both Beca and Progressive Transport Solutions have reached the same conclusion) that the trip generation assumptions provided in the Commute Transport Assessment – Section 9.1 to be aspirational and highly unlikely. AT has commissioned Beca to undertake a review of the application's trip generation assumptions and subsequently investigate more realistic trip generation assumptions that are possible with robust mitigation and consent conditions. Please refer to Annexure 3 for this report. To summarise this Beca report, the lowest that the expected trip generation rate could be is approximately 3,000 peak hour trips. This figure is still considered less than half of what industry trip generation standards would suggest but is still significantly higher than the Commute rate of 1,100 peak hour vehicle trips.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking). Notwithstanding this please the responses detailed in Section 1.1 and 1.3.

As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

5.9.2 ITEM 57 – TRIP GENERATION

Comment:

As noted above, applicant's transport assessment is based on a single aspirational trip generation rate. The applicant has not accounted for or assessed any other potential future scenario should their given trip generation rate not eventuate. Based on the unprecedented low trip generation rate it is consider likely that future scenarios other that than suggested in the transport assessment will likely occur. It is recommended that the applicant investigate these other potential scenarios, assess them in a systematic fashion and provide mitigation measures according to these scenarios to ensure that whatever trip generation scenario eventuates, its effects on the transport network is mitigated.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed

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Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking). Notwithstanding this please the responses detailed in Section 1.1 and 1.3.

As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

5.9.3 ITEM 58 – MODELLING

Comment:

In the absence of the applicant providing any assessments on alternative future scenarios, AT and the Auckland Forecasting Centre have undertaken a SATURN network related transport model to obtain some insight into what the effects on the wider transport network could be if a more realistic trip generation rate eventuates. This network model is based on the year 204112 And a 3000 peak hour vehicle trips trip generation rate identified by Beca - see Annexure 3. The Beca report in Annexure 1 assesses the findings of this network model and has subsequently undertaken individual intersection Sidra modelling for certain intersections to further understand the effects and infrastructure requirements of this development. Please refer to Annexure 1 for this report.

Commute response:

Refer to the comment in section 5.9.2.

5.9.4 ITEM 59 – INTERSECTION UPGRADES

Comment:

In summary, the report highlights eight intersections significantly affected by the proposal. Five of these have not been assessed by the applicant but it is likely that these will require upgrades and must be investigate by the applicant, these five are summarised as:

- *Ranfurly Road / Alfriston Road,*
- *Walters Road / Porchester Road – This intersection is likely to see significant performance issue regardless of what future trip generation scenario eventuates and would likely need to be signalised by the applicant,*
- *Porchester Road / Kuaka Drive,*
- *Mill Road / Popes Road – Beca has undertaken Sidra modelling of this intersection and additional lanes to the roundabout will likely be required,*
- *Mill Road / Alfriston Road - Beca has undertaken Sidra modelling of this intersection based on the increase in traveling times shown by the SATURN model, additional lanes to the roundabout will likely be required.*

Three of the eight have been assessed by the applicant but have been identified in the Beca report as likely requiring further upgrades, these three as summarised as:

- *Mill Road / Airfield Road - Beca has undertaken Sidra modelling of this intersection indicates that it will likely require an additional western lane and widened intersection footprint (land),*
- *Waters Road, Cosgrave Road - Beca has undertaken Sidra modelling of this intersection indicates that it will likely require an additional western lane and widened intersection footprint (land),*
- *Old Wairoa Road / Pakaraka Drive - Beca has undertaken Sidra modelling of this intersection, and it is likely that a roundabout will be the required upgrade at this intersection. In addition to Beca 'finding it is recommended that the applicant investigate the feasibility of shifting this*

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access to the Okawa Avenue intersection as the gradients, on-street parking, and direct connection to the Okawa Avenue/ Clevedon Road to-be-signalised intersection is better.

Commute response:

As previously detailed in Section 1.3 additional modelling (which includes each of the intersections identified above) has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

It is considered that these issues are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.9.5 ITEM 60 – INTERSECTION UPGRADES

Comment:

Please refer to Annexure 1 for more information on these suggested upgrades.

Commute response:

This statement is noted.

5.9.6 ITEM 61 – COST

Comment:

Beca's intersection modelling and findings indicate that the scale, cost, and land requirements of required infrastructure has been significantly underestimated.

Commute response:

As previously detailed in Section 1.3 additional modelling (which includes each of the intersections identified in Section 5.9.4) has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

5.10 ROAD SAFETY

5.10.1 ITEM 62-63 – ROAD SAFETY

Comment:

Para 62 – The transport assessment identifies a relatively high record of crashes on the external road network, including serious and fatal crashes over the last five years (Section 4.6). There are limited recommended safety upgrades to address this issue. Trips from the development may be accessing an unsafe road environment and increasing the risk of crashes occurring on a similar trend in the future. The transport assessment should include recommendations to address safety deficiencies.

Para 63 – The recommendation to provide traffic calming on Old Wairoa Road to lower speeds and improve cyclist safety (Section 7.1.2) has not been carried through into the implementation plan or draft conditions.

Para 64 – A Safe Systems Assessment approach to road and intersection design is recommended. This will require the applicant to undertake Safe Systems Audits for all intersection upgrades, except when exempt by AT. It is recommended that the requirement for Stage 3 Safe Systems Audits is provided for in the conditions.

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Commute response:

It is agreed that the safety assessment highlights potential safety risks to road users, we note the following:

- the existing road network operates in a semi-rural location with higher speeds generally leading to more severe crashes. The proposal urbanises the area which will be accompanies by lower posted speeds.
- the proposal includes significant intersection upgrades including seven existing priority intersections being converted to traffic signals.
- traffic calming on Old Wairoa Road to ensure a lower speed environment leading to improved safety outcomes could be implemented with the appropriate stage.
- it is noted that the construction of Mill Road stage 2 will improve the safety outcomes of the surrounding network by upgrading some key intersections and taking traffic off the local road network.

5.10.2 ITEM 64 – SAFE SYSTEMS ASSESSMENT

Comment:

A Safe Systems Assessment approach to road and intersection design is recommended. This will require the applicant to undertake Safe Systems Audits for all intersection upgrades, except when exempt by AT. It is recommended that the requirement for Stage 3 Safe Systems Audits is provided for in the conditions.

Commute response:

It is acknowledged and agreed that any future detailed design of intersections / roads should be subject to a Stage 3 Safe System Audits.

5.11 ROAD DESIGN

5.11.1 ITEM 65, 67, 69 – SHARED PATH COMPLETION AND ACCESS

Comment:

Para 65 – Note The Airfield Road / Mill Road intersection is included as a roundabout in the engineering drawings. It is understood that the applicant proposes to signalise this, and comments (this document and Annexure 1) are provided on the basis of signalisation.*

Para 67 – The Beca report (Annexure 1) indicates that two intersections proposed to be upgraded by the applicant will require additional land to ensure feasible upgrades. This includes the Airfield Road/ Mill Road signalisation, where more land is required on all approaches, specifically the eastern leg. The second intersection is the proposed signalisation of the Pakaraka Drive/ Old Wairoa Road intersection with proposed Road 1. This intersection is recommended to be a roundabout. Additionally, it is unclear why the Okawa Avenue/ Old Wairoa Road intersection is not used as an access point instead of Pakaraka Drive. Okawa Avenue provides a more level gradient and has no existing kerbside parking. It will also link in directly with the to be (future) signalised intersection with Clevedon Road. It is recommended that conferencing occur between AT's experts and the applicant's road designers to ensure that the consent allows for feasible solutions to be progressed at design stages.

Para 69 – As per the Active Modes comments, significant concerns are raised regarding the ability of the proposed upgrades to allow sufficient land for active modes facilities and berms. For example, the Airfield Road/ Mill Road intersection will require more land (on all approaches) to cater for walking, cycling and berm requirements. AT is unlikely to accept intersections at design and traffic resolution stages that do not sufficiently cater for all modes of transport.

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Commute response:

Please refer to the responses provided in Section 5.7.

5.11.2 ITEM 66 – VEHICLE TRACKING

Comment:

Design comments are covered in the PTSL technical note attached as Annexure 2. The technical note highlights key areas that must be addressed at the fast-track approval stage because they relate to boundaries which are set at this stage and would require subsequent consent amendment if they are not adequate at subsequent detailed design stages.

- *For example, vehicle tracking provided by the applicant is inadequate and does not indicate whether the internal intersection design can work safely or whether road widening in certain areas is required. An unsafe and inefficient design will not be accepted by AT.*

Commute response:

Please refer to the response to Section 3.3.1 – Item 14 and:

As detailed in the draft conditions, the applicant will provide vehicle tracking curves as part of the detailed design drawings to be provided as part of the Engineering Approval.

5.11.3 ITEM 68 – DETAILED DESIGN

Comment:

It is recommended that the applicant revise the detailed design aspects of their proposal in line with the requirements of Annexures 1 and 2. The applicant is also encouraged to workshop or conference with AT's experts regarding the design requirements suggested as part of Annexures 1 and 2. However, given the scale and absence of detailed design related discussion with the applicant, it is likely that further design issues could occur at subsequent stages of this development.

Commute response:

This is comment is noted and generally agreed.

5.11.4 ITEM 70 – ROAD DESIGN – OKAWA AVENUE / CLEVEDON ROAD

Comment:

AT is in the process of signalising the Okawa Avenue/ Clevedon Road intersection. This upgrade does not take into account the proposal and will not be able to cater for the additional traffic following the development. It is strongly recommended that the applicant engages with AT in this regard and looks to provide AT with certainty that this intersection will be upgraded within a certain timeframe. If this is not done, AT will likely upgrade the intersection, causing significant delays to the areas and then in a few years, the applicant will need to redo the upgrade at significant cost and more delays to the residents.

Commute response:

As per the draft conditions, the applicant is proposing to upgrade this intersection as part of stage 4 works. The applicant is happy to discuss the early upgrade of this intersection and a cost sharing arrangement with AT. Of note, the modelling completed by AFC on behalf of NZTA with MRS2A included showed significantly greater volumes of traffic on Papakura – Clevedon Road / Clevedon Road which should be accounted for the NZTA's planning of MRS2A.

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Further, the applicant is happy to engage with AT on the scale and timing of all of the applicants proposed intersection upgrades on the existing roading network.

It is considered that these issues are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.11.5 ITEM 71 – SHARED PATHS

Comment:

As noted previously in the active modes section, the use of shared paths instead of separated walking and cycling facilities on major roads will be for AT's consideration at the detailed design stage. It is likely that AT will require separated walking and cycling facilities on the main roads and not shared paths.

Commute response:

The applicant is happy to engage with AT on this point further and notes the intention is to change the shared path on Road 6 with a separated cycle path.

5.11.6 ITEM 72 – AT ENGAGEMENT

Comment:

It is requested that the applicant engages with AT on road design matters. This is recommended as part of this application, but also prior to lodgement of Engineering Approvals (detailed design review stage). It is recommended that, if the application is approved, a condition or at least advice is provided in any approval that requires the applicant to engage with AT to ensure road design is discussed before detailed design approval lodgements.

Commute response:

The applicant is happy to engage with AT as required on road design matters. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.12 TRAVEL DEMAND MANAGEMENT

5.12.1 ITEM 73 – TRAVEL DEMAND MANAGEMENT

Comment:

Para 73 – The Commute Transport Assessment at section 11.5 notes that a travel plan (Travel Demand Management Plan – TDMP) would be beneficial for the employment district within the site. The Commute s67 response at item 1.25 reiterates this. Although AT agrees, it is recommended that a wider TDMP be provided that includes each precinct proposed and not only the employment precinct. A TDMP will ensure that ongoing transport and mode choice education and advice are provided to all residents, school children and workers within the Sunfield development.

