

I hereby give notice that a hearing by commissioners will be held on:

Date: Tuesday 29 and Wednesday 30 August 2023

Time: 9.30am

Meeting room: Henderson Council Chamber

Venue: Level 2, Civic Building

3 Smythe Road, Henderson, Auckland

PRIVATE PLAN CHANGE 86 ADDENDUM HEARING REPORT 41-43 BRIGHAM CREEK ROAD, WHENUAPAI 41-43 BRIGHAM CREEK JV

COMMISSIONERS

Chairperson Janine Bell

Commissioners Nigel Mark-Brown James Whetu

Julie McKee

KAIWHAKAHAERE WHAKAWĀTANGA

HEARINGS MANAGER

Telephone: 09 977 6993 or 0274 909 902 Email: julie.mckee@aucklandcouncil.govt.nz Website: www.aucklandcouncil.govt.nz

WHAT HAPPENS AT A HEARING

Te Reo Māori and Sign Language Interpretation

Any party intending to give evidence in Māori or NZ sign language should advise the hearings advisor at least ten working days before the hearing so a qualified interpreter can be arranged.

Hearing Schedule

If you would like to appear at the hearing please return the appearance form to the hearings advisor by the date requested. A schedule will be prepared approximately one week before the hearing with speaking slots for those who have returned the appearance form. If changes need to be made to the schedule the hearings advisor will advise you of the changes.

Please note: during the course of the hearing changing circumstances may mean the proposed schedule may run ahead or behind time.

Cross Examination

No cross examination by the applicant or submitters is allowed at the hearing. Only the hearing commissioners are able to ask questions of the applicant or submitters. Attendees may suggest questions to the commissioners and they will decide whether or not to ask them.

The Hearing Procedure

The usual hearing procedure is:

- The chairperson will introduce the commissioners and will briefly outline the hearing procedure. The Chairperson may then call upon the parties present to introduce themselves. The Chairperson is addressed as Madam Chair or Mr Chairman.
- The applicant will be called upon to present their case. The applicant may be represented by legal counsel or consultants and may call witnesses in support of the application. After the applicant has presented their case, members of the hearing panel may ask questions to clarify the information presented.
- **Submitters** (for and against the application) are then called upon to speak. Submitters' active participation in the hearing process is completed after the presentation of their evidence so ensure you tell the hearing panel everything you want them to know during your presentation time. Submitters may be represented by legal counsel or consultants and may call witnesses on their behalf. The hearing panel may then question each speaker.
 - Late submissions: The council officer's report will identify submissions received outside
 of the submission period. At the hearing, late submitters may be asked to address the
 panel on why their submission should be accepted. Late submitters can speak only if
 the hearing panel accepts the late submission.
 - Should you wish to present written evidence in support of your submission please ensure you provide the number of copies indicated in the notification letter.
- **Council Officers** will then have the opportunity to clarify their position and provide any comments based on what they have heard at the hearing.
- The applicant or their representative has the right to summarise the application and reply to matters raised by submitters. Hearing panel members may further question the applicant at this stage. The applicants reply may be provided in writing after the hearing has adjourned.
- The chair will outline the next steps in the process and adjourn or close the hearing.
- If adjourned the hearing panel will decide when they have enough information to make a
 decision and close the hearing. The hearings advisor will contact you once the hearing is
 closed.

Please note

- that the hearing will be audio recorded and this will be publicly available after the hearing
- catering is not provided at the hearing.



A NOTIFIED PRIVATE PLAN CHANGE TO THE AUCKLAND UNITARY PLAN BY 41-43 BRIGHAM CREEK JV

TABLE OF CONTENTS		PAGE NO.	
Reporting officer's addendum report		5 – 24	
Appendix 1	Section 42A addendum recommendation	25 – 48	
Appendix 2	Section 42A specialist addendums	49 - 82	

Reporting officer, Todd Elder, Planner

Reporting on proposed Private Plan Change 86 to rezone 5.2 Hectares of land at 41 -43 Brigham Creek Road, Whenuapai from Future Urban Zone (FUZ) to Residential Mixed Housing Urban (MHU) with a Stormwater Management Area Flow 1 control (SMAF1) applicable to the site.

APPLICANT: 41-43 BRIGHAM CREEK JV



IN THE MATTER of the Resource

Management Act 1991

AND

IN THE MATTER of a request to Auckland

Council for Private Plan Change 86: Whenuapai 3 Precinct under clause 21 of

Schedule 1 of the

Resource Management Act

1991.

SECTION 42A ADDENDUM

TODD OLIVER ELDER ON BEHALF OF AUCKLAND COUNCIL

24 October 2023

5

Introduction

- 1. My full name is Todd Oliver Elder.
- 2. I am a Senior Policy Planner in Regional, North, West and Islands Planning in the Plans and Places Department of Auckland Council (**Council**). I have held this and other policy planner positions at Council since August 2017.
- 3. I hold a Bachelor of Science degree from the University of Otago (2014), New Zealand. I have worked as a planner for approximately 8 years. My experience has been in local government in the United Kingdom and New Zealand. I am an Associate member of the New Zealand Planning Institute.
- 4. I have read and agree to comply with the Code of Conduct for Expert Witnesses, which is contained in the Environment Court of New Zealand Practice Note 2023.
- 5. I am authorised to give this evidence on Council's behalf, in relation to the Proposed Plan Change 86 ("PC 86") application under Schedule 1 of the Resource Management Act 1991 ('RMA') by 41-43 Brigham Creek Joint Venture ("the Applicant").
- 6. This document will:
 - (a) Be an addendum to the Section 42A hearing report;
 - (b) Respond (where necessary) to evidence received after the notification of the PC86 S42A hearing report on the Councils website on 03 July 2023; and
 - (c) Provide a revised recommendation to the Hearing Commissioners on PC 86.
- 7. On 03 July 2023 the Council S42A hearing report was uploaded to the Auckland Unitary Plan website, and was placed on the PC 86 Hearings page. The hearing report was also provided to the Applicant and Submitters.
- 8. On 29 September 2023, the Applicant's evidence on PC 86 was made available on the PC 86 hearings page. The Applicant's evidence consisted of:
 - (a) Planning Natasha Rivai
 - (b) Civil Engineering Will Moore
 - (c) Ecology Graham Ussher
 - (d) Transport Todd Langwell
 - (e) Urban Design Richard Knott

