

MEMORANDUM - S67 MATTERS

To: Helen Atkins, Associate Panel Convenor, via Daya Thompson, Application Lead,

Environmental Protection Authority

From: Russell Butchers, Principal Project Lead – Premium Unit, Planning & Resource

Consents, Auckland Council

Karl Anderson, Senior Planner, Planning & Resource Consents, Auckland Council

Subject: Fast-Track Approvals Act 2024 (FTAA) – FTAA-2503-1039 - Sunfield Fast-track

Proposal – section 67 matters (AC ref BUN60447430)

Date: 16 June 2025

Purpose of this Memorandum in Relation to Section 67 of the Fast-track Approvals Act 2024

This memorandum has been prepared by Auckland Council to assist the Expert Panel and the Applicant by identifying the Council's initial concerns and information needs in relation to the current proposal. Its primary purpose is to support the Expert Panel in its consideration of whether any formal requests for further information or reports under section 67 of the Fast-track Approvals Act 2024 (**FTAA**) are warranted.

While only the Panel may issue a formal request under section 67, the Council has identified specific matters where additional clarity or further technical information may be beneficial to inform the Panel's assessment. These matters are raised for the Panel's consideration in determining whether a direction under section 67(1)(a) or (b) should be made.

The Council is also open to engaging directly with the Applicant's team to discuss any of the matters raised in this memorandum. Should the Applicant wish to meet to clarify or work through specific issues, Council officers are available to facilitate further discussion.

1. Stormwater and Flooding

Background

Most of the application site (**Site**) (188 ha) is currently zoned Rural – Mixed Rural Zone and drains north to the Papakura Stream catchment. The remainder of the site (56.5 ha) is zoned Future Urban and drains south to the Pahurehure Inlet catchment. Both catchments have existing flooding issues. Downstream of the proposed Sunfield development there are approximately:

- 442 properties in the Papakura Stream Catchment exposed to moderate or higher Flood Hazard, including 263 habitable floors and commercial buildings.
- 108 Properties in the Pahurehure Inlet Catchment exposed to moderate or higher Flood Hazard, including 60 residential and commercial buildings.

If stormwater discharges are not effectively mitigated from the development site, the flood risk to downstream properties will increase.

To mitigate the adverse effects of increased flooding caused by the proposed development, the Applicant has proposed a complex scheme of stormwater attenuation ponds and catchment diversions. This includes diverting approximately 55 hectares of catchment from the Papakura Stream catchment to the Pahurehure Inlet catchment, as shown in **Figure 1** below.

The Site is located in an area that is challenging to develop given the flat nature of the catchment, existing flooding issues both downstream and within the site, soft compressible ground, high water tables and nearby critical infrastructure (Waikato No.1 Watermain along Cosgrave Road which supplies approximately 60% of Auckland's water and a high-pressure transmission gas pipeline which runs through the Site). These issues present challenges for the Applicant and long term risks to Council assets and infrastructure, and to houses.

The stormwater and flood control assets that are proposed by the Applicant to be vested to Auckland Council from this development (noting that acceptance for vesting cannot be assumed) are likely to have residual long term operational risks associated with them, including:

- Possible long-term groundwater drawdown caused by assets that are constructed below the seasonal low groundwater level. This can cause damage to houses and infrastructure such as roads, pavements, wastewater, water and gas services.
- Settlement and damage to stormwater assets due to changes in loading from earthworks, backfill and structures.
- Increase in stormwater flows and / or volumes causing increased flood frequency or flood depths on roads and private properties.
- Increase in stormwater flows and / or volumes to the McLennan dam potentially causing damage to the dam structure and / or more frequent overtopping of the spillway.
- Increase in stormwater flows and / or volumes to the McLennan Wetland and Awakeri Wetlands exceeding their water quality design parameters, reducing their efficacy for contaminant removal.
- Increase in debris causing blockage of Healthy Waters stormwater assets and flooding of properties.
- Scour, erosion and instability of adjacent land from constructed streams which can cause damage to private property.

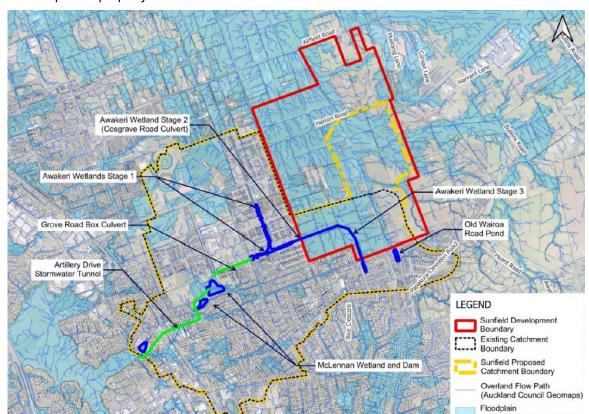


Figure 1 Catchments

Diversion and discharge of stormwater

The Sunfield Planning Report 01a, Section 5.6.2 Network Discharge Consent (**NDC**), incorrectly asserts that that the diversion and discharge from the proposed development can be authorised under Auckland Council's NDC.

Condition 13 of the NDC sets out the process for stormwater management plans to be adopted into the NDC to authorise the diversion and discharge of stormwater. In particular, for new greenfield development which is not currently urban zoned, a Stormwater Management Plan (**SMP**) can only be adopted following a notified plan change, where the plan change is consistent with the SMP. The diversion and discharge of stormwater from this Fast Track application therefore cannot be authorised by the NDC and a consent for diversion and discharge of stormwater will be needed. In addition to assertions described within Section 5.6.2 of the Planning Report, the Applicant's agent have sought diversion and discharge consent in Section 5.2.

Given the substantial additional catchment area proposed to be diverted to the Awakeri wetlands, Auckland Council has serious concerns about the hydraulic and water quality capacity of the existing infrastructure. Auckland Council holds a Designation for the Awakeri Wetlands. Before authorising any connections to the stormwater system or permitting the Applicant to proceed as Council's Agent for the Outline Plan of Works for Awakeri Wetlands Stages 2 and 3 the additional catchment area will need to have an authorised discharge consent.