Commute response:

Condition 130 has been updated to include each business within the Town Centre Precinct (in addition to the Employment Precinct)

5.12.2 .ITEM 74 – TDMP

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Comment:

AT requested that a draft TDMP be provided to AT for comments. The Commute s67 response at item 1.25 responds by saying that it can be done. However, a draft has not been received. It is recommended that the applicant provides TDMPs for all precincts and that the following be incorporated into the consent conditions, if the application is approved:

- *Condition 193 offered by the applicant notes the establishment of an Incorporated Society or equivalent to own and manage community assets. AT recommends that this Incorporated Society is also a forum through which travel demand management initiatives across the area are coordinated and delivered. If there is an annual charge for residents, commercial tenants, etc., a portion of this charge could be ringfenced to delivering sustainable travel initiatives and events. The annual charge could go towards paying for a travel management coordinator, for example. AT recommends that Condition 193 be expanded so that the Incorporated Society must contribute towards travel demand initiatives to reduce private vehicle travel.*
- *Individual workplaces, schools, and retirement villages should develop their own travel plans, which are focused on managing travel demand from deliveries, visitors, etc.*
- *Residential TDMP can support/incentivise local trip making, especially for new neighbourhoods such as this proposal, which is the ideal point for creating new behaviours and travel habits.*
- *Providing welcome packs to new residents that include information about transport options and incentives for new residents to set up the right travel behaviours from the beginning will be key. For example, AT HOP cards with credit for new residents, free trials for different transport modes such as scooters, bikes or carshares.*
- *Many people's travel decisions are based on household commitments. This will be a new way of living –the Commute Transport Assessment at section 3 provides context that this development is the first development of its kind – therefore, a large-scale, residential personal travel planning programme should be investigated.*
- *Measures to ensure that plan remains effective. I.e., how will the plan be reviewed and monitored, especially if higher vehicle usage is identified.*

Commute response:

Please see the response provided in Sections 5.12.1.

5.13 CONSTRUCTION TRAFFIC

5.13.1 ITEM 75-78 – CONSTRUCTION TRAFFIC – PAVEMENT ASSESSMENT

Comment:

Para 75 – Construction traffic effects have not been assessed in terms of potential impacts on the pavement condition of existing roads that will carry earthwork and construction related to heavy vehicles.

Para 76 – The applicant proposes 30,000m³ of net fill of earthworks to be imported to the site and an additional 100,000m³ of imported fill based on preloading one superlot at a time. Assuming a standard truck load of 12m³, this requires approximately 11,000 truckloads of earthworks to be imported into the site across the 10+ years of construction. This excludes construction vehicle traffic, which does not seem to have an estimate in the application.

Para 77 – Roads likely to be affected include Airfield Road, Walters Road, Old Wairoa Road and Clevedon Road. The roads in the vicinity of the site, especially adjacent to the site, have not been provided with the expectation that this site will be developed and have not necessarily been built to withstand a significant number of heavy vehicles. Superficial and structural damage is likely to occur on the road network based on the construction and earthwork traffic of this development. This matter has not been assessed in this application. Video surveys and Falling Weight Deflectometer tests are

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recommended prior to, during and post development to ascertain the damage caused by the construction and earthworks traffic of the proposal. These damages should then be rectified by the consent holder within a reasonable timeframe, depending on their severity or must be mitigated through a financial contribution appropriate to the damages to the road controlling authority.

Para 78 – A pavement Impact Assessment (PIA) and subsequent reinstatement by the applicant are recommended as a consent condition to address these matters, if the application is approved. Reference is made to a previously approved Covid fast track development, "Upland Road Retirement Village". This approval includes the condition that pavement damage for a certain stretch of road due to earthworks and construction traffic must be surveyed and repaired by the applicant.

Commute response:

This is not a traffic engineering matter, but the applicant notes:

- the applicant is not proposing to have exclusive use of any public road and therefore any wear on public roads cannot be attributed to one party. It is widely accepted that the roads surrounding the Sunfield site are high-capacity roads and therefore have a large number of existing roads users.
- it is the local roading authority's obligation to maintain public roads to an acceptable standard for all roads users. This should not be an obligation passed onto another party. As a rate payer it is the applicant's expectation that roads are maintained to provide suitable and safe access to their property. Walters Road, Old Wairoa Road, Clevedon-Papakura Road and the western end of Airfield Roads have been exposed to extensive development traffic so there would be an expectation that these roads are built and maintained to a standard to support this development and continued to be maintained to support future development.

5.14 STORMWATER

Items 79-81 are stormwater related matters, which are not traffic engineering matters and have not been addressed in this response memo.

5.15 MONITORING AND REVIEW OF TRANSPORT MATTERS

5.15.1 ITEM 82-84 – TRANSPORTATION – MONITORING AND REVIEW

Comment:

Para 82 – The Commute transport assessment at section 11.6 suggests the monitoring of initial stages of the development to ensure the measures proposed have the desired result (reduce external and internal private vehicle travel). The report also notes that this "monitoring should measure the travel modes of residents / workers including a continuous traffic count of the external links to the wider roading network to ensure private car travel is minimised as planned."

Para 83 – The provided conditions do not include a specific condition in this regard.

Para 83 – It is recommended that a robust condition or conditions be imposed requiring measures to address deviations from the required level of vehicle trip generation rate.

Para 84 - It is recommended that a robust condition or conditions be imposed requiring measures to address deviations from the required level of vehicle trip generation rate

Commute response:

In general, the applicant agrees with these comments.

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5.16 CONCLUSION

5.16.1 ITEM 85 – MILL ROAD INTEGRATION

Comment:

The proposal does not consider or integrate with the NZTA Mill Road upgrade works, including the recent NoR issued by NZTA.

Commute response:

As noted previously, NZTA lodged the Notice of Requirement for MRS2A on 13 June 2025 which was after the Sunfield Substantive Application had been lodged. The applicant and Commute had no prior knowledge of the Notice of Requirement lodgement.

The applicant has amended the Sunfield Substantive Application to integrate MRS2A into the Sunfield master planned community. Notwithstanding this as previously detailed in Section 1.3 additional modelling (which includes each of the intersections identified in Section 5.9.4) has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

It is considered that these issues are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.16.2 ITEM 86 – TRIP GENERATION

Comment:

The predominantly rural zoning of the site makes the matter of the potential unmitigated effects more significant, as strategic planning efforts such as the Supporting Growth programme have not accounted for the possibility of higher trip-generating outcomes for this site (i.e., cumulative effects). The effects of any trip generation above the assumed zoning will have implications for the planned strategic network and significant upgrades, such as Mill Road. There is a risk that the efficiency of the strategic Mill Road upgrade is diminished by additional traffic that has not been assumed in the design process.

Commute response:

As noted previously, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community and an appropriate sensitivity analysis is contained within Section 9.1.7 of the ITA.

5.16.3 ITEM 88 – WIDER TRANSPORT INFRASTRUCTURE

Comment:

No wider transport infrastructure is provided besides intersections leading into the site and the active modes upgrades on Cosgrave Road.

Commute response:

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We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this, please refer to responses provided in Section 5.7.

5.16.4 ITEM 89 – PUBLIC TRANSPORT

Comment:

The development cannot rely on AT to provide public transport services and should mitigate their own effects.

Commute response:

Please refer to responses provided at Section 5.6 and 5.7.

5.16.5 ITEM 90 – MODELLING

Comment:

Beca's independent intersection modelling and the combined Beca and Auckland Forecasting Centre's network modelling confirms that the applicant has underestimated both the number of intersections requiring upgrades and the extent of works needed. Material gaps include no assessment five likely affected intersections and limited assessment of three intersections summarised below:

- *The five intersections that are likely to experience delays requiring mitigation/upgrades but not assessed by the applicant:*
  - *Ranfurly Road / Alfriston Road*
  - *Walters Road / Porchester Road*
  - *Porchester Road / Kuaka Drive*
  - *Mill Road / Popes Road*
  - *Mill Road / Alfriston Road,*
- *The three intersections that requires further assessed and upgrades:*
  - *Airfield Road / Mill Road*
  - *Cosgrave Road / Walters Road*
  - *Pakaraka Drive / Old Wairoa Road (noting that the Okawa Avenue as opposed to Pakaraka Drivecould be a better access point onto the network).*

Commute response:

Additional modelling has now been undertaken and is provided in Attachment A which includes these intersections.

As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

It is considered that these issues / upgrades are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

5.16.6 ITEM 91 – STORMWATER MANAGEMENT

Comment:

There are significant deficiencies and unverifiable assumptions in flood modelling and stormwater management.

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Commute response:

This is not a traffic engineering matter, these issues are addressed in the wider Sunfield response.

5.16.7 ITEM 92 – FLOOD RISKS

Comment:

There has been inadequate assessment and presentation of flood risks, effects and associated mitigation measures.

Commute response:

This is not a traffic engineering matter, these issues are addressed in the wider Sunfield response.

5.16.8 ITEM 93 – PARKING CONTROLS

Comment:

No details are specified for on-street parking controls within the site and vicinity of the site.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application.

5.16.9 ITEM 94 – BUS SERVICE

Comment:

No details have been provided on who will provide, subsidise, and operate the proposed bus service.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application.

5.16.10 ITEM 95 – WALKING/CYCLING NETWORK UPGRADES

Comment:

No details on wider network upgrades required to provide the necessary level of service for walking and cycling have been provided.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this, please refer to the responses in Section 5.7 for information regarding wider network upgrades.

5.16.11 ITEM 96 – COSGRAVE ROAD UPGRADES

Comment:

External upgrades are proposed for Cosgrave Road over stages 1, 2, 23, 24, and 25. Staging will not deliver the necessary connectivity for pedestrians and cycling. External road upgrades will need to be delivered in full early in the staging to achieve the desired outcomes.

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Commute response:

We do not agree with this comment.

5.16.12 ITEM 97 – MONITORING PROVISIONS

Comment:

No monitoring provisions are included to assess actual outcomes and necessary additional mitigations over time.

Commute response:

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this, see the responses detailed in Section 1.1 and 1.3.

As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

5.16.13 ITEM 98 – CYCLING PARKING FACILITIES

Comment:

No conditions are proposed to upgrade the cycling parking facilities at the Takanini Train Station, although mentioned as a requirement by this proposal.

Commute response:

Please refer to the response provided in Section 5.7.8.

5.16.14 ITEM 99 – MONITORING PROVISIONS

Comment:

Finally, while AT has sought to provide initial comments on the proposed conditions throughout this memorandum to assist the Panel:

a) *The information provided by the applicant is insufficient to allow AT to undertake an informed review of the proposal and provide definitive feedback on appropriate conditions. In this regard, AT notes that the information requested in Council's 17 June section 67 memorandum relating to transport and traffic remains outstanding.*
b) *Its comments are offered without prejudice to AT's / the Council's ability to make more comprehensive comments on any draft conditions under section 70 of the Fast-track Approvals Act 2024, should the Panel decide to grant approval.*

Commute response:

The applicant believes it has provided a fulsome response to Council Section 67 memorandum especially as it related to transportation. Notwithstanding this, the applicant and Commute look forward to discussing AT concerns in the meeting which is to occur on 13th October.

5.17 COMMENTS ON CONDITIONS

100. Should the application be further considered by the Panel, AT provides the following high-level comments with regard to the conditions of consent. The provision of these comments

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should not be viewed as indicating support of the application, and AT kindly requests that they be included in any future discussions regarding transport related conditions.