- 9. On 13 October 2023, the submitters' expert evidence on PC 86 was made available on the PC 86 hearings page. This evidence consisted of:
 - (a) Watercare Andrew Deutschle and Paula Hunter.
 - (b) Auckland Transport Claire Drewery and Katherine Dorofaeff
 - (c) Waka Kotahi Evan Keating
 - (d) Dave Allen
 - (e) Jeff Spearman
- 10. In response to the submitter expert evidence on PC 86, the following s42A specialists have provided addendum reports (refer to Appendix 2):
 - (a) Gary Black (Transport)
 - (b) Jennifer Esterman (Urban Design)
 - (c) Danny Curtis and Amber Tsang (Healthy Waters)
- 11. On 20 October 2023 Ms Rivai's rebuttal statement (for the Applicant) was made available.
- 12. I have reviewed all of the documents listed in paragraphs 8, 9, 10 and 11 above.
- 13. The planning evidence in chief of Ms Rivai provided an updated set of proposed Precinct provisions (entitled the Whenuapai 3 Precinct) on behalf of the applicant (dated 28 September 2023). That version of the proposed provisions contains a number of changes that have been made to the earlier version attached to my S42A Report.
- 14. I do not agree with all aspects of Ms Rivai's 28 September 2023 version of the proposed provisions. To assist the Panel, in summary, I consider that the key differences between my recommended Precinct and the Applicant's Precinct is the nature and extent of infrastructure that is required to enable subdivision and development to occur, and to ensure that urban development is integrated with the provision of infrastructure.
- 15. I do consider that there are further amendments that can be made to the Whenuapai 3 Precinct provisions arising from the expert evidence and s42A Addendum reporting. These will be addressed below. Additionally there are amendments that are required to provide clarity/interpretation and compatibility with the style and formatting used throughout the AUP. A revised version of the proposed provisions are included in Appendix 1.

Summary - Statutory and Policy Framework relating to Infrastructure

- 16. Ms Rivai has provided an assessment of the 'Statutory and Policy Framework' in paragraphs 4.1 to 4.18 of her Evidence In Chief (EIC). I provided my assessment of these matters in paragraphs 50 to 131 of the S42A report. Rather than repeat my full assessment, I refer only to some of the key provisions below.
- 17. **National Policy Statement on Urban Development 2020 (NPSUD)** The NPSUD is raised in paragraphs 61 72 of the section 42A report. The Section 42A report outlines in these paragraphs two key concerns that relate to PC 86 (as notified and as updated) in terms of not meeting the NPSUD. These are:
 - (a) That urban development is integrated with infrastructure planning and funding decisions. This applies to wider infrastructure requirements for: water and wastewater; flooding and stormwater management; and transport; and
 - (b) That well-functioning urban environments have good accessibility between housing, jobs, and community services, including by way of public or active transport. This is relevant in PC86 in relation to the low level of accessibility between the PC86 site and the Whenuapai Neighbourhood Centre.
- 18. I do not consider the evidence for the Applicant has demonstrated that the version of the Whenuapai 3 Precinct provisions provided in conjunction with the applicant's evidence gives effect to the NPSUD. My reasons for this are provided in paragraph 20(e) and (f) below.
- 19. Regional Policy Statement Auckland Unitary Plan 2016 (Operative in Part) ("RPS")The RPS is raised in paragraphs 83 98 of the section 42A Report.
- 20. My key concerns in regard to the RPS and PC 86 (as notified) were identified in the s42A report, and are that:
 - (a) PC 86 does not integrate urban development of the land with the provision of infrastructure and so does not meet RPS Policy B2.2.2(7)(c), which reads:

RPS Policy B2.2.2(7)(c) Enable rezoning of land within the Rural Urban Boundary or other land zoned future urban to accommodate urban growth in ways that do all of the following:

. . .

(c) integrate with the provision of infrastructure; and

. . .

(b) In my view PC 86 does not meet the following Chapter B3 Policies as well:

B3.3.2 Policies:	
B3.3.2(1)	Enable the effective, efficient and safe development, operation, maintenance and upgrading of all modes of an integrated transport system.
B3.3.2(2)	Enable the movement of people, goods and services and ensure accessibility to sites.
B3.3.2(5)	Improve the integration of land use and transport by:
B3.3.2(5)(a)	ensuring transport infrastructure is planned, funded and staged to integrate with urban growth;
B3.3.2(5)(b)	encouraging land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods;
B3.3.2(5)(c)	locating high trip-generating activities so that they can be efficiently served by key public transport services and routes and complement surrounding activities by supporting accessibility to a range of transport modes;

- (c) RPS Policies B2.3.2(2)(b) and B2.4.2(6) are also relevant, which read:
- B2.3.2(2)(b) Encourage subdivision, use and development to be designed to promote the health, safety and well-being of people and communities by all of the following:

. . .

- (b) enabling walking, cycling and public transport and minimising vehicle movements; and
- B2.4.2(6) Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification.
- (d) My view is that PC 86 (as notified) did not integrate with the required upgrades of Brigham Creek Road and Māmari Road to:
 - (i) Provide suitable accessibility to the PC 86 site, and accessibility to the Whenuapai Neighbourhood Centre; and
 - (ii) Ensure that development would not proceed prior to these upgrades being available.

- (e) I am of the view that PC86 is not staged in conjunction with these upgrades, noting that these upgrades are also not funded. Therefore PC86 is, in my view, inconsistent with the statutory framework requirements of the NPS-UD and the RPS because the precinct provisions do not ensure that development will be integrated with infrastructure upgrades. Further, the public transport service is not classified as 'frequent' or 'rapid' under the Auckland Transport Regional Public Transport Plan (RPTP) 2018-2028 and therefore PC 86 is inconsistent with B3.3.2(5)(b) and B3.3.2(5)(c).
- (f) The issues identified in the s42A Report remain unresolved. The Applicant's PC86 proposed provisions as notified and as updated in evidence (28 September 2023) continue to only address transport infrastructure within the PC86 site and along the PC86 road frontages. The provisions do not appropriately identify or integrate the subdivision and development of the land with wider transport network and accessibility requirements beyond the site.

I therefore do not agree with Ms Rivai's assessment that the proposed provisions (dated 28 September 2023) satisfy the statutory requirements of the AUP - RPS.