1.1. Flood Assessment

Description of Missing Information

- 1.1.1. A complex arrangement of attenuation ponds and catchment diversions are proposed in an attempt to mitigate the development's effects on flooding, however information is missing that describes and demonstrates how the proposed Attenuation Ponds (including Attenuation Ponds 1, 2, 3 and 4) are intended to operate, and how flooding will be managed within these ponds during a range of design storm events. Due to the missing information there is insufficient evidence to support the Applicant's claim that the development will have no negative effect on flooding downstream of the Site.
- 1.1.2. Given the very flat topography and downstream flooding constraints, there is insufficient information provided on the feasibility of stormwater infrastructure to provide primary drainage for the 10% Annual Exceedance Probability (AEP) storm event. The assessment provided is incomplete and does not describe the methodology, assumptions made, nor the effect of groundwater and other tailwater constraints.
- 1.1.3. There is no information or assessment of the impact of the proposed development on downstream infrastructure in terms of peak flows and volumes during a range of design storm events, due to the modified catchments and increased impervious coverage. In particular, assessment of impacts on the below infrastructure is missing:
 - a) The McLennan Dam is a High Potential Impact Classification (PIC) Dam, which has been designed to manage specific flows and volumes for various storm events in accordance with its associated resource consents. There is no assessment on the frequency or duration that the spillway would activate under a range of design storm scenarios.
 - b) The conveyance infrastructure in the Pāhurehure Inlet catchment including the Grove Road Box Culverts and the Artillery Drive Stormwater Tunnel.
 - c) Stage 1 of the Awakeri Wetland, including weirs and boardwalks which are currently designed with a 2-year ARI level of service.
 - d) Private farm drains and culverts downstream of the site within the Papakura Stream Catchment. The Applicant has not provided hydraulic modelling results for the downstream private farm drains and culverts, nor has it assessed the impact of discharging a greater volume of runoff to these drains. Additionally, the approved stormwater discharges from Ardmore Airport will need to be accounted for as part of the assessment for this subcatchment.
- 1.1.4. The hydraulic model that has been described in the application in insufficient for providing a robust assessment of downstream effects and is missing the following considerations:
 - a) The Applicant has not assessed the development's potential impact on the frequency of predicted flood hazard for downstream properties (including back yard flooding, road flooding / overtopping and building footprints). To properly quantify potential increases in flood frequency, additional AEP scenarios should be analysed to assess more frequent flooding.
 - b) The Applicant has used "reservoirs" in HEC-HMS (Hydrologic Engineering Center's Hydrologic Modeling System) to model ponds 2 and 3. The Applicant does not clearly state how the discharges from these ponds are linked to the downstream water level, but these are typically represented in HEC-HMS as inlet-controlled structures (e.g. orifices). This is a concern for the validity of the modelling of these ponds in larger events, where backwater may be significant. Industry best practice would be to use alternative methods, such as

- modelling the ponds in HEC-RAS (Hydrologic Engineering Center River Analysis System) to represent the complex relationship of storage, pond outflow and downstream conditions.
- c) The Applicant has not assessed the potential impact on maximum / frequency of predicted flood hazard for storms which are not homogenous across the entire catchment, but which still present potential flood risk, especially where a storm event is located over the lower half of the catchment. This is considered important as storms which vary across catchment can result effects which would otherwise not be apparent if the analysis uses a homogenously distributed storm.
- d) The Applicant has not assessed the potential impact on maximum / frequency of predicted flood hazard for shorter duration storms, i.e. which are not 24 hours in length, especially where the duration of the event is aligned with the time of concentration (**ToC**) of the development site. This is considered important as the storm related to the ToC of the development is expected to be most likely to have effects on downstream flooding.
- 1.1.5. The proposed works include cut earthworks to below existing groundwater levels, however there is no information provided on how groundwater will be managed. There is also no assessment or information provided on the effect of groundwater management on the conveyance channel, ponds, roads and other buried infrastructure. Note: also see Point 4 of this memo for further detail in this regard.
- 1.1.6. Clarification is required of the vertical datum used in design: NZVD2016 or AUK46. The engineering drawings contain conflicting vertical datums some sheets state levels are in NZVD2016, while others state AUK46. Given the flatness of the Site, even small differences between these datums could significantly affect hydraulic performance. Provision of the Digital Elevation Model (**DEM**) used in the Applicant's analysis is required as we are getting significant discrepancies between our generated DEM and the culvert invert information provided.
- 1.1.7. The flood modelling lacks sensitivity analysis of key design parameters, such as Curve Number (CN) and other catchment parameters. Given the existing extensive and significant flood risk, a sensitivity analysis is required to understand the appropriateness and range of likely outcomes based on realistic upper and lower bound design parameters. In particular, the underlying peat soils are known to have extremely high variability in infiltration rates.
- 1.1.8. The lodged documents include the McKenzie & Co "Sunfield Fast Track Application 3 Waters Review memorandum (Lodged document #14, dated 24/01/2025) and the CKL "Stormwater Management Proof of Concept Review" memorandum (Lodged document #13, dated 10/02/2025). The McKenzie & Co memorandum states that their review is "subject to an independent flood model peer review". The CKL memorandum states that they reviewed inputs into the model based on the Stormwater Modelling Report, but they did not review the models directly.
- 1.1.9. CKL's memorandum recommends that a formal peer review of the hydraulic models be undertaken. The Applicant has not provided any evidence of an independent peer review of the hydraulic models. Therefore it is critical that Auckland Council (Healthy Waters department) receives the additional information requested in order to assess the impacts of the proposed development.
- 1.1.10. Given the insufficient hydraulic analysis presented in the application, Healthy Waters department of Auckland Council is currently updating the catchment-wide flood models to assess the effects of the development. However, as described above, there is missing information which prevents the Healthy Waters department from understanding the details of the Applicant's proposal, which limits their ability to prepare the model. We therefore request that the Applicant either provides:
 - a) their hydraulic model files and Digital Elevation Model; or
 - b) provide all of the hydraulic model input information and assumptions in a suitable format that can be used to prepare an independent hydraulic model of the Applicant's development.

Why is this Information Essential?

The missing information is required to understand the feasibility of the infrastructure to achieve the levels of service required for the development, and to achieve the necessary mitigation of flood effects as proposed.

Without this information, it is impossible to form a complete assessment of the application. This information cannot reasonably be deferred to implementation, or addressed through conditions, and the information is not considered a minor uncertainty.

In addition to missing information, there are also major inconsistencies between the information presented in the documents, which prevent a proper understanding of the proposal and its effects. These inconsistencies must be resolved in order to enable a complete assessment of the proposal.

1.2. Stormwater Assets

Description of Missing Information

- 1.2.1. The proposed earthworks include the redistribution of large volumes of cut and fill materials across the Site. Much of the proposed development will be supported on peat soils that are highly susceptible to consolidation settlements. There is no assessment of settlement caused by the proposed earthworks the Applicant has only presented information on possible settlement effects from building loads. There is brief mention of this risk in Section 8.4.1 of the geotechnical report which recommends that an assessment is undertaken at the EPA application stage, however this assessment has not yet occurred and is fundamental to understanding the effects of the proposed development and the impact on the long-term performance of stormwater assets, infrastructure and properties.
- 1.2.2. There are discrepancies between the visuals shown in the Masterplan compared to the Engineering drawings which are misleading. The masterplan shows a meandering stream-like feature running through the centre of the development, whereas the engineering drawings show this as a long, flat, wide, bare area utilised for stormwater attenuation. It may be envisaged that during the implementation stage the engineering design would be developed to create something resembling the masterplan, however this would require adding some gradient to the green corridor, which will reduce the storage volume, significantly change the earthworks levels and therefore could compromise flood management or require the green corridor to be much wider than shown which could affect the feasibility of the development. The engineering drawings should be updated to reflect a feasible waterway design to demonstrate that there is available space and capacity in the corridor provided.
- 1.2.3. There is no assessment of potential acid sulphate soils which are common in peat areas. Significant earthworks within acid sulphate soil areas can cause changes in groundwater and soil acidity which can have detrimental effects on underground infrastructure (such as stormwater pipes and manholes) and on the environment (such as changes in surface water pH).

Why is this Information Essential?

The missing information is required to gain an understanding of the effects from the proposed development on the existing infrastructure that services both existing development and the proposed development.

The missing information is critical for understanding the scale, function, and form of infrastructure that is proposed to vest to Auckland Council Healthy Waters.

Without this information, it is impossible to undertake a complete assessment of the application. This information cannot reasonably be deferred to implementation, or addressed through conditions, and the information is not considered a minor uncertainty.