5.17.1 ITEMS 101-105 – PUBLIC TRANSPORT

Comment:

101. AT recommends that condition 114 be redrafted as clear and enforceable conditions (e.g., so that a particular stage of development cannot proceed until the service is established and operational). Contingency also needs to be added to the condition in the case of service disruptions.
102. This condition does not, but needs to, reference the incorporated society as noted in the Commute s67 response.
103. The condition should be based on a specific, unambiguous trigger and not a stage number. Based on the Commute assessment, occupation of dwellings 445 is recommended to be the trigger point for needing to have this service in operation.
104. The condition will also need to indicate what level of service will be required during what stages of the development.
105. The investigation of the required bus infrastructure capacity upgrades and the provision of these upgrades must be conditioned. This includes bus stop capacity upgrades as well as active modes upgrades and cycle parking.

Commute response:

These proposed amendments to the conditions are agreed and reflected in the updated draft conditions with the exception being condition 103 where the applicant proposes 'the construction of 890 dwellings' rather than 'the occupation of 445 dwellings'.

5.17.2 ITEM 106-108 – ACTIVE MODES

Comment:

106. The AT recommended active modes infrastructure, as per paragraphs 40-49 should be appropriately conditioned.
107. The application must upgrade the southern side of Airfield Road from the northernmost corner of the site to the northwestern corner of 139 Airfield Road in consultation with the Road Controlling Authority.
108. The application must upgrade the eastern side of Mill Road, from Airfield Road, from the northernmost corner of the site to the northwestern corner of 139 Airfield Road, in consultation with the Road Controlling Authority.

Commute response:

The applicant agrees with the proposed amendment to the conditions outlined above with the exception being the shared path on Airfield Road as noted in Section 5.7.10. Please refer to the updated draft conditions which accompany this response.

5.17.3 ITEM 109-110 – ROAD SAFETY

Comment:

109. It is recommended that conditions be provided that the internal road be designed to speeds aligning with the safe systems approach and AT's requirements. This will include local roads to be designed to a 30km/h design speed.

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110. It is recommended that a condition be imposed to ensure that the pedestrian crossing deficiencies in the applicant's design raised in Annexure 2 can be addressed at subsequent stages.

Commute response:

The applicant agrees with the proposed amendment to the conditions outlined above. Please refer to the updated draft conditions which accompany this response.

5.17.4 ITEM 111 – CONSTRUCTION TRAFFIC

Comment:

It is recommended that the applicant prepares and provides a Pavement Impact Assessment which includes the requirement to monitor pavement condition and subsequent reinstatement by the applicant of damage to road pavement as a result of the earthworks or construction component of this development. A draft Pavement Impact Assessment must be provided to AT for review and comments prior to Lodging the final assessment.

Commute response:

Please refer to the response provided in Section 5.13.1.

5.17.5 ITEMS 112-114 – STORMWATER

Comment:

112. It is unclear how conditions can address the identified stormwater issues. In this regard, AT recommends that a condition be imposed that ensures new and existing roads will not be negatively affected when compared against the AT Transport Design Manual – Chapter on Road Drainage's guidance on road flooding depth and velocities.
113. Additionally, a condition should be imposed requiring the applicant to consider the network-wide impacts and whole of life costs for any stormwater asset proposed to be vested to AT to ensure that the asset is the best practical solution.
114. Conferencing is recommended between AT, the applicant, and Healthy Waters to establish an agreed on approach to managing road flooding for new and existing roads as well as for stormwater assets to be maintained by AT.

Commute response:

This is not a traffic engineering matter as is dealt with elsewhere in the response by the applicant.

5.17.6 ITEMS 115-116 – TRAVEL DEMAND MANAGEMENT

Comment:

115. It is recommended that the requirement for TDMP be applicable to all precincts and conditioned accordingly.
116. It is recommended that the CTMP condition include the requirements for managing bodies to continually reinforce the car-less principles for all the precincts.

Commute response:

The applicant agrees with the proposed amendment to the conditions outlined above. Please refer to the updated draft conditions which accompany this response.

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5.17.7 ITEMS 117-121 – INTERSECTION UPGRADES (INCLUDING ADDITIONAL UPGRADES), REVIEW AND MONITORING

Comment:

117. There has been no opportunity to discuss intersection upgrades with the applicant which generally requires a comprehensive iterative process to ensure appropriate upgrade solutions are identified and designed with sufficient road reserve to allow for delivery. Beca's independent analysis has identified eight specific intersections that will require upgrades under realistic trip generation scenarios, including five (Ranfurly Road / Alfriston Road, Walters Road / Porchester Road, Porchester Road / Kuaka Drive, Mill Road/Popes Road andMill Road/Alfriston Road) not assessed by the applicant.

118. Conferencing is recommended between AT and the applicant to establish the transport modelling (that could include a range of further future scenario's) and subsequent upgrade requirements and the land requirements/road reserve boundaries required for acceptable upgrades (which is relevant to all new intersections proposed and existing to-be-upgraded intersections).

119. Beca's independent analysis confirms that additional intersection capacity upgrades will be required under realistic trip generation scenarios. Given the scale of infrastructure underestimation identified, it is recommended that the following intersections require upfront assessment and commitment, with detailed design and land requirements confirmed prior to development commencement, supported by review and monitoring conditions to ensure timely delivery and assess the need for any additional mitigation:

1. *Ranfurly Road / Alfriston Road roundabout*
2. *Walters Road / Porchester Road roundabout*
3. *Porchester Road / Kuaka Drive traffic signals*
4. *Mill Road / Airfield Road (additional to that provided by the applicant)*
5. *Mill Road / Popes Road*
6. *Walters Road / Cosgrove Road (additional to that provided by the applicant)*
7. *Mill Road / Alfriston Road*
8. *Old Wairoa Road / Pakaraka Drive (additional to that provided by the applicant).*

120. Review/monitoring conditions are required to ensure the following, if the application is approved:

- *a) Trip Generation and associated effects remain in line with what is required to keep the transport network operating at an optimal level.*
- *b) Travel Demand Management remains effective.*
- *c) Address/avoid any potential future adverse effects.*

121. It is recommended that these conditions be carefully drafted to ensure their effectiveness, including clear triggers and processes for determining appropriate mitigation measures should monitoring identify that potential future adverse effects are materialising.

Commute response:

The applicant is happy to liaise with AT as required.

It is considered that these issues / upgrades are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

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6 AUCKLAND TRANSPORT – MARTIN PEAKE

6.1 GENERAL

Progressive Transport Solutions (Martin Peake) has provided a review of the traffic engineering aspects of the application,

In particular the review has considered:

- The internal roading layout and proposed intersection designs;
- JOAL connections to the proposed public road network including their safety in terms of location and on active modes (pedestrians / cyclists);
- External intersection upgrades;
- Internal road connectivity and need for road to road accessways;
- General road safety.

Mr Peake's review does not consider the forecast operation of the external intersections as this element is being considered by others and as such it is considered more a physical traffic review of the layout / upgrades.

Commute response:

We generally agree with most of Mr Peakes comments. A number can be considered in detailed design, however others have been addressed in revised civil engineering drawings which accompany this response. It is considered that these issues / upgrades are best managed / addressed in detail by way of meetings between the applicant and AT / Council engineers. In this regard an initial meeting will occur on 13th October with anticipation of further meetings / workshops.

7 ARDMORE AIRPORT LIMITED

7.1 ITEM 20.11 – COORDINDATION OF ARDMORE AIRPORT STAGES 2 & 3 AND MILL ROAD STAGE 2

Comment:

B&A Appendix – Pages 8 and 9 – The traffic modelling set out in the Sunfield Transportation Assessment prepared by Commute, does not include the traffic generated by Stages 2 and 3 of the Ardmore Airport industrial development. Stage 2 is consented, however not yet operating, and Stage 3 has recently been lodged with Auckland Council and is currently being processed. Stage 4 should also be considered, to the extent that aviation related industrial activities are permitted in the Ardmore Precinct (I401.4.1).

An integrated and comprehensive transport network needs to be established for this area, which also includes the traffic effects of the Mill Road Stage 2 NoR recently lodged by NZTA. Ardmore Airport consider there is a need to develop and agree a transport network for the wider area that integrates planned development at Ardmore Airport, Sunfield as well as the Mill Road Stage 2 project.

Commute response:

As noted previously, NZTA lodged the Notice of Requirement for Mill Road stage on 13 June 2025 which was after the Sunfield substantive application had been lodged. The applicant and Commute had no prior knowledge of the Notice of Requirement lodgement. The applicant has amended the Sunfield Substantive Application to integrate Mill Road stage 2 into the Sunfield master planned community.

It is noted that the co-ordination of Ardmore Airport Stages 2 and 3 with MRS2A is primarily a matter to be considered through the Notice of Requirement process for MRS2A with NZTA as this is out of the applicant's control. We do however agree with the notion of the need to develop and agree a

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transport network for the wider area that integrates the planned development at Ardmore Airport, the Sunfield development as well as MRS2A. This is best undertaken through the Notice of Requirement process with NZTA.

7.2 ITEM 20.12 – MILL ROAD STAGE 2

Comment:

B&A Appendix – Pages 9 and 10 – The Mill Road Stage 2 NoR has been lodged with Auckland Council. It is important that the Sunfield development provides for integration with the proposed alignment of Mill Road Stage 2.

Ardmore Airport seeks a new roundabout at the intersection of the new Mill Road Stage 2 corridor and the existing alignment of Hamlin Road is included in the Sunfield development. Ardmore Airport does not support a road network where Hamlin Road is terminated either side of the Mill Road Stage 2 alignment.

Ardmore Airport requests that the Sunfield development incorporates a new roundabout at the intersection of the new Mill Road Stage 2 corridor and the existing alignment of Hamlin Road into their proposed transport network.

Ardmore Airport supports the new Mill Road Stage 2 / Airfield Road two-lane roundabout proposed in the Mill Road Stage 2 NoR. Ardmore Airport requests that the Sunfield development incorporates this intersection into their proposed transport network.

Commute response:

Please see the response provided in Section 6.1 above. In terms of the two specific intersections referenced above:

- MRS2A / Hamlin Road. This is not currently shown as a roundabout in the MRS2A plans for the Notice of Requirement. The termination of Hamlin Road is not proposed as part of the Sunfield development but rather through MRS2A. The applicant has amended the Sunfield Substantive Application to integrate MRS2A into the Sunfield master planned community. We consider the issue of a roundabout in this location should be discussed with NZTA.
- MRS2A / Airfield Road two-lane roundabout. We agree that this is a good outcome and the applicant has amended the Sunfield substantive application to integrate MRS2A into the Sunfield master planned community.

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8 NEW ZEALAND TRANSPORT AGENCY (NZTA)

8.1 TRANSPORT

8.1.1 ITEM 6.3 – TRANSPORT EFFECTS

Comment:

Appendix 1 contains a technical note provided by Mr Andrew Murray, Technical Fellow – Transport at Beca. This technical note provides some preliminary comments relating to the potential impact of the Sunfield development on strategic components of the transport network (including State Highway 1 and the Mill Road Corridor).

Commute response:

As noted previously, NZTA lodged the Notice of Requirement for Mill Road stage 13 June 2025 which was after the Sunfield substantive application had been lodged. The applicant and Commute had no prior knowledge of the Notice of Requirement lodgement.

The applicant has amended the Sunfield substantive application to integrate MRS2A into the Sunfield master planned community. Notwithstanding this as previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

8.1.2 ITEM 6.4 – KEY FINDINGS

Comment:

To summarise the key findings of the transport technical note:

a) *Overall, NZTA has significant concerns regarding the effects of the Application on both the local and strategic southern Auckland transport network including State Highway 1 and the future Mill Road corridor. The proposal assumes and relies on future residents adopting travel behaviours that are highly reliant on public transport, with minimal or no use of private vehicles by either residents or employees within the development. Effective mechanisms should be put in place to ensure that these outcomes are achieved.*

   We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is our opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community and an appropriate sensitivity analysis is contained within Section 9.1.7 of the ITA. Notwithstanding this, see the responses detailed in Section 1.1 and 1.3.