- 21. Future Urban Land Supply Strategy 2017 (FULSS) & the Whenuapai Structure Plan 2016 (WSP) Both of these documents identify timeframes to provide guidance about Auckland's growth, sequencing and priority areas for development. I have concerns with the following statement in Ms Rivai's EIC:
 - 4.13 "Future Urban Land Supply Strategy 2017 determines the subject site to be within an area that will be 'development ready' between 2028 and 2032, but notes that bulk infrastructure is not planned for nor funded at that time (2017)...

4.14 In relation to the availability and funding of bulk infrastructure, the PPC request with Precinct provisions include specific transportation and wastewater infrastructure that will enable urban development of the site and its integration with the wider network upgrades when they occur."

22. In my view, I do not consider that the possible timings of some future resource consents, as suggested by Ms Rivai, will bring PC 86 'in line' with the FULSS or WSP. It is necessary to "have regard" to these documents at this statutory rezoning stage, as required by s74(2)(b)(i) of the RMA. Nor do I consider that only providing for the site's on-site infrastructure addresses the 'bulk infrastructure' requirements as identified by these

strategic documents. To assist the Panel, I provide the following diagram from the FULSS that illustrates how the FULSS and the WSP interact.

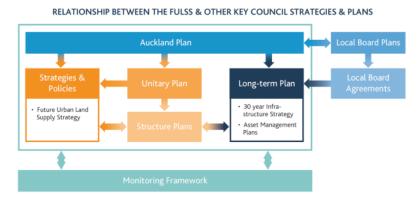


Figure 2: Relationship between the Future Urban Land Supply Strategy and other council documents

- 23. With regard to the <u>timing of development</u> identified in these two documents, I consider that limited weight should be placed on them. The following relevant factors have occurred since the WSP was adopted in 2016, and the FULSS in 2017:
 - (a) The reduced ability of the Council to fund and finance infrastructure across the region due to the changed economic circumstances, including the economic effects of the COVID pandemic; and
 - (b) The NPSUD was gazetted.
- 24. Due to the economic effects associated with COVID-19, the Council was required to review its budget in 2022, to endeavour to save an estimated \$1 billion dollars. It is my understanding that this has affected the ability of the Council to fund and finance infrastructure in the region.
- In August 2020 the NPSUD was gazetted by the Government. The NPSUD was updated following the passage of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (HSAA), in May 2022. In summary the NPSUD requires councils to provide for growth, including providing sufficient development capacity for housing and business land within a well-functioning urban environment. Sections 77G and 77N of the Resource Management Act 1991 (RMA) inserted by the HSAA prescribe a number of changes that are required to be made to the AUP to give effect to Policy 3 of the NPSUD in residential and non-residential zones and to incorporate the Medium Density Residential Standards (MDRS) in relevant residential zones. The Council has notified Proposed Plan Change 78 Intensification (PC78), the Council's Intensification Planning Instrument (IPI) to implement those intensification requirements. The NPSUD

also requires that Auckland Council prepare a Future Development Strategy. This document is currently in draft form, but it proposes changes to (amongst other things) Council's approach to growth within the AUP Rural Urban Boundary.

- 26. In my view, the NPSUD potentially affects the applicability of the WSP at two levels. First at a local level the population projections and density assumptions used as the basis to prepare the WSP are no longer in line with the higher levels of intensification required by Policy 3 of the NPSUD. Similarly, the land uses in the WSP are generalised and importantly relate to the residential and business zones as they were envisaged prior to the making operative of the AUP (2016).
- 27. These matters are relevant as they illustrate that there are likely to be delays in Council's ability to provide or fund bulk infrastructure.
- 28. Secondly, in addition to the above, I am not satisfied that Ms Rivai has had an appropriate level of 'regard' to the WSP. Ms Rivai has stated:

"The PPC request to rezone the site as MHU with the inclusion of the Precinct provisions is consistent with the WSP in that medium density zoning is anticipated under WSP, and the inclusion of specific infrastructure thresholds to ensure transportation upgrades are provided to support growth.".

- 29. As I have outlined in the S42A report in paras 112 116, the WSP identifies a number of transport projects and roads which are outlined in Appendix 4. Ms Rivai has not had regard to Appendix 4, nor for section 3 'Vision and Key Objectives', and section 9 'Implementation' of the WSP. These outline the release of development of land relating to the PC86 site. In my view, the Applicant is only proposing to address the localised environmental effects, and is not providing for a wider integration or delivery of infrastructure that is identified in the WSP.
- 30. A recent Environment Court Decision (Decision [2022] NZEnvC 162)) has recognised the significance of a structure plan:

"[72] We find that the Structure Plan is a document which had the benefit of <u>comprehensive</u> <u>public consultation and community engagement</u>. It is also informed by numerous technical reports. It provides a strategic vision to guide future development in Warkworth. It is a document that is relevant to our determination of the appeal." [emphasis added]

31. In my view, the WSP has had comprehensive public consultation and community engagement. It is also supported by numerous technical reports. Therefore, I do not

consider that appropriate regard has been given to the WSP in the Applicant's proposed Whenuapai 3 Precinct.

Section 32 AA Evaluation

- 32. A section 32AA assessment was provided in paragraphs 456 to 478 of the s42A report. Further amendments to a plan change requires an additional assessment in accordance with S32AA of the RMA.
- 33. Ms Rivai's s32AA assessment (paragraphs 7.1 – 7.6) of her evidence in chief relates to the 28 September 2023 version and, in my view, does not contain an appropriate level of assessment when considered against s32AA of the RMA. Specifically, there does not seem to be a consideration of ss32(1)(b)(ii),32(2) and 32(4) which would, in my view, outline the proposed precinct amendments by the Applicant and how those amendments are the most effective and efficient in terms of meeting the objective of PC 86 against the s42A recommended version. For example, I do not consider, in Ms Rivai's paragraph 7.3, that stating that precinct amendments have been made to ensure that any provisions that apply to development in the precinct aligns to the Applicant's development plans for the site is a relevant test under s32AA. This appears to be tailoring precinct provisions to enable a specific development, rather than providing a policy and rule framework that manages the effects of development. In my view it is also important that any precinct provisions are "future-proof" and that there is clarity of implementation. This is a re-zoning proposal, not a subdivision /development resource consent application for a specific project. It is not certain that this Applicant will develop this land. Nor is it certain how or when the land will be developed - it could be subdivided in a "final" residential density layout or it could be subdivided into super-lots that are subsequently developed more intensively by other developers.
- 34. There is also limited assessment of AUP objectives and policies when considering the proposed amendments.