In addition to missing information, there are also major inconsistencies between the information presented in the documents, which prevent a proper understanding of the proposal and its effects. These inconsistencies must be resolved in order to enable a complete assessment of the proposal.

1.3. Water Quality

Description of Missing Information

1.3.1. An assessment of effects on downstream water quality treatment devices such as the McLennan Wetland is required. No such assessment has been undertaken as yet. The McLennan Wetland provides water quality treatment for a large portion of the Pahurehure Inlet catchment. The Applicant proposes to increase the catchment draining to the McLennan Wetland significantly (by

approximately 55 hectares). Although the Applicant proposes to treat stormwater on-site, increasing flows to downstream treatment devices can reduce their efficiency, therefore having adverse effects on the water quality of downstream receiving environments.

- 1.3.2. An options assessment must be provided, detailing the options explored to determine the Best Practicable Option (BPO) for stormwater quality for each catchment area. This should include:
 - a) An evaluation of the various stormwater management devices and strategies.
 - a) An assessment of the lifecycle costs of each option, including capital, maintenance, and rehabilitation costs over a 100-year period.
- 1.3.3. The stormwater treatment proposal proposes a primary, secondary, and tertiary treatment train approach. It is noted that Awakeri Wetlands and the Existing McLennan Wetland is proposed for providing tertiary treatment for the catchment draining to the Pahurehure Inlet.

However, Stage 1 of the Awakeri Wetlands is not designed for water quality treatment and the McLennan Wetland was not designed for treating the additional catchment area proposed.

An assessment is needed to demonstrate how the primary, secondary, and tertiary water quality treatment options will be GD01 compliant to meet water quality objectives.

Why is this Information Essential?

An options assessment is essential to ensure the BPO for water quality management is technically feasible, cost-effective for ratepayers over the lifecycle of the assets, and capable of mitigating the effects of this development on an already stressed receiving environment. The *Marine Ecology State and Trends in Auckland* report (Drylie, 2021) identifies the combined marine health score in this area as ranging between marginal and poor—an issue that is also acknowledged in the SMP.

As the potential future operator of these stormwater treatment devices, it is important the solutions proposed are not only affordable and maintainable but also effectively tailored to meet the Site's water quality objectives while maximising long-term environmental and operational outcomes.

The implications of conveying high flows through the proposed treatment devices must be carefully assessed. Without appropriate flow management or bypass provisions, high flows risk resuspending captured contaminants back into the system.

1.4. Stream Works

Description of Missing Information

1.4.1. A large conveyance channel and secondary swales are being proposed to contain flood flows within the site. Containing 100-year flows into a single channel can create a massive amount of energy for erosion potential both within the channel and at the downstream receiving environment.

The proposed development layout is based on the current size, location, and capacity of the constructed stream network. However, stream networks are dynamic and will respond to changes in hydraulics over time, by deepening, widening, and meandering. There is no consideration of these effects in the application.

A Geomorphic Risk Assessment is required to:

- a) Evaluate the Current State of the Network: Assess the present condition and sensitivity of the present stream networks, including its response to flow modifications and increased impervious surfaces, as well as assess the strength and resistance parameters of the soils to be used for the constructed networks.
- b) **Identify Development Impacts and Mitigation Strategies**: Determine whether the proposed development will affect the health and stability of the stream network over the design life of the development and provide a detailed mitigation plan to address any adverse impacts.

c) Assess Natural Hazards and Public Safety Risks: Evaluate whether the stream network's sensitivity poses risks to the development or public safety. Develop strategies to mitigate these risks, with a preference towards nature-based solutions and green infrastructure.

Proposed strategies should:

- a) Specify the type and scale of instream and stream margin work required to manage ecological and geomorphological impacts and ensure resilience to future flow changes.
- b) Ensure that instream and stream margin work improve degraded channels over time or maintains high-value stream conditions where they exist.
- c) Prioritise nature-based solutions and green infrastructure that are resilient and adaptable to climate and flow changes, rather than relying on permanent hard engineering solutions.
- 1.4.2. The Applicant proposes to divert a 350 hectare upstream catchment around the proposed development site using a large open swale. The swale has a proposed width of 20-40m, 2.2km long, a 10m wide base, depth of between 2.18m 7.36m, and an average longitudinal gradient of 0.4%. The swale has a flat base and 1:3 side slopes. The channel is proposed to be grassed, with subsoil drains under the base.

It is unlikely that such a channel would be feasible given that the 350 hectare upstream catchment is expected to have a permanent baseflow which has not been allowed for. There is mention that a low flow channel will be added during detailed design to form a natural stream. This is not something that can be left to detailed design because designing this corridor as a naturalised stream is likely to significantly change the dimensions, scale and form of the corridor, which will impact on the layout of the development. A design of the diversion stream is required which should include the considerations highlighted above in the Geomorphic Risk Assessment.

Why is this Information Essential?

The missing information is required to gain an understanding of effects from the proposed development. Scour, erosion and movement of constructed waterways is a common occurrence which can damage infrastructure, buildings and land.

The missing information is critical for understanding the scale, function, and form of infrastructure, including streams and drainage reserves, that is proposed to potentially be vested to Auckland Council Healthy Waters. Changes to the scale of infrastructure, especially open systems such as streams and swales can have significant impacts on the overall development layout.

The strength and resistance of the soils needs to be determined to ensure the stability of the proposed network to withstand the constrained flood energies over the design life of the development, considering increased impervious areas, efficient flow delivery, and the effects of climate change.

Without this information, it is impossible to undertake a complete assessment of the application. This information cannot reasonably be deferred to implementation, or addressed through conditions, and the information is not considered a minor uncertainty.

This assessment is essential due to:

- a) **Environment**: allowing the stream to perform critical hydrologic functions;
- b) Health and safety: reducing risk of flooding and geotechnical failure in habitable areas; and
- c) **Economy**: increasing asset lifespan, reducing need for ongoing maintenance or replacement, and avoiding buy out of private properties following erosion and scour of land due to geomorphological processes.

1.5. Vesting of Land

Description of Missing Information

1.5.1. Supporting information that demonstrates how the proposed extents of the Local Purpose Reserves (Drainage) is delivering both an essential stormwater function and additional public benefit or function (e.g. passive or active recreation, amenity, etc.) which cannot otherwise be achieved if these areas remained in private ownership.

Note: For the avoidance of doubt, this request for further information should not be interpreted as an indication that the proposed land will be accepted for vesting by Auckland Council (see below for further discussion).

Why is this Information Essential?

The land containing the stormwater channels within the development is proposed to be vested to Council as Local Purpose Reserve (Drainage). The extent of this land likely exceeds what Healthy Waters are willing to accept. In this regard, acceptance of the proposed land is at the discretion of Auckland Council Healthy Waters and is subject to (but not limited to) meeting all necessary criteria requested from the Applicant. Noting that any land proposed to vest to Auckland Council Healthy Waters should be in the form of 'Land in Lieu of Reserve' not 'Local Purpose Reserve (Drainage) in any case. Demonstration and/or justification of additional public benefit or function is needed to determine if the proposed vesting of land is appropriate.

1.6. Auckland Unitary Plan – Operative in Part (AUP) Assessment

Description of Missing Information

1.6.1. An assessment of the proposal against AUP Chapter 8 Stormwater - Diversion and Discharge and E9 High Contaminant Generating Areas is required.

Why is this Information Essential?