   As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

   We do however agree that "*effective mechanisms should be put in place to ensure that these outcomes are achieved*", and in our opinion this can be achieved through the development of appropriate monitoring conditions.

b) *An assessment is required of the effects should the stated outcomes relied upon in the proposal not be achieved.*

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We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is our opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community and an appropriate sensitivity analysis is contained within Section 9.1.7 of the ITA. Notwithstanding this, see the responses detailed in Section 1.1 and 1.3.

As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

c) *There are no examples of development in any urban environments in New Zealand and little predictive or case-study evidence of applicable examples overseas where such outcomes have been achieved.*

The applicant has been clear that Sunfield is a first for New Zealand.

As previously detailed in Section 1.3 additional modelling has been completed by AFC on behalf of NZTA and the results are detailed within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

d) *Although promoted as a 15 minute walkable community, the Application site is located nearly 3km from the existing rail stations at Papakura and Takaanini. The proposal would require existing or carefully planned public transport, walking, and cycling connections to the wider network and key destinations (such as places of employment, education institutions, and community facilities) outside of the Application site. Even with the local connecting services to stations proposed in the Application, the travel times to the wider employment areas by rail would be high enough to impact the attractiveness of mode shift to public transport.*

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. We also note the significant employment opportunities which will be provided at Sunfield.

e) *Existing travel patterns within the Papakura-Takaanini area, where the Sunfield development is located, are characterised by high levels of outward commuting and an extremely high reliance on private vehicles – exceeding 90% mode share. These patterns are not aligned with the transport behaviours that the Application anticipates for its future residents.*

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application.

f) *According to the latest 2023 census data, a high proportion of private vehicle commutes are directed toward industrial areas such as Wiri and East Tāmaki. These areas are already underserved by public transport, and the nature of industrial employment often involving shift work and extensive onsite parking typically results in lower public transport uptake.*

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. We also note the significant employment opportunities which will be provided at Sunfield.

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g) *Further information is required in relation to the following:*

i. Evidence of achieving the high public transport mode share projected for an area that is remote from any Rapid Transport Network (RTN) or even Frequent Transit Network (FTN) corridor where the travel times by public transport to key external destinations are high (and therefore unlikely to be competitive with private vehicles for many users).

ii. The feasibility of attracting and moving up to 3,500 passengers in peak periods via the proposed bus routes (without dedicated RTN or FTN infrastructure), given anticipated conflicts with general traffic movements along these routes.

iii. Further evidence to support the assumption that half of the 11,000 employees will reside within Sunfield, as this would require more than 100% of all resident workers to be employed locally.

iv. Further evidence to support the ITA assumptions regarding minimal car ownership and high public transport usage. The ITA proposes that bus services will not be introduced until after 890 dwellings are constructed. It is unclear how residents of these initial dwellings will travel, aside from a lengthy walk to existing local bus services. This level of constrained accessibility does not align with the development's objective for residents to avoid car ownership and use.

As a result, significant pressure will be placed on the surrounding network including local and strategic corridors like State Highway 1, which currently does not have capacity to accommodate the substantial increase in traffic generation expected from population growth within the development.

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. In response to point iv, please refer to the response provided in Section 5.6.3, specifically *'The applicant acknowledges the statement that AT is increasing the provision of public transport in the immediate vicinity of Sunfield in addition to the existing public transport which is already in operation and that the residents of Sunfield will be able to use this public transport service from 2026 onwards.*

As noted in section 4.5.2 of the ITA:

- *the first stages of development will be within walking distance of existing Bus Route 372, a connection service to the wider network.*
- *several neighbourhood service hubs will be constructed and will provide storage and charging for micro mobility transport along with limited parking for private vehicles.*
- *the local hub will initially provide an at grade car park for private vehicles until the internal public transport network is available.'*

h) *Long term transport planning and route protection is being undertaken by NZTA and AT through Te Tupu Ngātahi Supporting Growth (SGA), a programme that has been in progress since 2018. This planning supports Auckland Council's planned growth projections for Future Urban Zone (FUZ) areas across the region, including land in Takaanini, north Papakura and Drury. Given the amount of future urban zoned land within this area, planning for growth in this area has been extremely challenging. The Sunfield development lies largely outside these identified southern growth areas (mostly zoned Rural and only a small part zoned FUZ). Consequently, the network planning undertaken through SGA did not anticipate or account for rural zoned land such as the Sunfield development.*

As noted previously, we believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield

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Substantive Application. Specifically, it is our opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community and an appropriate sensitivity analysis is contained within Section 9.1.7 of the ITA. Notwithstanding this, see the responses detailed in Section 1.1 and 1.3.

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

i) *If the transport outcomes assumed by Winton were not to materialise, significant traffic effects on the surrounding areas would be expected, particularly given that the development and its projected 11,000 residents were not anticipated for in southern Auckland's transport planning under the SGA. These impacts are likely to include significant congestion along the east-west routes into Takaanini and Papakura, as well as on north-south corridors such as the Mill Road corridor. This would constrain the operation of efficient bus services, including the FTN corridors, restrict freight access to industrial areas, and increase the risk of on-street parking overflow, especially on adjacent local streets.*

Commute Response: We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community and an appropriate sensitivity analysis is contained within Section 9.1.7 of the ITA. Notwithstanding this, see the responses detailed in Section 1.1 and 1.3.
We generally agree with this comment and again note this is exactly why the ITA has recommended continual monitoring and in particular the very last sentence of the ITA states: "*As a result, it is considered that carefully monitoring of initial stages of the development is needed to ensure the measures proposed have the desired result of significantly reducing private car travel (both internal and externally)*".

As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption).

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This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

j) *Further consideration by Winton of the broader strategic transport network of southern Auckland is needed to support the Application's projected travel demand. Should the assumed travel behaviour not eventuate, the resulting scale of traffic volumes could compromise both the function and resilience of the strategic Mill Road corridor, as well as the effective operation of the local transport network.*

We believe these queries have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Specifically, it is my opinion that the trip generation rates applied within the ITA are appropriate for the proposed Sunfield masterplan community providing the car-less measures are successful (public transport, employment close to residential, reduction in parking).

In regard to all the above requests, it needs to be stressed that the proposal is meant to be a new response to the reliance of cars within the Auckland region. The ITA recognises this and notes / recommends monitoring of the development to ensure the low levels of traffic generation (and thus effects) are achieved.
As noted in Section 1.3, NZTA has prepared further extensive traffic modelling relating to MRS2A with and without the proposed Sunfield development. The modelling has been undertaken by the Auckland Forecasting Centre and builds on initial modelling of the Sunfield development undertaken by Beca Consultants for Auckland Transport. The modelling includes scenarios with and without the Sunfield development and with and without MRS2A. Another key assumption relates to the trip generation assumed, with a figure of 3,000vph being the basis for the modelling (based on Auckland Transport and Beca Consultants assumption). This trip generation figure is significantly higher than that which was assumed in the ITA at 1,100vph. The modelling finds that the development of Sunfield, with the intersection upgrades proposed in the ITA and the changes resulting from the construction of MRS2A, generally results in an acceptable level of performance in the surrounding local area in 2041. Some additional intersections were identified in the wider network that will be approaching capacity based on the higher traffic generation assumed by AFC (being 3,000vph vs 1,100vph). Based on these findings, the applicant proposes an additional condition that after approximately one third of the Sunfield residential dwellings (including within the retirement village) are occupied, monitoring should occur relating to the trip generation of the development with a further Integrated Transport Assessment being required to determine if the wider intersections identified in the modelling memo require additional mitigation and / or if any additional measures are required to reduce trip generation within Sunfield. The modelling results are contained within the Modelling Memo prepared by Commute which accompanies this response at Attachment A.

k) *Aside from the proposed Sunbus connection to Papakura Train Station, Winton has not provided any proposal to establish high-capacity public transport facilities along existing east-*

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west corridors accessing Papakura and Takaanini stations, with service levels comparable to RTN facilities.

We believe this query have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this, see the responses detailed in Section 1.1 and 1.3.

8.1.3 ITEM 6.5 – OVERALL OUTCOMES

Comment:

Given the consequences of the site not delivering the assumed outcomes, Mr Murray recommends that:

a) *Enforceable staging and monitoring systems are used to manage the potential adverse effects including conditions relating to:*
   i. *Car ownership;*
   ii. *The provision of employment and service facilities in the development concurrently with residential dwellings;*
   iii. *The level of internalisation within the development: and*
   iv. *The provision infrastructure to support the mode shift assumptions including walking, cycling and bus services.*
b) *Each stage of development be based on a new ITA, that considers the status of each of these important areas, along with the monitoring data on the observed outcomes for preceding stages.*

Commute response:

We believe this query have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the responses detailed in Section 1.1.

We agree with the intent of Mr Murray's recommendations in regarding to managing potential effects. We agree that the site needs to be carefully monitored as stages progress to ensure the car traffic generated is in accordance with that assumed in the car-less society assumed. We do however consider the full ITA reviewing the mitigation is only needed once one third of the residential dwellings (including within the retirement village) within Sunfield are occupied as noted in the additional modelling memo in Attachment A.

8.1.4 ITEM 6.6 – SUNFIELD OBJECTIVES

Comment:

If the Sunfield development objectives are not achieved, there will be significant impacts on the strategic transport network in terms of worsening both the congestion on State Highway 1 and significantly exceeding the capacity that the NoR will be able to accommodate.

Commute response:

We believe this query have been dealt with within the ITA and the Sunfield Section 67 Response which have been submitted to date as part of the Sunfield Substantive Application. Notwithstanding this please see the responses detailed in Section 1.3 and 7.1.3.

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8.1.5 ITEM 6.7 – CONDITIONS

Comment:

Given the nature of the application in front of the Panel, i.e. seeking resource consent for the Sunfield development (as opposed to enabling the development through a plan change), NZTA acknowledges that it is likely to be difficult to impose controls along the lines recommended by Mr Murray. However, NZTA requests the opportunity to comment on the rearrangement of the Sunfield internal road network that is required to respond to the NoR once that information is submitted to the Panel.

Commute response:

This comment is noted.

8.1.6 STORMWATER

Items 6.8-6.11 are stormwater related matters which are not related to traffic engineering; therefore, a direct response has not been prepared in this RFI memo.

8.1.7 SUMMARY

8.1.7.1 ITEM 6.12 – SUMMARY

Comment:

In its current form, the proposed activities associated with the Sunfield development are conflicting with the NoR and would prevent and hinder the Mill Road Project. Accordingly, NZTA is not able to provide approval under s176/178 of the RMA to Winton. Notwithstanding this, collaborative discussions between NZTA and Winton are continuing, however, it is not clear when amendments to the application to reflect these discussions will be submitted to the Panel. Without this information, NZTA is unable to complete its assessment of the effects of the Sunfield development. Therefore, NZTA requests the opportunity to provide comment on any updated information provided by Winton to the Panel.

Commute response:

As detailed above, NZTA and the applicant collaborative discussion between the parties are continuing and the applicant has amended the Sunfield Substantive Application to integrate MRS2A into the Sunfield master planned community.

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APPENDIX A – MODELLING MEMO

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Mr S Ash / D Osborne

Winton

14 October 2025

Copy via email: [redacted]

Dear Simon / David,

MODELLING MEMO – SUNFIELD / MILL ROAD STAGE 2 NOR

I, Leo Hills of Commute Transportation Consultants, confirm that this memo was prepared in accordance with the Environment Court Practice Note 2023 (Code of Conduct for Expert Witnesses). Details of my qualifications and relevant experience has been provided to the Expert Panel previously.

Further to your recent instructions, we have undertaken an assessment of the traffic modelling completed by NZTA for various scenarios involving the proposed Sunfield masterplanned community (the 'Sunfield Development) and the Mill Road Stage 2a Notice of Requirement ('MRS2A').