Submitter Evidence

35. Statements for Watercare – Statements were received from Ms Paula Hunter (Planning) and Mr Martine Deutschle (Corporate) on behalf of Watercare Services Limited. These statements outline a number of concerns relating to PC 86. In summary, Ms Hunter and Mr Deutshcle have outlined that:

- (a) The PC86 site is not serviced, and cannot be serviced for water supply and wastewater until the completion of the new interim Slaughterhouse Pump Station;
- (b) The applicant has proposed to construct a rising main along Brigham Creek Road from a new pump station located in the south-east corner of the PC 86 site to the Slaughterhouse Pump Station. Watercare does not support a pumped rising main that is located along Brigham Creek Road, and instead requires a gravity main to connect to the Slaughterhouse Pump Station; and
- (c) Sizing of the gravity main and pump station on the PC 86 site needs to accommodate the wider catchment. Ms Hunter states that these capacity requirements have not been addressed in the PC 86 proposal.
- 36. Significantly, Ms Hunter has identified that the S42A recommendations for the inclusion of the Watercare infrastructure as a 'trigger' has not been effectively incorporated into the proposed precinct provisions.
- 37. Para 4.2(a) (e) of Ms Hunter's evidence summarises her suggested amendments to the Whenuapai 3 Precinct provisions. Paras 4.3 4.7 contain Ms Hunter's assessment against the RPS AUP (with the relevant provisions attached as Attachment 2). Ms Hunter summarises that "...Watercare's proposed amendments give effect to the objective and policies relating to urban development and the provision of infrastructure."
- 38. Attachment 1 to Ms Hunter's evidence has proposed several amendments to the Applicant's version of Whenuapai 3 Precinct provisions, to address Watercare's concerns regarding the lack of bulk watersupply and wastewater infrastructure.
- 39. I agree with, and adopt, Ms Hunter's evidence. In my view, Ms Hunter's suggested amendments seek to ensure subdivision and development does not proceed without appropriate bulk water and wastewater infrastructure being available. Further, I consider Watercare's amendments give effect to the AUP RPS, specifically objectives B2.2.1(1)(c), B2.2.1(5), B2.3.1.(1)(d) and policies B2.2.2.(2)(d), B2.2.2(7)(c) and B2.4.2(6). In my view, compared to the s42A recommendation and the Applicant's version of Whenuapai 3 Precinct, Watercare's amendments are more effective and efficient and will lead to integrated management of these aspects of development on the PC 86 site and with the wider network requirements
- 40. Ms Rivai in her Rebuttal evidence generally accepts Ms Hunter's amendments. Ms Rivai has suggested further amendments that would allow works to commence on the site,

while ensuring that titles (s224c RMA) cannot be issued and dwellings cannot be occupied until such time as bulk infrastructure has been completed and commissioned. I support the references to not issuing s224c certificates (and thereby preventing the issue of titles) and limiting the occupation of dwellings. I note that the latter is too late in the development/construction process and where it has occurred elsewhere in Auckland it has caused a lot of consternation to all parties, including home owners.

- 41. I have incorporated Watercare's amendments into my recommended version of the Whenuapai 3 Precinct provisions attached to this Addendum (Appendix 1).
- 42. **Statements for Auckland Transport** Statements were received from Ms Katherine Dorofaeff (Planning) and Ms Claire Drewery (Noise Specialist) on behalf of Auckland Transport ("AT"). There are no new matters raised in these statements that were not previously addressed in the s42A Report. In summary, the statements for AT outline that:
 - (a) The Applicant has met with AT to discuss the AT's submission points; and
 - (b) Amendments are requested to PC 86 relating to the following matters:
 - (i) Acoustic Mitigation
 - (ii) Connections Through to Adjacent Sites
 - (iii) Form of Intersection between Brigham Creek Road and New Local Road
 - (iv) Standard IX6.6 Transport Infrastructure Requirements
 - (v) 'Other amendments' to the Whenuapai 3 Precinct activity table and assessment criteria

Acoustic Mitigation

- 43. AT submission 17.12 sought to include specific precinct provisions to require that future residential developments, and alterations to existing buildings, mitigate potential noise effects on activities sensitive to noise from the future roading upgrades of Brigham Creek Road and Māmari Road.
- 44. Annexure A of Ms Dorofaeff's EiC provides a revised version of Whenuapai 3 Precinct which includes an acoustic mitigation standard and assessment matters where the standards are not met. Ms Drewery on behalf of AT has provided an acoustics assessment supporting the recommended provisions.

- 45. Para 8.9 of Ms Dorofaeff's EiC states "...acoustic mitigation provisions will give effect to AUP-RPS Policy B3.3.2(6) and following objectives in Chapter E25 Noise and Vibration.".

 These AUP provisions are as follows:
 - Policy B3.3.2(6) Require activities sensitive to adverse effects from the operation of transport infrastructure to be located or designed to avoid, remedy or mitigate those potential adverse effects.
 - Objective E25.2(1) People are protected from unreasonable levels of noise and vibration
 - Objective E25.2(2) The amenity values of residential zones are protected from unreasonable noise and vibration, particularly at night.
- 46. Paragraphs 270 to 276 of the s42A Report addresses noise effects from Brigham Creek Road and Māmari Road. This is where I outlined my view that the roads generating the noise are part of the recently heard Supporting Growth Alliance Notices of Requirement and that this matter is more appropriately addressed through that process. The relevant Notices of Requirement are North West Local Network: Māmari Road (Auckland Transport) (W2) and North West Local Network: Brigham Creek Road (Auckland Transport) (W3).
- 47. In considering the updated information from AT, I have changed my position and agree with Ms Drewery that there is a wider responsibility to address road traffic noise effects in the AUP¹.
- 48. I note that noise provisions typically include noise contour lines so that it is clear which areas are 'within' the identified noise areas. Noise contours generated by the Supporting Growth Alliance were attached as Appendix 8 to the s42A report. However, in this circumstance, the Applicant seems to agree to the proposed noise provisions being applied to land within 50 metres of the road boundary. In my view, this means:
 - (a) The responsibility and cost for the implementation of the additional building requirements has been accepted by the Applicant; and
 - (b) A resource consent will be required if the noise provisions (Standards) are not complied with.
- 49. Ms Rivai mentions that AT has recommended the inclusion of noise effects mitigation in paragraph 6.7 of her EiC. Ms Rivai states that "The Applicant is not opposed to the inclusion of these provisions in the Precinct ..."