This Site will need to be authorised for stormwater discharge under chapter E8 of the AUP, and an assessment should be made of the proposal against this chapter. Similarly E9 will need to authorise the contaminant generating areas (car parks and high use roads). The stormwater report has been prepared in accordance with the requirements of the NDC but does not make reference to the relevant E8 standards or E9 standards (E10 standards are mentioned). This information is essential as it provides details on where the proposal meets the standards under the authorising chapters of the AUP for the proposed activities.

2. Transport

2.1. Mill Road

Description of Missing Information

- 2.1.1. The Sunfield proposal does not account for the proposed Mill Road 'road of national significance' project, and this proposed road alignment would have a significant impact on the proposal and hence it would also significantly impact the potential delivery of the project. Consequently, the proposal's roading network does not reflect or integrate with the anticipated Mill Road corridor. The following information gaps are identified:
 - a) An assessment is required against the Mill Road Notice of Requirement (NOR) that was lodged by NZTA on Friday 13 June 2025 and for which the designation has interim immediate effect and now forms part of the receiving environment. This should include an assessment of traffic conditions around the site.
 - b) The existing transport assessment should be updated to consider the Mill Road NOR in the design of the proposed internal roads and in terms of the assessment's underlying assumptions. For instance:
 - Whether an arterial road through the development has any impact on the transport assessment's intention of a 'car-less' development, particularly on active mode and connections to the employment areas; and
 - Whether the road would affect the envisaged employment district and the trip generation and network assignment assumptions; and
 - Whether Mill Road could impact the proposed idea of the Sunfield 'loop' road and connections to adjoining AT road networks; and
 - Any other implications for proposed network and land use activities and travel demand measures; and
 - Any changes to offered conditions of consent including those relating the staging of development and networks.
 - c) The consultation summary should be updated to include any consultation between the applicant and NZTA with regards to the Mill Road project.

Note: We recommend the Panel considers issuing a direction for the Applicant to arrange conferencing between themselves, AT, Auckland Council and NZTA to discuss the implications of the Mill Road NOR to Sunfield.

2.2. Trip Generation and modelling

Description of Missing Information

- 2.2.1. The Applicant should provide assessment for various sensitivity test scenarios to provide more confidence that the network can respond to a range of possible future scenarios and still function. Auckland Transport (AT) recommends that the Applicant undertake transport modelling for at least two scenarios where the proposed methods to reduce trip generation are less effective. This should include scenarios where lower internal employment rates are assumed. The following is requested with regard to transport modelling:
 - a) AT notes the 0.65 trip generation figure used in the transport assessment for 'standard' residential developments might be higher. An updated modelling assessment should relate this figure back to relevant trip generation standards or other development. In this regard AT notes other Commute transport assessments have noted up to 0.85 residential trip generation rates.
 - b) The transport assessment notes that the underlying assumptions need to be in place to achieve the mode share proposed and that "planning provisions" are important in delivering this mode share. The updated transport assessment needs to clarify what these planning provisions are and how they will be effective.
 - c) Clarify if and how the proposed internalisation (50%) of trips affects their assumed vehicle trip distribution assessment.
 - d) Clarify why 10 years was used for transport modelling when the proposed development is intended to take 15 years.
 - e) Confirm if the provision of car share parking spaces (ratio of 1:11.5) has been accounted for in the trip generation rates assumed.
 - f) The Cosgrave Rd/ Walters Rd/ Hamlin Rd intersection appears incorrect in terms of the land configuration. Confirm if the layout of this intersection as used in the transport model is correct.
- 2.2.2. The ITA states that continuous monitoring is recommended to ensure the desired modal share is achieved. It is recommended that a robust set of monitoring conditions are provided by the Applicant to ensure that caps are in place when the number of trips exceed the trip generation anticipated in the ITA. The monitoring conditions may be similar to other locations where the number of vehicle trips are restricted such as Auckland's Wynyard Quarter or the Beachlands South Precinct Plan (Precinct I458 in the Auckland Unitary Plan).

Why is this Information Essential?

AT has significant concerns regarding the ability to achieve the trip generation rates relied on in the transport assessment. AT considers that, given the unique nature of the proposal and the assumptions made, further sensitivity tests are required to understand a wider range of possible future scenarios and to test the sensitivity of the transport system to a broader range of possible outcomes. This would include testing more scenarios involving a lower percentage of internal employment and lower rates of passenger transport use (hence more traffic is generated external to the Site).

A higher trip generation by private vehicle and a lower rate of internalised trips could have a very significant impact on the surrounding transport system that has not been accounted for. This must be fully explored and investigated in the application and would lead to a more robust monitoring framework and higher confidence that mitigation linked to the monitoring framework would be effective. It would also give confidence that intersections are designed appropriately and have enough capacity.

2.3. Parking

Description of Missing Information

- 2.3.1. The measures to avoid car ownership include preventing homeowners from owning a car(s) through covenants or similar (see 12.3 of the ITA) as well as significant physical parking restrictions are questioned. Aside from the fact that the Applicant's draft conditions do not appear to implement this proposal, the Applicant should in any event provide further evidence as to the legality, enforceability and effectiveness of the mechanisms they have proposed, and other potential mechanisms should the proposed solutions be determined to be unable to be implemented.
- 2.3.2. No assessment of the proposal with regards to the Plan Change 79 accessible parking requirements has been provided.

Why is this Information Essential?

One of the application's key assumptions relating to low trip generation is limited car usage/ownership. AT considers that the Applicant has not demonstrated that car ownership will be and will remain 1 car per 10 houses.

AT has low confidence that the measures put forward in the application to prevent car ownership will be successful, are legal, and able to be enforced. AT considers that there is a high risk that residents will own cars and park on streets near their homes if they are able to.

AT does not consider that implementing parking management in neighbouring suburbs as a result of the high level of spillover parking is viable. It is also not an easily supported solution for AT. The following is also noted by AT:

- a) Parking restrictions within the Site and adjacent neighbourhoods would require significant resources for AT to continually enforce (and physically maintain). Essentially the Applicant will require AT to ensure the feasibility of the Applicant's proposal with regard to the proposed lower car ownership. This approach is generally not supported by AT.
- b) AT can also note that the proliferation of parking restrictions can lose its adherence value over time as resident becomes overwhelmed and frustrated by significant number of parking rules.
- c) The legality and enforceability of banning car ownership is also questioned. This also does not seem to be a condition of the proposal due to sheer number of infringements.
- d) Limited consideration is given to factors such as rain, wind or people requiring medical visits that make it difficult to walk or access amenities/bus stops if car ownership is only at 10%.
- e) Plan Change 79 is now operative and the applicant should include an assessment against its provisions.

2.4. Public Transport

It is requested that the Applicant provide clarification of the following to aid assessment and assist the Council/AT in preparing our written comments.

- 2.4.1. The draft conditions state that the Sunbus service be provided with the completion of 890 dwellings on site. However, the transport assessment notes that with the completion of 890 lots a frequent transit service is required between the site and the Papakura Town Centre and that it is recommended as a joint venture between AT and the Applicant. Clarification of this discrepancy between these two documents should be provided.
- 2.4.2. Information on how the development will be serviced with public transport and internal employment in early stages of the proposal (including prior to 890 dwellings constructed) should be provided. There should also be an assessment as to whether this could cause earlier residents to remain reliant on private transport as they will have external jobs.
- 2.4.3. Clear information on how the development will be serviced with other transport (i.e. private) during different stages of development without relying on AT to mitigate the effects should be provided.