1 GENERAL

NZTA has prepared further extensive traffic modelling of the Mill Road Stage 2 with and without the proposed Sunfield Development.

The modelling has been undertaken by the Auckland Forecasting Centre ('AFC') and builds on initial modelling of the Sunfield Development undertaken for Auckland Transport. It includes scenarios with and without the Sunfield Development and with and without MRS2A.

Key assumptions include:

- A single model year was assessed (2041). At this point in time, the assumption is that the Sunfield Development will be fully developed.
- All models include Mill Road Stage 1 being constructed .
- The sub-area S3M SATURN Traffic model was used, with no new multi-model demand modelling. This means that all travel patterns remain fixed, other than those associated with the Sunfield Development. This means that:
    - Changes in travel pattern due to the Mill Road Stage 2a project for Sunfield have not been included (considered worst case).
    - The travel pattern associated with the Sunfield Development have been assumed, rather than modelled.
    - No change in travel patterns have been assumed due to changes in network performance as a result of the Sunfield Development.
- Only the morning and evening commuter peaks have been modelled, with no assessment of conditions during other parts of the day which we consider to be typical of such assessments / modelling.
- Traffic generation for the Sunfield Development as estimated by Auckland Transport being 3,000 vehicles per hour (vph) which is significantly higher than the 1,100vph estimated in the Commute Sunfield ITA. It would still be considered a "car-less" type development, but significantly less constrained than the Sunfield ITA proposes.

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- NZTA have noted that the SATURN traffic model used has a simple delay function for roundabouts that may not reflect some movement patterns. This is discussed in further sections below.
- The Sunfield Development scenarios included new or upgraded intersections as identified in the Sunfield ITA (however we note that there have been two upgrades detailed within the Sunfield ITA which have not been included which are discussed in later sections of this review.
- No additional bus (vehicles) services were added to reflect the Sunbus movements, however we do not consider this to be significant.
- The underlying trip patterns for all scenarios were developed from the regional multi-modal modelling, except for:
    a. the Sunfield Development trip generation was simply added for those scenarios.
    b. Scenario 5 had extra traffic added based on 10% of traffic using Mill Road Stage 1 (just north of the Alfriston Roundabout). For the purposes of this assessment, we have ignored this scenario.

An assessment and summary of the traffic modelling has been conducted and included below; three scenarios have been modelled which are summarised in Table 1 below.

Table 1: Modelling Scenario Summary

Scenario	Description

1	• No Sunfield Development (Baseline). Essentially a do minimum for Scenario 2
	  ○ Mill Road Stage 1
	  ○ No Sunfield Development
	• No Sunfield Development (Baseline) & Mill Road Stage 2A. Essentially a do minimum for Scenario 3
	  ○ Mill Road Stage 1 & Stage 2A
	  ○ No Sunfield Development

2	• Mill Road Stage 1 • Sunfield Development (trip generation + proposed intersection upgrades as per Auckland Transport assessment of 3,000 vph)
3	• Mill Road Stage 1 & Stage 2A • Sunfield Development (trip generation + proposed intersection upgrades as per Auckland Transport assessment of 3,000 vph)

Note: we have removed the scenarios with +10% background traffic as we consider them to be unrelated to Sunfield Development effects.

2 MODELLING RESULTS

2.1 GENERAL

The modelling results / Level of Service (LOS) plots can be seen in Appendix A. Key intersections and road sections have been compared between scenarios to determine the potential effect of the Sunfield Development on the surrounding traffic network. In this regard:

- LOS A-D: General stable flow with LOS A being minimal delay and LOS D approaching noticeable delays (note the LOS plots do not show these as coloured).
- LOS E: Shown as ORANGE approaching capacity, with high delay and very restricted flow.
- LOS F: Shown as RED with extreme congestion, low speeds, and potential instability.

Based on the modelling conducted, the Sunfield Development with the intersection upgrades proposed in the Sunfield ITA and the changes resulting from the construction of MRS2A generally

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results in acceptable level of performance in the surrounding local area. Some additional intersections were identified due to the higher traffic generation assumed (3,000 vph vs 1,100 vph) by AFC.

2.2 INDIVIDUAL INTERSECTIONS

2.2.1 GENERAL

Individual intersections have been discussed below. It is noted that intersections have been split into immediate vicinity (within 1km of the proposed Sunfield Site) and wider. As per Figure 1, a map of the intersections discussed below can be seen. Items A-I were identified in the original ITA (1,100vph) while J-P have been identified in the Beca review and subsequent modelling of Mill Road Stage 2 both with an assessment of 3,000vph from the Sunfield Development.

A. Cosgrave Road / Walters Road
B. Cosgrave Road / Clevedon Road
C. Okawa Avenue / Clevedon Road / Dominion Road / Papakura-Clevedon Road
D. Cosgrave Road / Road 4
E. Cosgrave Road / Road 2 / Bellbird Street
F. Airfield Road / Mill Road
G. Airfield Road / Road 1
H. Airfield Road / Road 7
I. Pakaraka Drive / Old Wairoa Road / Road 1
J. Ranfurly Road / Alfriston Road
K. Walters Road / Porchester Road
L. Porchester Road / Kuaka Drive
M. Mill Road / Popes Road
N. Alfriston Road / Mill Road
O. Old Wairoa Road / Porchester Road
P. Ranfurly Road / Mill Road

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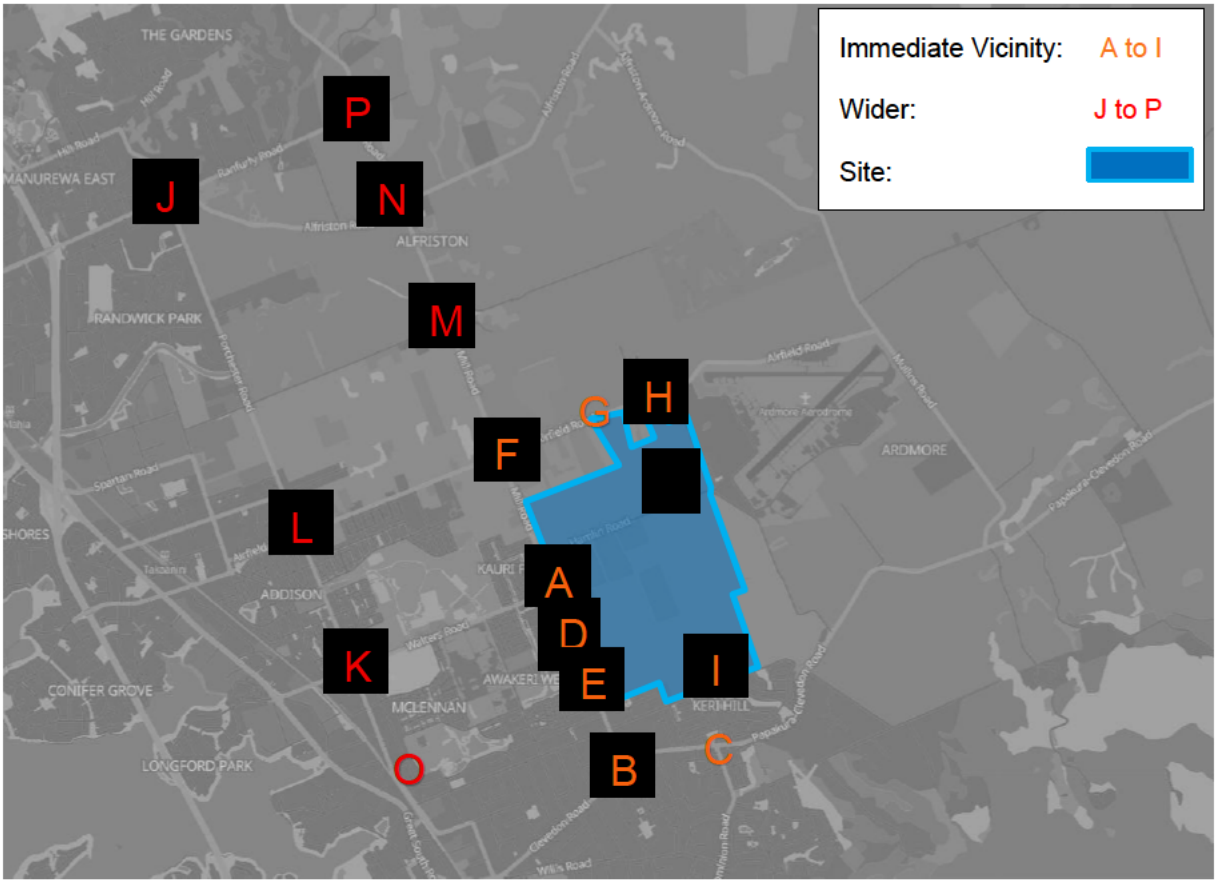
Figure 1: Individual Intersections



2.2.2 IMMEDIATE VICINITY

2.2.2.1 COSGRAVE ROAD / WALTERS ROAD / ROAD 6 (A)

This intersection is currently a priority-controlled intersection. The Sunfield Development proposes to join Road 6 (the realigned Hamlin Road) with this intersection and for it to be upgraded to a four leg signalised intersection. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Operates acceptably
- Without Sunfield Development and with MRS2A: Operates acceptably
- With Sunfield Development and without MRS2A: Unacceptable operation (LOS F ~80 sec delay in the PM peak)
- With Sunfield Development and with MRS2A: Operates acceptably (ie MRS2A improves operation)

The modelling uses the intersections as proposed in the Sunfield ITA, however Beca / AT have suggested a slightly different layout. As requested, we have then reviewed this intersection in the critical PM peak (without MRS2A). With the addition of a short left turn lane from Cosgrave Road (north) into Road 6 (as shown below) together with some minor lane marking changes / departure lane as suggested by Beca, the intersection with the 2041 flows performs at LOS D and Degree of Saturation of 0.911 indicating appropriate operating performance.

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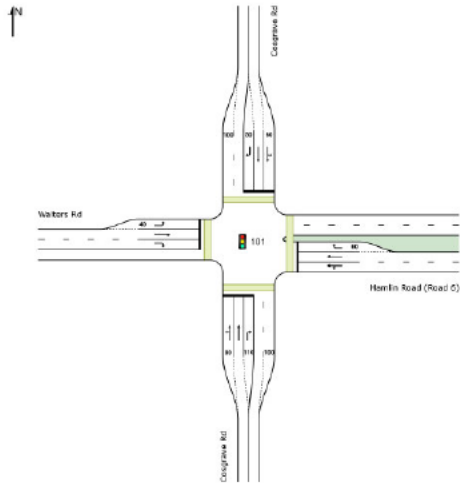
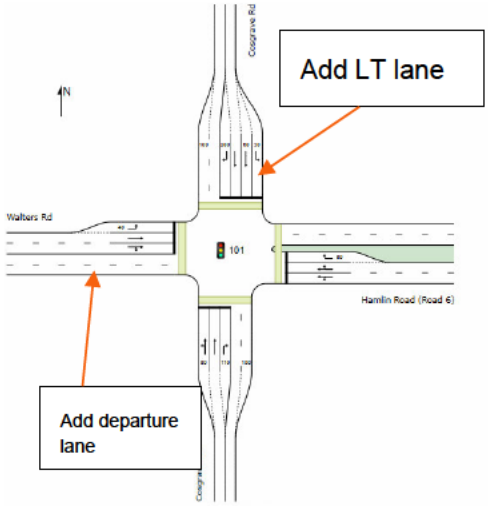
Cosgrave Road / Walters Road / Road 6 / (ITA)	Cosgrave Road / Walters Road / Road 6 / (updated)
	

2.2.2.2 COSGRAVE ROAD / CLEVEDON ROAD / PAPAKURA-CLEVEDON ROAD (B)

Currently, this intersection is priority-controlled, and it is proposed to upgrade this intersection to be a signalised intersection as part of the Sunfield Development (early stages)

It is noted that it appears the SATURN modelling has this as a priority intersection in the Sunfield modelling which is showing issues. We consider the signalisation of this intersection mitigates the effects of the Sunfield Development.