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¹ Para 6.8 of Ms Drewery EiC

50. Given the new information from AT, I agree and adopt Ms Dorofaeff's and Ms Drewery's evidence in regards to managing noise effects. I have incorporated these amendments into a revised version of the provisions at Appendix 1.

Connections Through to Adjacent Sites

- 51. Section 9 of Ms Dorofaeff's EiC outlines that she considers that indicative connections through to adjacent sites are required. Ms Dorofaeff considers that this would be more consistent with Policy 6 of the Whenuapai 3 Precinct. Which states:
 - Policy 6 Ensure that subdivision and development provides for future road connections to adjoining sites as <u>shown on Precinct Plan 1</u>.
- 52. PC 86 as notified did suggest a path through 45 Brigham Creek Road, which was addressed in paragraphs 277 284 of the s42A Report. Submitter 14, Woolworths NZ opposes this pedestrian thoroughfare. In the s42A Report I stated:
 - 280. The submitter has stated that it is not necessary, and for full pedestrian facilities to be delivered on Brigham Creek Road.
 - 281. Currently, there is no footpath on the southern side of Brigham Creek Road. There is a footpath and cycleway on the northern side of the road. There is also no agreement between the landowners for a through path to be placed in this location and would in my view require a private agreement if it this was to proceed in PPC 86. I do have concerns if this was included that the delivery of the through path would depend on a private agreement
 - 282. Walking and cycling infrastructure is more appropriate to be provided within the road corridor or within an open space. As stated above, and in the assessment under Section 8.2 above an active mode transport route is required to facilitate PPC 86 being developed. This is proposed in the future upgrade of Brigham Creek Road by SGA in its NoR.
- 53. Ms Esterman (s.42A reporting) in her addendum to PC 86 has noted in para 1.6 of her statement:

- 1.6 From an urban design perspective these road connections do not need to be shown therefore I suggest the wording of this policy (I1.3(6)) be amended to remove reference to Precinct Plan 1. I note this wording is not included in the version of provisions within the s42A report.
- 54. However, Mr Black in his report (attached in Appendix 2) supports Ms Dorofaeff's position. I concur with Mr Black and Ms Dorofaeff and consider that Policy 6 and the indicative connections on Whenuapai 3 Precinct Plan 1 are the most appropriate method to give effect to transport integration with the surrounding area.

Transport Infrastructure Upgrades

- 55. Ms Dorofaeff's sections 10 and 11 of her EiC addresses:
 - (a) Section 10: Form of intersection between Brigham Creek Road and New Local Road
 - (b) Section 11: Standard IX6.6 Transport Infrastructure Requirements.
- Ms Dorofaeff comments that she considers that PC 86 responds favourably to some aspects of the NPS-UD and AUP-RPS. Ms Dorofaeff provides an assessment against objectives and policies for each document. She summarizes that, in her view, the NPS-UD and AUP-RPS are covered by four themes:
 - (a) 'Integrating development with infrastructure provision including effective, efficient and safe transport. Integration includes ensuring transport infrastructure is planned, funded and staged to integrate with urban growth.'
 - (b) 'Reducing dependence on private vehicle trips by encouraging land use development and patterns that support other modes and reduce the need to travel, and by providing for and enabling walking, cycling and public transport.
 - (c) 'Providing for the future development and upgrading of Auckland's transport infrastructure.'
 - (d) 'Enabling infrastructure, including by protecting it from reverse sensitivity effects, while managing adverse effects on the health and safety of communities and amenity values. In the context of this evidence, the reverse sensitivity and health and safety effects relate to road traffic noise from existing and future arterial roads.'
- 57. Ms Dorofaeff suggests that with further amendments to the proposed provisions, PC 86 could give better effect to policy matters under themes (a), (c) and (d) above. However

Ms Dorofaeff considers that PC 86 gives limited effect to theme (b): reducing dependency on the private car and for enabling walking, cycling and public transport.

- 58. Ms Dorofaeff considers PC 86 will not be consistent with the following objectives:
 - (a) NPS UD: Objective 3(b) 'Regional policy statements and district plans enable more people to live in, and more businesses and community services to be located in, areas of an urban environment in which one or more of the following apply: (b) the area is well-serviced by existing or planned public transport.'
 - (b) NPS- UD: Policy 1(c) in relation to 'well-functioning urban environments'....
 'have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport'
 - (c) AUP-RPS: B2.2.1 (1)(d) 'A well-functioning urban environment with a quality compact urban form that enables all of the following: (d) good accessibility for all people, including by improved and more effective efficient public or active transport'
 - (d) AUP-RPS: B2.3.2 (2)(b) 'Encourage subdivision, use and development to be designed to promote the health, safety and well-being of people and communities by all of the following: (b) enabling walking, cycling and public transport'
 - (e) AUP-RPS: B3.3.1 (1)(e) 'Effective, efficient and safe transport that:.... (e) facilitates transport choices, recognises different trip characteristics and enables accessibility and mobility for all sectors of the community.'
 - (f) AUP-RPS: B3.3.2 (5)(b) 'Improve the integration of land use and transport by:....(b) encouraging land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods'
- 59. The Applicant's and AT's versions of the provisions only have the road frontages of the PC86 site be upgraded as subdivision/development occurs. Upgrading the frontages along Brigham Creek and Māmari Roads and forming the intersection of the new precinct road with Brigham Creek Road (including a pedestrian crossing) are required to be undertaken by the developer(s) of PC86. However this addresses only "local infrastructure effects" as these Whenuapai 3 Precinct provisions do not include the wider infrastructure identified in the WSP.

60. **Statement for Waka Kotahi** - Mr Evan Keating has tabled a letter from Waka Kotahi. This letter outlines Waka Kotahi has opted not to attend the hearing for PC 86. Mr Keating states:

The applicant has worked with Waka Kotahi and Auckland Transport to clarify the information provided and make amendments to the proposal. I have reviewed the reporting officer's section 42A report and the relevant evidence filed by the applicant. Waka Kotahi retains reservations regarding the development of this land out of sequence with Auckland Council's Future Urban Land Supply Strategy and the proposed Future Development Strategy, particularly as the site is remote from the rapid transit network.