2.4.4. Additionally, the Applicant has not provided a funding mechanism to demonstrate that the proposed Sunbus service will continue to function. Confirm how it will be managed in perpetuity and indicate the consequences or measures to ensure that the service does continue.

2.5. Walking and Cycling

<u>It is requested that the Applicant provide clarification of the following to aid assessment and assist the Council/AT in preparing our written comments.</u>

- 2.5.1. The ITA states that part of the vision includes linking the site with Papakura town centre and rail station, and Takanini town centre and rail station. However, the draft conditions only include cycle facilities (shared path) on Cosgrove Road between Walters Road and Clevedon Road, and there are no requirements or triggers for wider network upgrades. This will not achieve the vision as the necessary connections are not made, and the proposed shared paths are not suitable for commuter cycling as these cyclists often prefer the road to shared paths. Thus, cycle uptake will not be effective in contributing to the necessary lower car trip rate. AT also highlights that shared path are generally only acceptable for short sections as they present a safety issue due to cyclist speeds.
- 2.5.2. AT also requests that the Applicant provide further justification for providing shared paths instead of separated walking and cycling facilities.
- 2.5.3. The transport assessment only assesses the site and three limited cycling connections from the site on the network. Additional assessment and likely, additional walking and cycling upgrades must be provided by the Applicant on the roads adjacent to their site but also on the wider network.

2.6. Internal Road Design

<u>It is requested that the Applicant provide clarification of the following to aid assessment and assist the Council/AT in preparing our written comments.</u>

- 2.6.1. The application documents refer to a loop road which is a circular road within the development that allows vehicles and the proposed Sunbus to circle around the neighbourhood, the transport assessment indicates this on multiple plans. However other plans including the Engineering Plan Proposed Roading External Intersection Overview Plan M-C341 show that this loop has a gap and does not complete full circle. Confirm the roading layout and if the route is not continuous assess what implication this has for the proposed public transport route as well as walking and cycling.
- 2.6.2. It is also unclear from the scheme plans and transport assessment exactly what roads are proposed to be vested as public roads. It is requested that a specific scheme plan be provided that clearly indicates all roads and accessways to be vested.
- 2.6.3. Indicate when the loop road will be built in relation to when the proposal will require this to be functional.
- 2.6.4. Provide detailed information on how exactly parking will be managed on internal roads, especially given wide berms and wide road reserves.
- 2.6.5. Clarify why a flush median is proposed on the internal roads if the trip generation rate assumed is very low.
- 2.6.6. Clarify why the proposed bus lane within the Sunfield 'loop' is required if the trip generation rate assumed is very low.
- 2.6.7. The bus lane also includes 'car parking' this should be clarified.
- 2.6.8. Comment on the future volume of the east-west links through the site with wider future growth and how this could affect the proposal.
- 2.6.9. The ITA states that movements at several intersections are expected to operate at a Level of Service (LOS) F, which is not considered acceptable particularly when it affects the through movement on a busy arterial road. It is recommended that the performance of any intersections that are assessed to operate at a LOS F should be remodelled with appropriate mitigation to ensure the intersection can operate within capacity.

2.7. Road Safety

Description of Missing Information

- 2.7.1. A safe systems approach needs to be used by the Applicant in their internal road design, external upgrades, and effects on the wider road network. In this regard, AT considers that the Applicant needs to fully investigate the effects of their development on the safety of the adjacent road network and further investigate what interventions are required on the network to ensure safety based on the increase in trips. For instance, traffic calming adjacent roads, pedestrian crossings on adjacent roads, separating walking and cycling facilities, etc.
- 2.7.2. The Applicant also needs to assess the road safety elements of the internal loop road and how pedestrians can safely cross this wide road reserve including how they can safely cross the proposed bus lane.

2.8. Travel Demand Management Plans

It is requested that the Applicant provide clarification of the following to aid assessment and assist the Council/AT in preparing our written comments.

- 2.8.1. More reliance and information on travel demand management plans are recommended for each component of the employment component. This should include further conditions on travel demand management plans and also provide draft travel demand management plans for AT's review.
- 2.8.2. The Applicant should also comment on who will be responsible for enforcing and travel demand management plan(s).
- 2.8.3. The proposed Travel Plan in draft Condition 128 promotes measures to reduce reliance on private vehicle use. This is not considered sufficient to ensure the significant reduction in car use anticipated by the development. It is recommended that all employment and industrial activities include comprehensive and robust measures to ensure the modal share and peak time truck bans are adhered too. This could be in the form of conditions imposed on the resource consents.

2.9. Construction Traffic

It is requested that the Applicant provide clarification of the following to aid assessment and assist the Council/AT in preparing our written comments.

- 2.9.1. Provide more details on construction and earthwork traffic which include the proposed numbers of trucks and their routes.
- 2.9.2. Identify whether the routes to be used by the heavy vehicles can withstand the proposed heavy vehicle trips and what mitigation is proposed to prevent damage to the roads.
- 2.9.3. A pavement impact assessment condition should be provided.
- 2.10. Rubbish Trucks, Loading and Emergency Access

Description of Missing Information

2.10.1. We are concerned that the low provision of car parking may lead to problems for accessing the site, including 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.

¹ https://knowledgeauckland.org.nz/publications/living-in-addison-an-investigation-into-the-lived-experience-of-a-master-planned-housing-development-in-auckland/

- 2.10.2. The ITA states that a house could be up to 135m from fire truck access. It is recommended that FENZ and other emergency responders such as Hato Hone St John provide input to confirm compliance and practicality.
- 2.10.3. No assessment against the Plan Change 79 standards has been provided with regards to the clear legal and physical width requirements for emergency access where pedestrian-only access is provided.

<u>It is requested that the Applicant provide clarification of the following to aid assessment and assist</u> the Council/AT in preparing our written comments.

- 2.10.4. More information is needed on the usage of the trafficable laneways. The Masterplan documents suggest that vehicles can access most laneways including emergency services and moving trucks. The ITA suggests that servicing and loading is limited to the service hubs. If the 6m trafficable lanes are open to vehicles, what measures will be in place to ensure households do not use the lanes to access and park closer to their house. If obstructions are proposed to limit vehicle access, for example bollards, how will access be enabled for emergency services and moving trucks?
- 2.10.5. There is limited information on the proposed 'neighbourhood service hubs' that will cater for rubbish trucks and loading vehicles which are proposed to be located within 75m of each dwelling. No dimensions or vehicle tracking has been provided to show heavy vehicles can safely manoeuvre into and out of the hubs. In addition, the practicalities of moving furniture and other heavy items up to 75m from the service hub has not been addressed. Further, it is unclear how these hubs will be managed, particularly to ensure they are not used for parking for residents or visitors cars.

3. Water/Wastewater

Background

The Sunfield application under the Fast Track Approvals Act (**Sunfield FTAA**) encompasses 244.5 hectares of rural land. Of this total area, 57 hectares are zoned as Future Urban Zone (**FUZ**) and are accounted for within the Future Development Strategy (**FDS**), with an expectation that this land will be development ready by 2050 or thereafter. The remaining 187 hectares is zoned as Rural – Mixed Rural and is located outside the existing and future urban area or rural urban boundary (**RUB**).

The Applicant has assumed that public water supply and wastewater servicing will be available to service the Sunfield FTAA.