2.2.2.3 OKAWA AVENUE / CLEVEDON ROAD / DOMINION ROAD / PAPAKURA CLEVEDON ROAD (C)

Currently, this intersection is priority-controlled, and it is proposed to upgrade this intersection to be a signalised intersection as part of the Sunfield Development (early stages)

It is noted that it appears the SATURN modelling has this as a priority intersection in the Sunfield modelling which is showing issues. We consider the signalisation of this intersection mitigates the effects of the Sunfield Development.

We also note that given MRS2a essentially terminates at Papakura Clevedon Road (at a proposed roundabout) it adds significant level of traffic to Papakura Clevedon Road which will be alleviated when Stage 2b and 3 are constructed through to SH1 south of Drury. This issue is considered to be unrelated to Sunfield.

2.2.2.4 COSGRAVE ROAD / ROAD 4 (D)

Currently, this intersection does not exist (it is created as a result of the Sunfield Development being undertaken), and it is proposed for this intersection to be a signalised intersection as part of the Sunfield Development.

Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: N/A
- Without Sunfield Development and with MRS2A: N/A

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- With Sunfield Development and without MRS2A: Operates acceptably
- With Sunfield Development and with MRS2A: Operates acceptably

This intersection will operate at acceptable levels.

2.2.2.5 COSGRAVE ROAD / ROAD 2 / BELLBIRD STREET (E)

Currently, this intersection does not exist (it is created as a result of the Sunfield Development), and it is proposed for this intersection to be a signalised intersection as part of the Sunfield Development.

Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: N/A
- Without Sunfield Development and with MRS2A: N/A
- With Sunfield Development and without MRS2A: Operates acceptably
- With Sunfield Development and with MRS2A: Operates acceptably

This intersection will operate at acceptable levels.

2.2.2.6 AIRFIELD ROAD / MILL ROAD (F)

This intersection is currently a single lane roundabout. Sunfield Development upgrade being the construction of a signalised intersection as outlined within the Sunfield ITA. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Unacceptable operation (LOS F ~80 sec delay in both peaks)
- Without Sunfield Development and with MRS2A: Operates acceptably (MRS2A removes traffic from Mill Road)
- With Sunfield Development and without MRS2A: Operates acceptably in terms of diagrams however it is noted that some links either side are nearing capacity. The Sunfield Development upgrade being the construction of a signalised intersection as outlined within the Sunfield ITA improved the operation in the short term.
- With Sunfield Development and with MRS2A: Operates acceptably

Overall, the Sunfield Development is anticipated to result in improvements in the operation of the Airfield Road / Mill Road intersection in the short to medium term (with upgrade). It is noted that the Beca review considers further upgrading is required. It appears that the Sunfield upgrade is sufficient in the short / medium term however in the longer-term an additional upgrade is required if the AT / Beca prediction trip generation of 3,000vph eventuates (upgrade is essentially additional lanes on Airfield Road). However, MRS2A completely negates the need for this “second” upgrade (as it removes traffic from this area) to the point where this additional upgrade would not be required.

2.2.2.7 ROAD 1 / AIRFIELD ROAD (G)

This intersection is proposed to be a priority-controlled intersection as part of the Sunfield Development. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Does not exist
- Without Sunfield Development and with MRS2A: Does not exist
- With Sunfield Development and without MRS2A: Operates acceptability
- With Sunfield Development and with MRS2A: Operates acceptably

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Overall, the proposed intersection is anticipated to operate acceptably given the MRS2A upgrade is completed. It is noted the modelling assumes both Road 1 and Road 7 link to Airfield Road which in turn links to MRS2A in the future. Provision should be made in the design of this intersection to allow it to be signalised in the future if required (now that there is only one connection to Airfield Road).

2.2.2.8 ROAD 7 / AIRFIELD ROAD (H)

This intersection was proposed to be a priority-controlled intersection as part of the Sunfield Development. Road 7 has subsequently been removed from the Sunfield masterplan due to the incorporation of Mill Road stage 2 into the Sunfield Development. As such, this intersection is no longer proposed.

2.2.2.9 PAKARAKA DRIVE / ROAD 1 / OLD WAIROA ROAD (I)

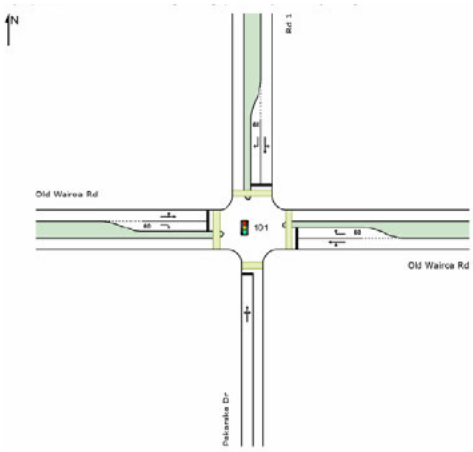
This intersection is proposed as part of the Sunfield Development as a signal-controlled intersection. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Operates acceptably
- Without Sunfield Development and with MRS2A: Operates acceptably
- With Sunfield Development and without MRS2A: Operates acceptably
- With Sunfield Development and with MRS2A: Nearing capacity (E ~80 sec delay in the PM peak)

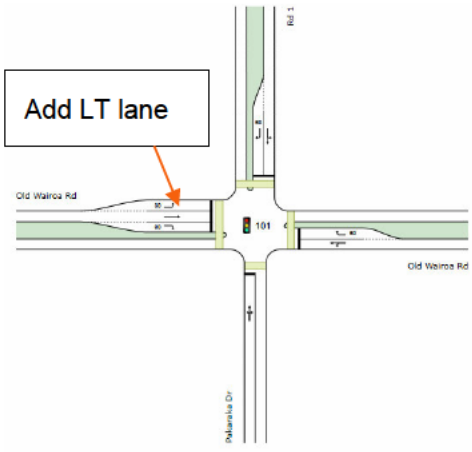
Overall, the proposed intersection is anticipated to operate acceptably without the MRS2A upgrade. With the Sunfield Development and MRS2A this intersection is near capacity in the PM peak hour. This was also identified by Beca / AT in their review, and they have suggested a single lane roundabout instead of traffic signals. We consider that due to pedestrian / cycling reasons a signalised intersection is preferred (although acknowledging roundabout could be constructed).

We have reviewed this intersection in the critical PM peak. With the addition of a short left turn lane from Old Wairoa Road into Road 1 (as shown below) the intersection with the 2041 flows and with MRS2A performs at LOS D and Degree of Saturation of 0.745 indicating an appropriate operating performance.

Pakaraka Drive / Old Wairoa Road / Road 1 (ITA)



Pakaraka Drive / Old Wairoa Road / Road 1 (updated)



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2.2.3 WIDER NETWORK

2.2.3.1 RANFURLY ROAD / ALFRISTON ROAD (J)

This intersection is a single lane roundabout. No upgrades are proposed to this intersection. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: approaching capacity (LOS E ~50 sec delay in AM peak)
- Without Sunfield Development and with MRS2A: Operates acceptably
- With Sunfield Development and without MRS2A: approaching unacceptable operation (LOS E ~50 sec delay in PM peak)
- With Sunfield Development and with MRS2A: Unacceptable operation (LOS F ~80 sec delay in the PM peak)

Overall, the Ranfurly Road / Alfriston Road intersection is not anticipated to operate acceptably in the long term. Commute are aware of other Proposed Plan Changes in the immediate area which have proposed to upgrade this intersection to traffic signals. Upon this intersection being upgraded to traffic signals it is anticipated to operate at acceptable levels.

2.2.3.2 WALTERS ROAD / PORCHESTER ROAD (K)

This intersection is currently a single lane roundabout and is planned to be upgraded to a signalised intersection as part of South Frequent Transit Network: Takaanini FTN – Porchester and Popes Road Upgrades (NoR 4). Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Nearing capacity (LOS E ~80 sec delay in PM peak)
- Without Sunfield Development and with MRS2A: Operates acceptably
- With Sunfield Development and without MRS2A: Unacceptable operation (LOS E and F ~80 sec delay in AM and PM peaks respectively)
- With Sunfield Development and with MRS2A: Unacceptable operation (LOS E and F ~80 sec delay in AM and PM peaks respectively)

Overall, the MRS2A upgrade is anticipated to result in improvements to the intersection with the Sunfield Development anticipated to result in the intersection returning to similar levels to the 2041 base. Noting it is to be upgraded as part of NOR 4 with little opportunity of additional upgrade.

2.2.3.3 PORCHESTER ROAD / KUAKA DRIVE (L)

This intersection is an existing four-leg signalised intersection, no upgrades to this intersection are proposed. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Operates acceptability
- Without Sunfield Development and with MRS2A: Operates acceptably
- With Sunfield Development and without MRS2A: Operates acceptably
- With Sunfield Development and with MRS2A: Nearing capacity (LOS E ~80 sec delay in the PM peak)

Overall, the proposed intersection is anticipated to operate acceptably without the MRS2A upgrade. With the MRS2A and the Sunfield Development upgrade, the intersection nears capacity in the PM peak hour.

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2.2.3.4 MILL ROAD / POPES ROAD (M)

This intersection is a four-leg priority controlled intersection, no upgrades to this intersection are proposed. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Unacceptable operation (LOS F ~80 sec delay in AM peak)
- Without Sunfield Development and with MRS2A: Operates acceptably
- With Sunfield Development and without MRS2A: Unacceptable operation (LOS F ~80 sec delay in AM and PM peak)
- With Sunfield and with MRS2A: Operates acceptably

Overall, it is noted there are issues with this priority-controlled intersection with or without the Sunfield Development. The construction of MRS2A completely removes these issues.

2.2.3.5 ALFRISTON ROAD / MILL ROAD (N)

This intersection is currently a single lane roundabout and is to be upgraded to a large two-lane roundabout as part of Mill Road Stage 1. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Operates acceptably
- Without Sunfield Development and with MRS2A: Operates acceptably
- With Sunfield Development and without MRS2A: Operates acceptably
- With Sunfield Development and with MRS2A: Unacceptable operation (F ~80 sec delay in the PM peak)

The Sunfield Development is anticipated to result in unacceptable operation during the PM peak. It is however noted by NZTA that the SATURN traffic model used has a simple delay function for roundabouts that may not reflect some movement patterns. We consider the large two-lane roundabout proposed will likely have sufficient capacity. We have modelled the two-lane roundabout in SIDRA for the PM peak using the SATURN volumes and found it to operate at acceptable levels (150m queues and degree of saturation 0.90).

2.2.3.6 OLD WAIROA ROAD / PORCHESTER ROAD (O)

This intersection is currently a priority-controlled intersection, no upgrade to this intersection is proposed. Key aspects of the modelling:

- 2041 base. Without Sunfield Development and Without MR2A: Nearing capacity (LOS E ~20 sec delay in AM and PM peaks)
- Without Sunfield Development and with MRS2A: Nearing capacity (LOS E ~20 sec delay in AM and PM peaks)
- With Sunfield Development and without MRS2A: Nearing capacity (F ~80 sec delay in AM and PM peaks)
- With Sunfield Development and with MRS2A: Unacceptable operation (F ~80 sec delay in AM and PM peaks)

Overall, the MRS2A construction is anticipated to result in negligible improvements to the intersection. Further mitigation is recommended at this intersection in the long term with likely signalisation.