In noting the above position, the proposed provisions in the applicant's evidence would manage localised transport effects, particularly through the use of staging to require upgrades to the local roads, including walking and cycling provision. If the commissioners are minded to approve the plan change, Waka Kotahi supports the proposed provisions in the evidence of Ms Rivai. As the roads surrounding the site are local roads managed by Auckland Transport, Waka Kotahi defer to their views for further detailed input on the plan change, including provision drafting.

61. I concur with the reservations about the remoteness of the PC86 site from the rapid transit network and that the proposed provisions relate only to localised transport effects.

Summary – Section 42A Addendum Position on Transport Upgrades

- 62. The inclusion of wider transport upgrades as "triggers", before subdivision or development is enabled, is now common practice in other areas of Auckland under the AUP. These triggers relate to achieving integration between land use and transport and require works to be available at the same time as development. These triggers do not specify who is to provide these upgrades they confirm what upgrades/works are required for specified stages of development. As such, triggers are different to developer contributions. These types of provisions (triggers) are now included in operative parts of the AUP, for example PCs 59 (Albany), 69 (Spedding) and several private plan changes in Drury (eg PCs 49, 50, 51, 55, 58).
- 63. As stated above, I consider the use of triggers to be consistent with the strong statutory framework (NPSUD, RPS and WSP) which requires well-functioning urban areas and

integration between urban development and infrastructure, particularly transport infrastructure.

- Mr Black (S42A addendum report attached as Appendix 2) supports Ms Dorofaeff's amendments to the transport upgrade triggers. Mr Black also recommends that additional pedestrian and cycling facilities are required along the southern side of Brigham Creek Road and a pedestrian facility along Māmari Road to link the PC 86 site with the existing intersection of Brigham Creek Road/Māmari Road intersection.
- 65. I also note that in Ms Esterman's s42A addendum report, she "...prefer(s) the approach within the s42A report that references Whenuapai Precinct Plan 1, requiring a complete corridor with active modes facilities. From an urban design perspective these requirements will ensure that a safe pedestrian connection is provided between the PPC site and Brigham Creek Road/Māmari Road intersection."
- 66. Taking into account the amendments to the PC86 provisions suggested by Ms Dorofaeff, Mr Black and Ms Esterman, I have prepared a revised version of the Whenuapai 3 precinct and this is attached in Appendix 1. In summary the transport upgrade triggers provide for:
 - (a) upgrading the PC 86 road frontages; and
 - (b) forming the new intersection between the new road from the precinct PC86 site and Brigham Creek Road and including a active mode crossing across Brigham Creek Road; and
 - (c) forming a local road through the precinct between Brigham Creek Road and Māmari Road; and
 - (d) extending separate pedestrian and cycling facilities along the southern side of Brigham Creek Road from the precinct to the existing intersection of Brigham Creek Road/Māmari Road and Totara Road; and
 - (e) extending a pedestrian facility along Marmari Road to the existing intersection.

Stormwater Management

- 67. Ms Amber Tsang and Mr Danny Curtis have provided an s42A addendum (attached in Appendix 2), relating to the stormwater provisions in response to the amendments by the Applicant.
- 68. This addendum by Ms Tsang does not support the Applicant's amendments. Ms Tsang has stated the reasons why she disagrees with the amendments and has provided an

analysis against the AUP RPS. Ms Tang has provided some amendments to the proposed provisions (S42A addendum report attached as Appendix 2).

- 69. I agree and adopt Ms Tsang's position. The recommended amendments supported by Ms Tsang have been incorporated into the revised version in Appendix 1 to this addendum.
- 70. However, in addition to the above comments, Mr Tsang has concluded her addendum stating:

The majority of the recommended stormwater precinct provisions have been accepted by the Applicant. However, no further assessment of flood impacts on 5 Māmari Road has been provided with the evidence. With the limited assessment provided, it is not possible to quantify effects on 5 Māmari Road.

Our recommendation therefore remains.

More detailed assessment is required to ensure that the frequency, duration and extent of flooding on 5 Māmari Road as a result of future developments enabled by PPC 86 are identified and that any potential flooding and stormwater runoff effects will be avoided or mitigated. Until such assessment is provided, we do not support PPC 86 from a stormwater and flooding perspective.

71. I agree with Ms Tsang and consider that the Applicant should address this outstanding matter at the hearing.

Statement of Mr Dave Allen

- 72. Mr Dave Allen has provided a presentation that identifies the following matters:
 - (a) Green Space
 - (b) Inappropriate consideration of noise levels.
- 73. In regards to the slides on green space, I consider this matter has been addressed in the s42A report, specifically by the assessment completed by Mr Daniel Kinnock. In summary, there is currently sufficient green space available in Whenuapai.
- 74. In terms of the matter raised by Mr Allen regarding the amount of green space provided under the provisions of the MHU, I do not consider any reasons have been provided to outline why additional rules are required to increase the percentage of vegetation coverage.

- 75. Mr Allen's second point, regarding noise levels from the Whenuapai Air Base, seems to be indicating that development in this area is not appropriate and that effects on the outside of the house regarding noise levels need be addressed.
- 76. This matter has been addressed in the s42A report (paragraphs 270 276 of the s.42A report), and I consider no further mitigation measures are required to be included in PC 86. Existing AUP provisions manage these noise effects.
- 77. I note Mr Allen has provided a presentation and he may intend to present that at the hearing. I am available for further comment about these matters should that be required following the presentation by Mr Allen at the forthcoming hearing.

Statement of Mr Jeff Spearman

78. Mr Jeff Spearman has provided a photograph presentation. This seems to be photographs of wet weather effects. I am unclear as to what relief Mr Spearman is seeking and reserve my comments until Mr Spearman has presented at the forthcoming hearing.

Conclusions

- 79. Submissions have been received in support and in opposition to PC 86. 23 submissions and 6 further submissions were received.
- 80. Based on the technical reviews and analysis of submissions and evidence, PC 86 (as notified and as updated by the applicant on 28 September 2023) does not appropriately give effect to the NPSUD, the AUP RPS, and other statutory documents.
- 81. Having considered all of the submissions, evidence and reports, and reviewed all relevant statutory and non-statutory documents, I recommend that Plan Change 86 be declined, in particular because of the unresolved issues relating to flooding and stormwater as addressed in the s42A report and this addendum.
- 82. In terms of other outstanding matters, particularly relating to water and wastewater infrastructure and transport infrastructure, I have recommended further amendments to the proposed PC 86 precinct provisions. I consider that all of these amendments are necessary to better give effect to the NPSUD, the AUP RPS and other statutory documents. Without these amendments, I would recommend that Plan Change 86 be declined.