In line with Watercare's statutory obligations, which include requirements to support growth areas identified by Auckland Council, Watercare does not provide water supply and wastewater servicing to rural zoned land. Further, Watercare does not support water supply or wastewater connections to FUZ land where providing those connections would jeopardise Watercare's ability to provide connections for development of the existing live zone land.

Watercare has assessed the capacity of the existing and planned bulk infrastructure to support the development of the 57 hectares of FUZ land ahead of the 2050+ timing in the FDS. The earliest that connections for the FUZ land could theoretically be provided would be from the late 2030s, however these connections would be reliant on the Applicant funding the identified unplanned bulk wastewater upgrades and reliant on the delivery of planned but unfunded bulk water supply and bulk wastewater projects. Please see the water supply and wastewater servicing summaries for the FUZ land **below** for further information.

Given that connections to the public wastewater and water supply networks will not be available for the FUZ land at the earliest until the late 2030s - and even then, remain uncertain due to the planning and funding status of the required projects and reliance on Applicant-funded bulk wastewater upgrades - and because the 187 hectares of rural land will not be able to be provided with connections, the Applicant will need to demonstrate permanent private servicing solutions for both potable water and wastewater.

Water supply servicing summary – FUZ land only

The Applicant proposes the establishment of a new potable water supply network, which will require a connection to the nearest Bulk Supply Point (**BSP**). Their preliminary assessments identify two suitable BSPs, these are:

- I. Airfield #1: Located on the 450mmØ transmission line on Airfield Road: or
- II. Porchester Road: Situated at the intersection of Airfield Road and Porchester Road.

A preliminary assessment undertaken by Watercare indicates that there is sufficient capacity within the bulk water supply network to supply development of the 57 hectares of FUZ without precluding development of the existing live zoned land. However, the challenge at this location relates specifically to limitations in accessing the transmission capacity.

Both the Airfield Road BSP and the Porchester Road BSP identified by the Applicant are at full capacity and cannot accommodate new connections.

The construction of a new BSP to access the bulk water supply available from the Waikato-1 Watermain is restricted due to the shutdown limitations for this watermain. The next scheduled shutdown will occur in late 2025 at Quarry Road. Following this, Watercare will not allow any further shutdowns of the Waikato-1 Watermain until the Waikato-2 Watermain is operational.

The Waikato-2 Watermain is a new 50km pipeline to be delivered as part of the Waikato Supply Programme which has a current estimate of \$760M. The Waikato Supply Programme is partially funded within the 10 year Watercare Business Plan (currently 2025-2035). The Waikato-2 Watermain is currently in the feasibility stage, with construction anticipated to commence in 2030 and commissioning by the end of 2034. However, there is uncertainty associated with this completion date as various project stages, such as concept design and securing of designations and resource consents, have not yet been completed.

As such, while there is theoretically capacity to service the FUZ component of the Sunfield FTAA with potable water, that capacity cannot be realised without the completion of the Waikato-2 Watermain and developer funding of a new BSP from the new Waikato-2 Watermain connecting to the Sunfield FTAA.

Wastewater servicing summary – FUZ land only

The existing downstream transmission infrastructure does not have the necessary capacity to accommodate development of the FUZ land and provide for the development of the existing live zoned areas.

To accommodate development of the FUZ land, an extension of the Takanini Branch Sewer would be required, along with upgrades to the existing sewer line. These upgrades are not currently planned or funded within Watercare's 10 year Business Plan and would need to be funded by the Applicant. These upgrades could only be undertaken alongside the planned duplication of the South Western Interceptor, which is not expected to be completed until the late 2030s with feasibility to begin in 2030. Currently the South Western Interceptor Duplication is not identified for funding with the Watercare 10 year Business Plan.

The Applicant has suggested implementing a low pressure sewer (**LPS**) network to manage the significant wastewater load. However, Watercare does not consider this approach to be acceptable. Watercare's Code of Practice (**CoP**) stipulates that servicing should predominantly rely on a gravity network unless specific conditions apply. The documentation received lacks adequate justification for the proposed use of an LPS over a gravity solution. Moreover, it appears unlikely that an LPS would sufficiently reduce flow from the site to negate the need for upgrading the downstream infrastructure.

Description of Missing Information

3.1. Watercare - Private Servicing Solutions

3.1.1. The Applicant must provide clear and detailed evidence of permanent private servicing solutions for both potable water and wastewater for the entire Sunfield FTAA.

Why is this Information Essential?

Watercare will not provide connections to the rural zoned land and cannot provide servicing to the FUZ land without Applicant-funded upgrades to the bulk wastewater network and not until the late 2030s at the earliest without jeopardising its ability to provide services the existing live zoned land.

As noted, access to the bulk potable water supply is constrained by transmission limitations, and no new connections can be made via the existing BSPs. A new BSP connection will not be feasible until the Waikato-2 Watermain is operational, which is not expected until at least the end of 2034 – and remains subject to uncertainty.

Watercare requests that the Panel seek detailed information from the Applicant regarding how the proposed development will be serviced independently of the public networks. This must include clear, technically robust, and sustainable proposals for permanent private potable water supply and wastewater servicing.

This information is essential to understanding whether a viable and sustainable solution exists for water and wastewater, without undermining servicing of existing live zoned land.

4. Groundwater

Description of Missing Information

4.1. Geotechnical Review

4.1.1. Engineering drawings for the proposed development (Proposed Overview, Cut / Fill Plan, prepared by Maven Associates, Rev: A, dated February 2025) were not available during preparation of the Geotechnical Report, prepared by LDE, Project Ref: J01627, dated 6 December 2024, and which referenced Cut to Fill Plans, prepared by Maven Associates, Rev: C, dated December 2023, which show different excavation levels. Therefore, a geotechnical review of the proposed works must be undertaken, with reference to the latest earthworks plans, which confirms if the assessment, recommendations, and conclusions in the Geotechnical Report remain relevant. If the review concludes that they do not, an updated Geotechnical Report must be provided.

4.2. AUP and NES:F Assessment

- 4.2.1. No clear assessment of the proposed activity against AUP Standards E7.6.1.6 and E7.6.1.10 has been provided. An assessment of the proposed activity against each of the permitted standards E7.6.1.10 (1) to (6) and E7.6.1.6 (1) to (3) should be undertaken based on the proposed Cut/Fill plan (February 2025) noted above to confirm whether or not the application complies with each.
- 4.2.2. The Applicant needs to confirm whether the proposal is a Restricted Discretionary Activity (RDA) under the NES-F (45C) or not, providing justification. If it is, then an assessment of effects is required.

4.3. Settlement

- 4.3.1. Critical geological cross-section(s) through the site that show the locations and depths of soil investigations that have been undertaken, estimated groundwater levels, existing and proposed ground levels, site boundaries, retaining walls, building platforms, driveways, buried services (including stormwater and wastewater) are required in order to determine groundwater drawdown effects. This information has not been provided as part of the application.
- 4.3.2. No assessment of mechanical settlement effects resulting from proposed retaining structures (that is, groundwater cut-off walls) proposed due to deep excavations, has been provided.
- 4.3.3. Profiles at the critical cross-sections, showing the total (combined) settlement (i.e. the consolidation settlement due to groundwater drawdown plus mechanical settlement due to retaining wall deflection), beneath the neighbouring buildings/structures (including driveways) and public services are required. The profiles should be annotated with maximum differential settlement under neighbouring buildings/structures (including driveways) and public and private services. The calculations of maximum differential settlement should be provided.
- 4.3.4. On the basis of the settlement predictions required under No.4.3.3 above, confirmation whether a draft Groundwater Settlement Monitoring & Contingency Plan (GSMCP) is required or not should be provided. If it is considered that settlement monitoring or conditions surveys of a specific asset are not required, then this should be fully justified.