2.2.3.7 RANFURLY ROAD / MILL ROAD (P)

This intersection is a priority-controlled intersection, which is anticipated to be upgraded to a two-lane roundabout as part of the construction of Mill Road Stage 1. Key aspects of the modelling:

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- 2041 base. Without Sunfield Development and Without MR2A: Operates acceptably
- Without Sunfield Development and with MRS2A: Unacceptable operation (LOS E ~50 sec delay in the AM peak)
- With Sunfield Development and without MRS2A: Operates acceptably
- With Sunfield Development and with MRS2A: Unacceptable operation (LOS F ~80 sec delay in the AM peak)

Overall, despite the proposed upgrade to a roundabout, the above intersection does not perform within acceptable parameters with the MRS2A upgrade. It is however noted by NZTA that the SATURN traffic model used has a simple delay function for roundabouts that may not reflect some movement patterns. We consider the large two-lane roundabout proposed will have sufficient capacity.

3 CONCLUSION

Key intersections have been compared between scenarios to determine the potential effect of the Sunfield Development on the surrounding traffic network (both with and without the MRS2A).

In general, with the upgrades proposed to be undertaken as part of the Sunfield Development (as detailed within the Sunfield ITA, together with some minor improvements as suggested by Beca) and with (or without) the construction of MRS2A, the immediate network results in acceptable overall performance in 2041.

In terms of the wider area, there are a few intersections that are at / approaching capacity with the 3,000vph assumed in the latest modelling from the Auckland Transport review, which is significantly higher than the 1,100vph estimated in the Commute Sunfield ITA. It is therefore recommended that after approximately one third of the residential dwellings (including within the retirement village) within Sunfield are occupied, monitoring should occur regarding the trip generation of the Sunfield Development with an Integrated Transport Assessment (ITA) produced to determine if the wider intersections identified require additional mitigation and / or additional measures are needed to reduce trip generation.

Yours sincerely

Commute Transportation Consultants

Leo Hills

Director

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APPENDIX A – MODELLING LOS PLOTS

Figure 2: Scenario 1 - No Sunfield Development 2041 AM Peak no MRS2a

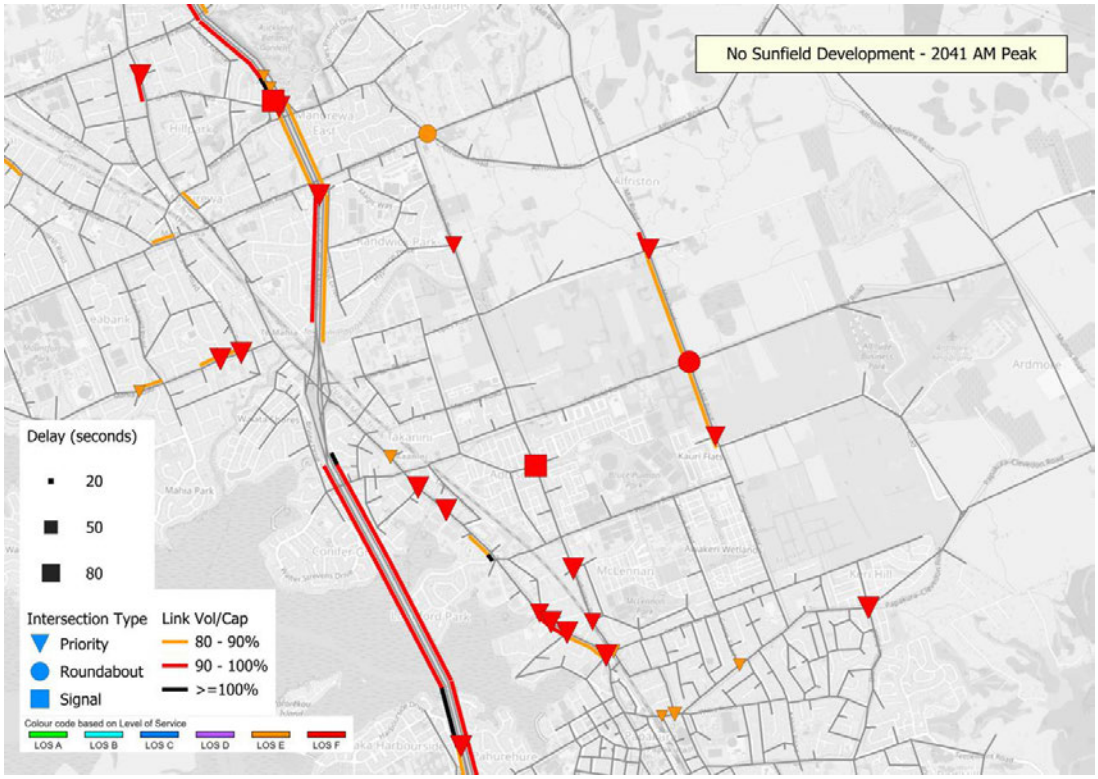

Figure 3: Scenario 1 - No Sunfield Development 2041 PM Peak no MRS2a

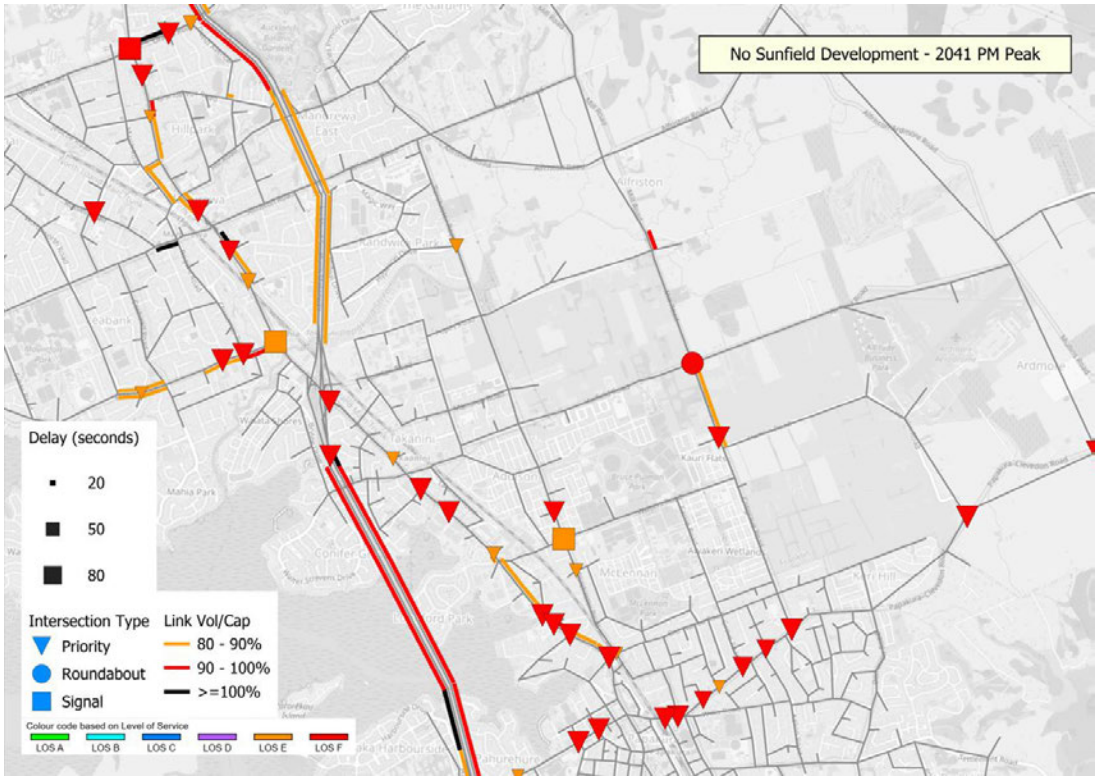

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Figure 4: Scenario 1 - No Sunfield Development 2041 AM peak with MRS2a