- 83. To assist the Panel I have prepared an updated version of the proposed PC 86 provisions, taking into account the evidence filed to date and the s42A Addendum reporting refer to Appendix 1 to this Report. For clarity this version does not resolve the outstanding flooding and stormwater matters.
- 84. This version of Appendix 1 should be considered preliminary owing to time constraints in compiling and editing all the amendments. If a finalised version is prepared it will be circulated prior to, or at the hearing.

Recommendation

- 85. That the Hearing Commissioners accept (in full or in part) or reject submissions (and associated further submissions) as outlined in the s42A Report and in this Addendum.
- 86. That, as a result of the assessment of the submissions and technical reporting, I recommend that **PC 86 should be declined**. I note that this recommendation could be subject to change dependent on any additional information and evidence that may be provided at the hearing. I am available to provide further reporting.

Signature:	11/1	
	Todd Oliver Elder	
	24 October 2023	
	Date	

APPENDIX 1

SECTION 42A ADDENDUM RECOMMENDATION

Appendix 1

Recommended amendments to PC86 (text and diagrams) for Hearings

Editorial Notes

- 1. Changes proposed in the notified PC86 by the Applicant are shown in strikethrough and <u>underline</u>
- 2. The use of ... indicates that there is more text, but it is not being changed. These are used when the whole provisions are too long to be included. Some existing text is shown to place the changes in context.
- 3. Pink text changes record amendments proposed in primary evidence based upon submissions received shown as strikethrough and underline
- 4. Proposed amendments to the diagram or figure in AUP have not been made. In some cases, the existing diagram or figure is shown to diagonally strikethrough to place the changes in context.

11. Whenuapai 3 Precinct

I1.1. Precinct Description

The Whenuapai 3 Precinct applies to 5.2 ha of land in Whenuapai. Development in the Whenuapai 3 Precinct will enable an increase in housing capacity through the efficient use of land and infrastructure.

The purpose of the precinct is for the area to be developed as a liveable, compact and accessible community with high quality residential development, while taking into account the natural environment and the proximity <u>and operation</u> of <u>the Royal New Zealand Air Force (RNZAF) Base Auckland, including activities conducted from it. Whenuapai Airbase.</u>

Development of this precinct is directed by Whenuapai 3 Precinct Plan 1.

Whenuapai 3 Precinct Plan 1 shows the transportation infrastructure requirements required to enable the development. Development is limited in scale unless No development can occur until land Subdivision and development is restricted until the land within Whenuapai 3 Precinct 3-is able to be:

- Connected to the new wastewater pump station on Brigham Creek Road (9377
 North Harbour No. 2 Watermain/Northern Interceptor Shared Corridor); <u>Bulk</u>
 water supply and wastewater infrastructure; and
- <u>Supported by T-Provided with</u> transportation <u>infrastructure projects-listed in Table IX.6.36.1 infrastructure upgrade thresholds are built to provide for a well-functioning urban environment.
 </u>

Reverse Sensitivity Effects on <u>Royal New Zealand Air Force (RNZAF) Base Auckland</u> Whenuapai Airbase

The <u>(RNZAF)</u> Base Auckland Whenuapai Airbase is located east of the Whenuapai 3 Precinct boundary. While the <u>physical infrastructure of the RNZAF Base Auckland</u> airbase is outside of the precinct boundary it contributes to the precinct's existing environment and character. The airbase is a defence facility of <u>regional</u>, national and strategic importance. Operations at the airbase include maritime patrol, search and rescue, and transport of personnel and equipment within New Zealand and on overseas deployments.

Most of the flying activity conducted from the RNZAF Base Auckland is for training purposes and includes night flying and repetitive activity. The Precinct manages development lighting to ensure safety risks and reverse sensitivity effects on the operation and activities of the airbase are avoided, remedied or mitigated. All subdivision, use and development within the Precinct will need to occur in a way that does not adversely affect effect on-the ongoing operation of the RNZAF Base Auckland and in a way that is consistent with the Regional Policy Statement (RPS) in regard to recognising the functional and operational needs of infrastructure, and protecting it from reverse sensitivity effects caused by incompatible subdivision, use and development airbase.

The zoning of land within this precinct is Residential – Mixed Housing Urban (MHU) zone with a Stormwater Management Area Flow 1 (SMAF1) overlay.

All relevant overlays, Auckland-wide and zone provisions apply in this precinct unless otherwise specified below.

I1.2. Objectives [rcp/rp/dp]

(1) Whenuapai 3 Precinct is developed in a comprehensive and integrated way to facilitate the development of a residential area.

Three Waters Infrastructure

- (2) Establish all the infrastructure necessary (including water supply, wastewater, and stormwater infrastructure) to service development within the Precinct in a coordinated and timely way.
- (3) <u>Subdivision and</u> development shall be coordinated with the upgrading of the 9377 North Harbour No. 2 Watermain/Northern Interceptor Shared Corridor provision of bulk water <u>supply and wastewater infrastructure</u> in a manner that avoids adverse effects on the environment.
- (4) Stormwater quality and quantity is managed to avoid, as far as practicable, or otherwise minimise or mitigate adverse effects on the receiving environment, and the attraction of birds that could become a hazard to aircraft operations at the RNZAF Base Auckland, maintain the health and well-being of the receiving environment and is enhanced over time in degraded areas.
- (5) <u>Stormwater devices avoid, as far as practicable, or otherwise minimise or mitigate</u> adverse effects on the receiving environment, and the attraction of birds that could become a hazard to aircraft operations at the RNZAF Base Auckland.

Transport Infrastructure

- (6) Subdivision and development provides for the safe and efficient operation of the current and future transport network for all modes.
- (7) Transport infrastructure that is required to service <u>subdivision and development</u> within the Precinct:
 - a. Provides for <u>safe</u> walking and cycling connections <u>within the Precinct and to</u> the Whenuapai Neighbour Centre;
 - b. Supports the planned upgrades to Brigham Creek Road and Māmari Road;
 - c. Mitigates transport effects on the <u>surrounding wider</u>-road network; and
 - d. <u>Provides connectivity to future subdivision and development of adjacent sites.</u>

 Is co-ordinated with subdivision and development.