4.4. Conditions

4.4.1. The proposed conditions from 41 to 71 are taken from another construction project for proposed stormwater channels (Awakeri Wetlands, Stages 2 and 3). These should be updated so that they are specific to this application.

Note:

In addition to LDE's geotechnical report noted above, the two reports below have been provided with the application. However, those reports were prepared for Stages 2 and 3 of the Awakeri Wetlands project. The AEE report states that the groundwater conditions across the entire Sunfield area are generally consistent and therefore the reports below are relevant to this proposal. Based on the updated Cut/Fill plan provided, this appears incorrect.

- A report titled "Groundwater Dewatering and Ground Settlement Effects Assessment Review of Awakeri Wetlands Stage 1 Construction and Assessment for Stages 2 and 3" prepared by Earthtech Consulting Limited (Earthtech), dated 13 June 2024, ref. R10015-1, Draft, rev. B.
- A report titled "Awakeri Wetlands Stages 2 and 3, Groundwater and Settlement Monitoring and Contingency Plan", prepared by Earthtech, dated 25 March 2025, ref. R10015-2, Draft, rev. D.

Why is this Information Essential?

Based on the size of the excavation, and the groundwater drawdown anticipated, there remains a risk that ground conditions are not as they have been evaluated, and variability within the peat soil has been noted based on the site investigations.

The extent of adverse effects on built elements and the environment must be appropriately evaluated, including the cumulative effects from other ongoing projects at the site.

5. Earthworks

5.1. Erosion and Sediment Control

Description of Missing Information

5.1.1. Details regarding the excavation / construction of the stormwater channels and Awakeri Wetland infrastructure through the site. Stages 2 and 3 are proposed by others, but it appears that stage 4 is part is this application.

Why is this Information Essential?

Construction of the stormwater channels associated with the Awakeri Wetlands project will impact a contractors' ability to appropriately manage construction water. i.e., clean and dirty water management via the construction & application of erosion and sediment control measures. Can the Applicant confirm the "status" of these works? i.e., will the earthworks for stages 4 and 5 of the wetlands project be done at the same time as the earthworks for the any of the 25 stages of this project? A clearer understanding of how the earthworks for the wetland areas affect the earthworks and any erosion and sediment control measure for the main project, is required to better understand how the overall ESCP will work.

Description of Missing Information

5.1.2. There are no staging details for the earthworks. The overall ESCP indicates six (6) stages, but the boundaries of these stages are not clear, nor is it clear whether how the cut-fill for each stage is determined. Further, the AEE states there will be approx. 25 stages with each stage taking approximately 12 months to complete, however, no earthworks specific details have been provided. Lastly, it is unlikely that an earthworks contractor will complete the cut to fill in either 6 or 25 stages.

Why is this Information Essential?

Staging information for the earthworks informs how much area is proposed to be exposed at any one time, helping to manage sediment loads across the entire project. The project area is 244 ha. How much land will be exposed at any one time, including any areas required for soil conditioning, pre-loading utilising zone 2 soils, etc? The overall ESCP proposes 6 stages. Are there cut-fill plans specific to each stage? The overall cut-fill plan is for ALL 244 ha to be earthworked at once. This is highly unusual.

Description of Missing Information

5.1.3. There's insufficient detail on the ESCPs for approximately half of the project. i.e., 21 sediment retention ponds are proposed in stages 2, 4 and 5 but no ponds are proposed in stages 1, 3 and 6.

Why is this Information Essential?

It is difficult to assess whether the erosion and sediment control proposal is appropriate when there's insufficient detail in the application documents. The plan is to utilise erosion and sediment controls in accordance with GD05, which is great, but the indicative plans propose silt fences to manage 120ha of earthworks which is not appropriate. At the very least, indicative ESCPs would allow an assessment to be undertaken that ensures what is proposed is feasible.

Description of Missing Information

5.1.4. There is no comment regarding adaptive management of the overall earthworks area which is considered significant.

Why is this Information Essential?

Adaptive management is typically implemented on projects where the earthworks area is 10 ha or more, or when the project is significant. This project meets the criteria for both size and significance. Is Adaptive Management supported?

Description of Missing Information

5.1.5. There are significant differences in the earthworks presented within different documents. In particular, the earthworks plan in the LDE Geotechnical Report states 840,000m³ of cut and fill, with little to no earthworks adjacent to Old Wairoa Road, whereas the Infrastructure Report and Engineering drawings state 1,700,000m³ of cut and 1,490,000m³ of fill and includes cutting out the ridgeline adjacent to Old Wairoa Road using an excavation of up to 17m deep.

The geotechnical report does not take into account this significant difference in earthworks volumes, nor the 17m deep cut, and therefore does not adequately assess the geotechnical effects of the proposal, including geotechnical effects on infrastructure that is proposed to be vested (i.e. stormwater, wastewater, roading). It is also unclear whether this significant level of earthworks has been considered by other specialists, stakeholders or mana whenua. Clarification of the correct scale of earthworks and associated cut and fill is therefore essential.

Note: this should be read in conjunction with the Groundwater matters in Section 4.1 of this memo.

Why is this Information Essential?

A more accurate estimate of the overall earthworks will allow proper assessment of the earthworks proposal.

5.2. General Comments

The proposed chemical treatment management plan (ChTMP) must also include how "pumped" water will be managed as pumping to SRPs or other treatment devices has been highlighted as a requirement due to the flat topography of the overall site.

There are typically two Erosion and sediment Control stages to a residential earthworks project. The first stage is bulk earthworks which is cut and fill to prepare the land for the second stage which is civil earthworks (minor cut and fill road and footpath construction, install services such as lighting and telecommunications, and stormwater and wastewater etc.). On a site with 25 "civil" stages, I would expect at least 25 different erosion and sediment control plans (one for each civil stage), and at least one for each of the 6 bulk earthworks stages. The plans provided barely scratch the surface of what is required. Will the Applicant agree to conditions that address the requirement for ESCPs for each area / stage of earthworks?

The cut fill plans are for the entire 244 ha but the staging plans are for areas much smaller than that. How does the proposed staging of the project work in relation to the overall cut and fill? This relates to my query above about "earthworks staging".

It would be ideal if the Applicant acknowledged that this is a significant project that will occur over 10-15 years, and that adaptive management is required. Conditions to this effect can be recommended. Alternatively, the Applicant could prepare an adaptive management plan (AMP) based on Auckland Council's Erosion and Sediment Control Adaptive Management Plan Guidance Document.

Overall, there is no clear methodology for the proposed earthworks, in particular with regard to the staging required. A significant portion of the site will require pre-loading and how this is to be done and how it relates

to other areas of earthworks is also unclear. The application also states that stages of works may be undertaken concurrently, but again, no details are provided.

The erosion and sediment control methodology is extremely light on detail, is very generic and there is no supporting information to indicate that what is proposed from an erosion and sediment control point of view, can be done. The ESCP also shows dirty water diversions within stream channels. The plan is draft and very high level and therefore unlikely to ever be referred to, but it shows a lack of understanding of construction water management.