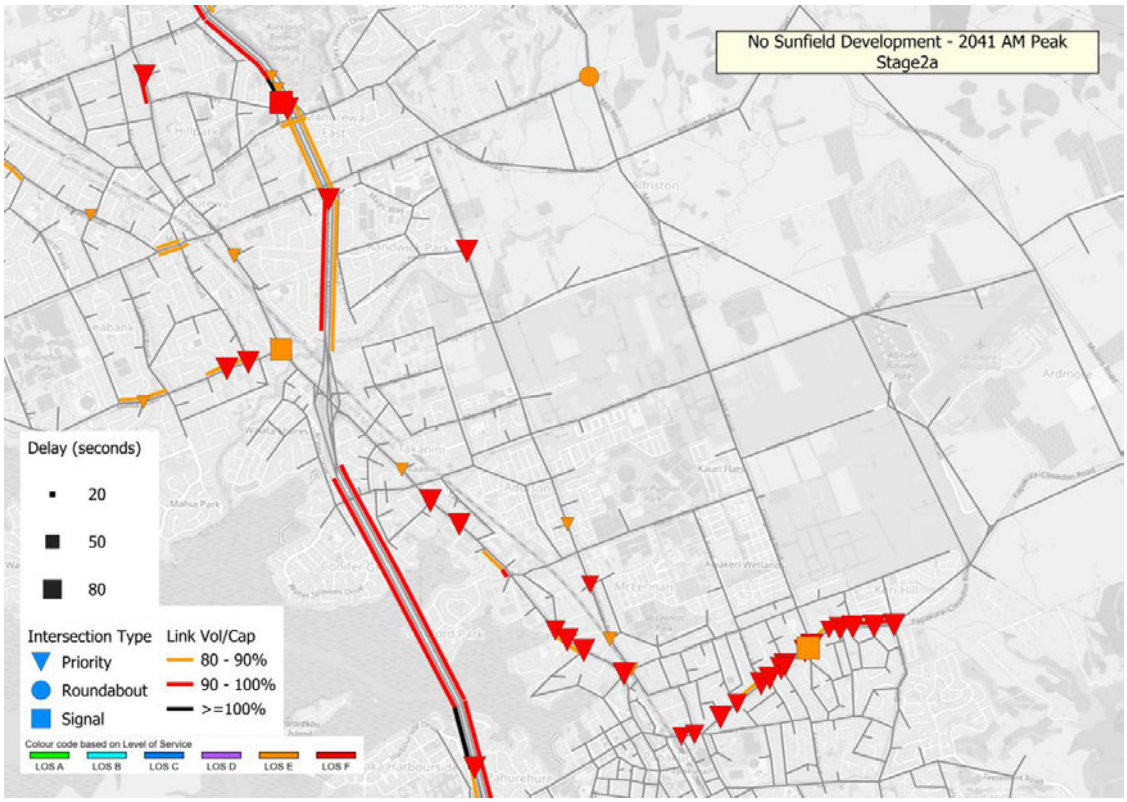

Figure 5: Scenario 1: No Sunfield Development 2041 PM Peak with MRS2a

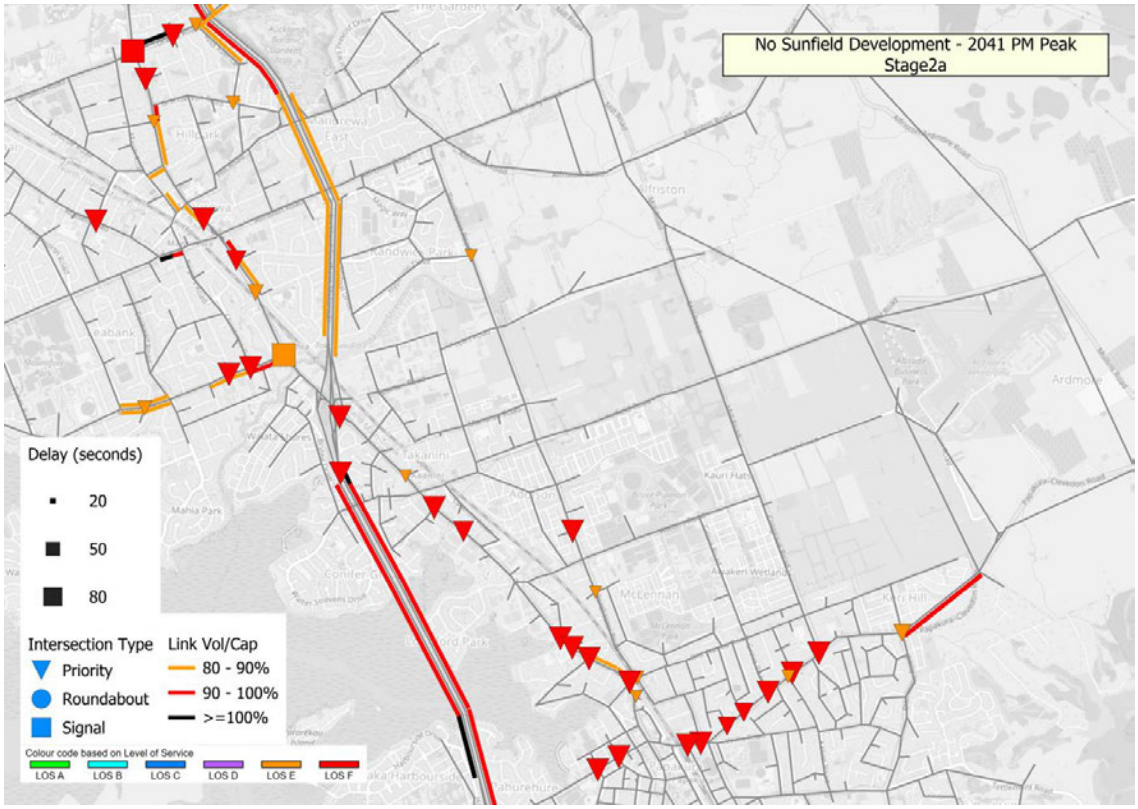

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Figure 6: Scenario 2 - Sunfield Development (3,000vph) 2041 AM Peak no MRS2a

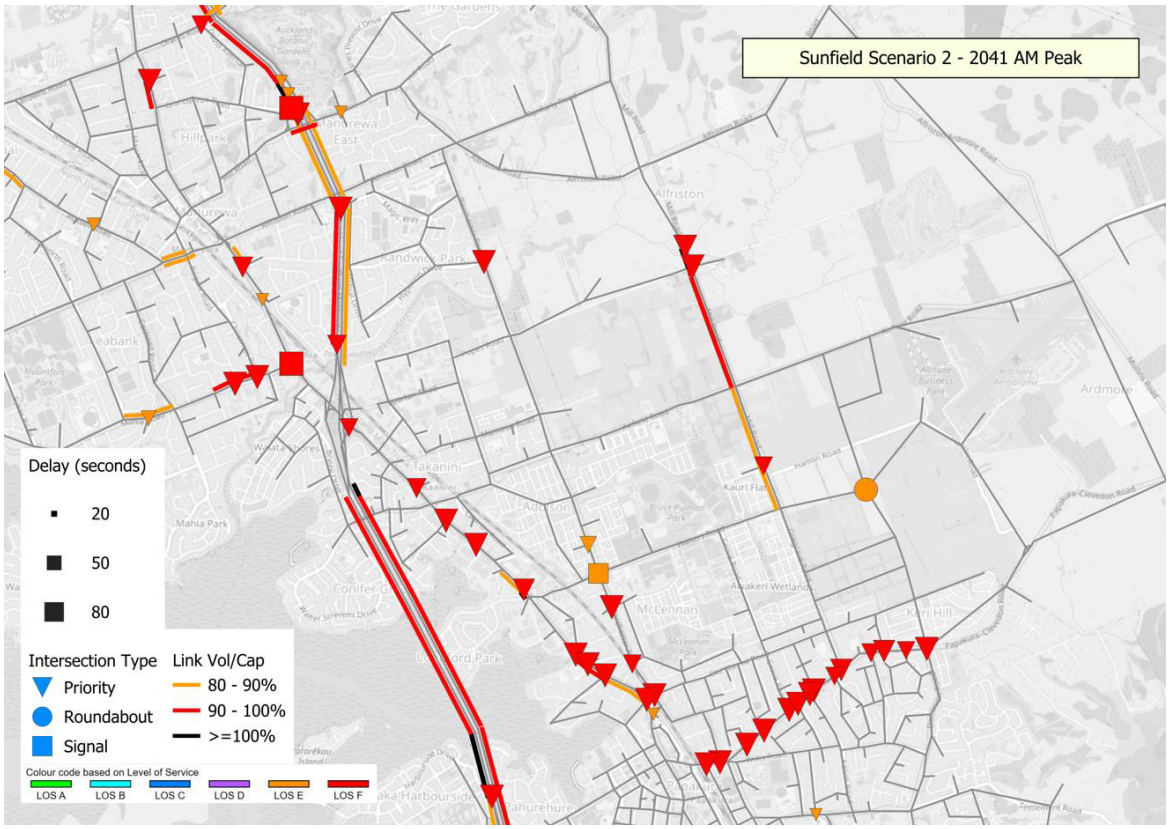

Figure 7: Scenario 2 - Sunfield Development (3,000vph) 2041 PM Peak no MRS2a

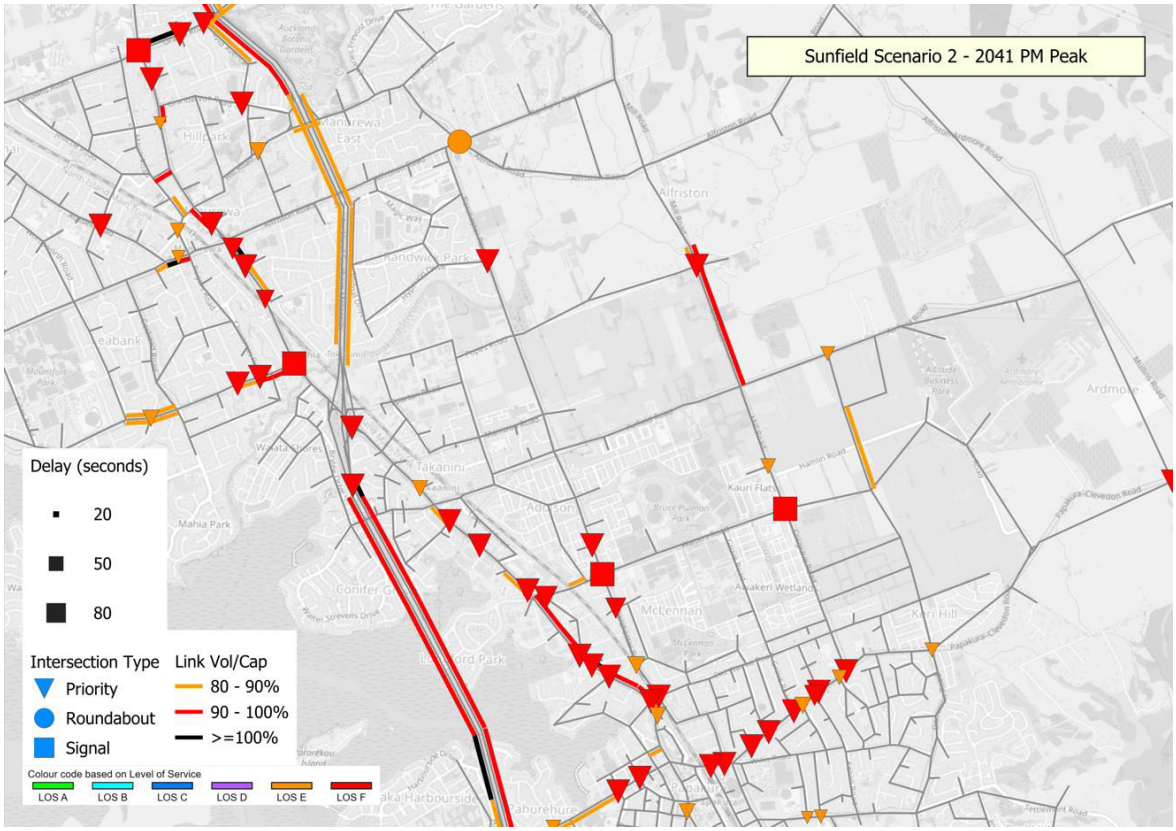

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Figure 8: Scenario 3 - 2041 AM Peak Sunfield Development (3,000vph) & MRS2a

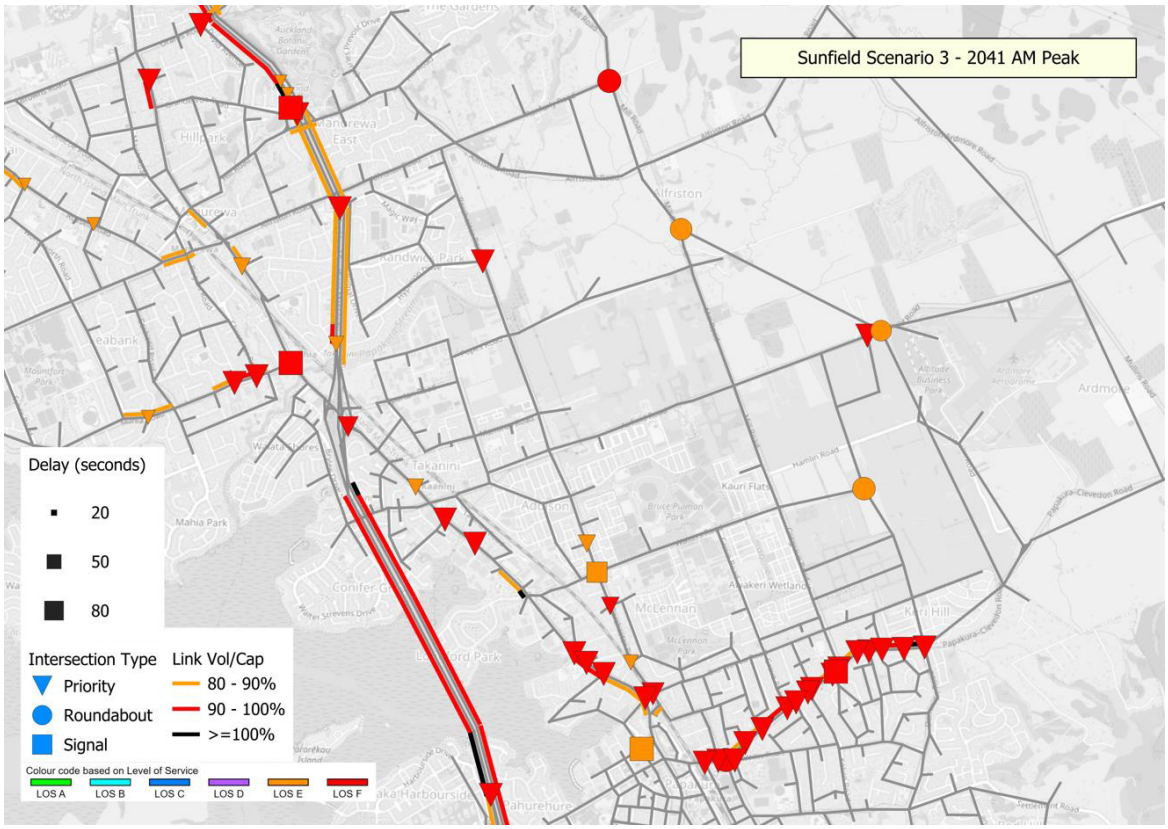

Figure 9: Scenario 3 - 2041 PM Peak Sunfield Development (3,000vph) & MRS2a