6. Ecology

Description of Missing Information

6.1. Reasons for Consent

6.1.1. The Assessment of Environmental Effects does not identify any reasons for consent under chapter E3 of the Auckland Unitary Plan. The Ecological Impact Assessment does not identify any activities within the streams which would be relevant to chapter E3.

However, the engineering plans show:

- Earthworks across the streams on-site,
- Diversion of watercourses 1, 3 and 4, and;
- Numerous culverts over natural watercourses (Road 5, culvert 1; Road 6, culvert 1; Road 1, culvert 2; Road 6, culvert 2).

The proposed activities, reasons for consent and any associated environmental effects, as well as how any identified effects will be managed, should be clarified.

Why is this Information Essential?

The application does not currently identify any works within streams as reasons for consents or in their assessment of effects. However, the plans imply significant in-stream works that would require consent (and effects management).

It is unclear if any in-stream works are proposed, what the effects would be, and how these effects would be managed.

Noting that such activities would be unconsented if they were to occur without the necessary consents having been applied for and granted.

7. Parks

Description of Missing Information

Note: For the avoidance of doubt, the requests for further information below should not be interpreted as an indication that any land will be accepted for vesting by Auckland Council.

7.1. Reserve Classification and Suitability

7.1.1. Clarification of Reserve Classification and Updated Scheme Plans

A clear distinction is required between land proposed to vest as recreation reserve and land proposed as local purpose (drainage) reserve. Updated scheme plans should reflect this delineation to enable accurate assessment of recreational function, amenity provision, and acquisition suitability. Further clarification is also needed to distinguish the respective scopes of Healthy Waters and Parks, particularly where recreational assets are proposed on land primarily functioning as stormwater infrastructure. It must be confirmed whether such land is suitable for recreational purposes in accordance with Council standards.

7.1.2. Land Suitability for Recreational Use

Confirmation is required that the proposed open space areas, particularly those with secondary drainage functions, can support a primary recreational purpose, in line with neighbourhood park provision standards. At present, there appears to be a conflict between the recreational function proposed and the underlying stormwater management needs of the land. All identified open spaces,

including Sunfield Park, are located in flood-prone or potentially contaminated areas and are primarily designed to serve stormwater functions. As currently proposed, none of these areas meet Auckland Council's criteria for recreational open space provision.

7.1.3. It is requested that the Applicant provide clarification of the following to aid assessment and assist the Council in preparing our written comments. Scope of Engineering Plan Approval Landscape cross-sections and detailed engineering drawings are required to demonstrate recreational usability, compliance with slope requirements (particularly gradients not exceeding 1:12), and clear spatial separation from stormwater infrastructure. While the Engineering Plan Approval process currently addresses stormwater and transport assets, it should also encompass all open space, landscaping specifications and maintenance, asset and amenity infrastructure in accordance with Council's Code of Practice.

7.1.4. Esplanade Reserve Requirements

Clarification is required as to whether any streams or watercourses within the site meet the thresholds for esplanade reserve requirements under sections 230–237 of the Resource Management Act (RMA). The Applicant has only noted that no existing esplanade reserves or strips are present within the proposed site. Further clarification is necessary to ensure that the classification of land as drainage reserve is not being used to circumvent esplanade reserve obligations.

7.2. Funding and Maintenance

7.2.1. Amenity Development Commitment

The extent of open space proposed significantly exceeds what was originally anticipated. Further detail is required from the Applicant to confirm a commitment to fully fund, construct, and maintain all open space assets—including playgrounds, sports courts, greenways, and landscaping—prior to vesting, and in accordance with Council-approved standards. Current draft conditions only secure the delivery of stormwater and transport infrastructure, with no clear obligations relating to the development of recreational or amenity assets.

7.2.2. Maintenance and Asset Handover Strategy

An interim open space maintenance plan is requested, outlining the proposed approach to maintenance during the period between asset establishment, after asset establishment and formal handover. Given that the land is zoned Future Urban and Rural, its acquisition was not anticipated within the current Long-term Plan (LTP). Accordingly, no capital (CAPEX) or operational (OPEX) funding has been allocated for its acquisition, development, or maintenance within this period. Advancing acquisition and development ahead of the planned sequencing presents both funding and operational risks.

7.2.3. Ownership and Maintenance Responsibilities for Greenways and Connections Clarification is required regarding the ownership, intended function (e.g., ecological corridor versus active transport link), design specifications, and long-term maintenance responsibilities for the proposed greenways, pedestrian links, and laneways. It should be confirmed whether these assets are intended to be maintained by Auckland Council (Parks or Healthy Waters), Auckland Transport, or an alternative entity such as a Residents' Society.

7.3. Landscaping Design

- 7.3.1. It is requested that the Applicant provide clarification of the following to aid assessment and assist the Council in preparing our written comments. Lack of Descriptive Legends or Keys Many of the landscaping plans, concept plans, and open space strategies lack an adequate Legend.
- 7.3.2. Revised Landscaping and Planting Schedules

 There is a gap in the proposed planting schedules with respect to species selection that would support medium to large tree canopy closure within the street environment and thrive in streetscape conditions. The following matters should be addressed:
 - a) Removal of Karaka (Corynocarpus laevigatus) due to toxicity concerns for dogs.

- b) Greater tree species diversity to enhance ecological resilience; the currently proposed species have demonstrated limited survival in similar environments and contribute minimally to long-term canopy outcomes (Excluding the Pohutukawa trees).
- c) Revision of footpath designs to avoid "rat-tail" or dead-end terminations, which hinder mowability and increase maintenance requirements.

Why is this Information Essential?

The proposed open space network introduces a range of land parcels with varying functions, constraints, and intended uses. To determine whether these areas are suitable for vesting and long-term integration into Auckland's open space network, further clarification is required across several technical, operational, and policy areas.

This information is critical to establish whether the proposed reserves can meet the expectations for recreational quality, function, and maintainability, particularly where stormwater management is the dominant design driver.

To assess alignment with Auckland's open space provision, it must be demonstrated that the proposed land, particularly areas with secondary drainage functions, can provide safe, accessible, and functional recreational use under typical conditions. Where land is intended to perform both drainage and recreational roles, there must be sufficient evidence to demonstrate that flooding, access limitations, or topographic constraints do not compromise the recreational function. Without clear delineation of reserve classifications and confirmation of asset suitability, there is a risk that land may be accepted without clarity on future use, function, or cost responsibility.

The absence of secured commitments to deliver key amenity infrastructure, combined with the fact that this land falls outside the current Long-term Plan sequencing, creates uncertainty around how and when community outcomes will be realised. This makes it difficult to assess the deliverability, affordability, and long-term viability of the proposed open space assets.

Many of the landscaping plans, concept plans, and open space strategies lack an adequate legend. While this may seem minor, it represents a genuine gap as it affects transparency, accuracy, and accountability throughout planning, implementation, and asset management processes.

Further, the long-term management and operational responsibilities for assets such as greenways, pedestrian links, and streetscape planting must be clearly defined. This ensures that future maintenance obligations are assigned to the appropriate entity and that asset performance standards can be upheld across the full lifecycle.

In summary, the information requested is essential to determine whether the proposed open space is suitable for acceptance, aligns with Auckland Council's strategic intent, and can be delivered and maintained to the required standard without creating unintended service or funding gaps.

RButchers

Russell Butchers

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Auckland Council