(8) <u>Subdivision and development does not occur in advance of the availability of operational transport infrastructure.</u> The construction of Brigham Creek Road and Mamari Road is enabled

Activities sensitive to noise adjacent to existing and future arterial road corridors

- (9) <u>Activities sensitive to noise adjacent to existing or proposed arterial roads are designed to protect people's health and residential amenity while they are indoors.</u>
- (10) Existing and future strategic transport links that would enhance the precinct's integration with the wider Whenuapai area and support growth beyond the precinct are protected.

Effects on Royal New Zealand Air Force (RNZAF) Base Auckland Whenuapai Airbase

(11) The effects of subdivision, use and development on the operation and activities of RNZAF Base Auckland Whenuapai Airbase are avoided, as far as practicable or otherwise remedied or mitigated.

I1.3. Policies [rcp/rp/dp]

- (1) Whenuapai 3 Precinct is developed in general accordance with Precinct Plan 1
- (2) Avoid subdivision and development that does not align with the timing of the provision of bulk water supply and wastewater infrastructure.

Subdivision and development shall be <u>limited</u> sequenced to ensure new titles are not issued prior to water supply and wastewater infrastructure being constructed and commissioned.

Limit Avoid subdivision, use and development that does not align with the timing of the upgrading and provision of wastewater services, particularly the Brigham Creek Road Pump Station at 23-27 Brigham Creek Road.

Stormwater Management

- (3) Require subdivision and development to be consistent with any approved stormwater management plan including by, in particular:
 - (a) Requiring management of runoff from all impervious surfaces to <u>minimise</u> <u>effects on enhance the</u> water quality and protect the health of the receiving environment;
 - (b) <u>Promoting a Promotion of the treatment train approach to achieve water</u> quality and hydrology mitigation;
 - (c) Requiring appropriate design and location of all stormwater outfalls; and
 - (d) Requiring that the <u>Ttiming</u> of subdivision and development shall align with the provision of stormwater infrastructure along Mamari Road to mitigate downstream flood effects

(e) Requiring stormwater management outcomes and devices of the site shall be planned, designed and implemented to avoid attracting birds in order to mitigate the potential for bird strike to impact safety and flight operations at the RNZAF Base Auckland.

Transport infrastructure

- (4) Require subdivision and development to provide the of a transport infrastructure network so that it implements the elements and connections identified on Whenuapai 3 Precinct Plan 1 and is in accordance with Table IX.6.6.1 and Appendix 1.
- (5) Ensure that subdivision and development provides for the future road corridors and connections to adjoining sites as shown in Precinct Plan 1.
- (6) Avoid subdivision and development occurring in advance of the availability of operational transport infrastructure identified on Whenuapai 3 Precinct Plan 1 and is in accordance with Table IX.6.6.1 and Appendix 1.

Effects on Royal New Zealand Air Force (RNZAF) Base Auckland Whenuapai Airbase

- (7) Require subdivision, use and development within the Whenuapai 3 Precinct to avoid, remedy or mitigate any adverse effects, including reverse sensitivity effects and safety risks relating to <u>bird strike</u>, lighting, glare and reflection, on the operation and activities of RNZAF Base Auckland Whenuapai Airbase.
- (8) Require the design of roads and their associated lighting to be clearly differentiated from runway lights at <u>RNZAF Base Auckland</u> Whenuapai Airbase to provide for the ongoing safe operation of the airbase.
 - Activities sensitive to noise adjacent to existing and future arterial road corridors
- (9) Ensure that activities sensitive to noise adjacent to existing and future arterial roads are designed with acoustic attenuation measures to protect people's health and residential amenity while they are indoors.

All relevant overlay, Auckland-wide and zone policies apply in this precinct in addition to those specified above.

I1.4. Activity table [rcp/rp/dp]

All relevant overlay, Auckland-wide and zone activity tables apply unless the activity is listed in Activity Table IX1.4.1 below.

A blank in the activity status column means that the activity status in the relevant Aucklandwide or zone provision applies in addition to any standards listed.

In addition to the provisions of IX.4 Whenuapai 3 Precinct, reference should also be had to the planning maps (GIS Viewer) which shows the extent of all designations, overlays and controls applying to land within the Whenuapai 3 Precinct. These may apply additional restrictions.

Development in the precinct may be subject to height restrictions under Designation 4311. Reference should also be made to RNZAF Base Auckland Whenuapai Airbase Designation 4310 including the Aircraft Noise provisions of Condition 1 and associated RNZAF Base Auckland Whenuapai Airbase Noise maps.

Table IX.4.1 specifies the activity status of land use and subdivision activities in the Whenuapai 3 Precinct pursuant to sections 9(3) and section 11 of the Resource Management Act 1991.

Table II1.4.1 Activity table

Activity	Activity status			
Use and Development				
(A1)	Activities listed as permitted or restricted discretionary activities in Table H5.4.1 Activity Table in the Residential – Mixed Housing Urban Zone			
(A2)	Use and development that does not comply with Standard IX.6. <u>1 and IX.6.763</u>	NC		
(AX)	Development that does not comply with Standard IX.6.7 Road design, IX.6.8 Vehicle Access Restriction, and / or IX.6.9 Activities sensitive to noise within 50m of an existing or future arterial road	RD		
Subdivision				
(A4)	Subdivision listed in Chapter E38 Subdivision			
(A5)	Subdivision that does not comply with Standard IX.6.1 and IX.6.763	NC		
(AX)	Subdivision that does not comply with Standard IX.6.7 Road design, IX.6.8 Vehicle Access Restriction, and / or IX.6.9 Activities sensitive to noise within 50m of an existing or future arterial road	<u>RD</u>		

11.5. Notification

- (1) Any application for resource consent for an activity listed in Activity Table IX.4.1 above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (2) When deciding who is an affected person in relation to any activity for the purpose of section 95E of the Resource Management Act 1991, the Council will give specific consideration to:
 - a. those persons listed in Rule C1.13(4); and
 - <u>b.</u> The New Zealand Defence Force in relation to any proposal that does not comply with:
 - i. IX.6.2(3) Dry detention basins or stormwater ponds;
 - ii. <u>IX.6.2(4) Birdstrike</u>;
 - iii. IX.6.3 Lighting;

Appendix 1 S42a Addendum Recommendation

- iv. IX.6.4 Temporary activities; or
- v. IX.6.5 Noise.

11.6. Standards

All relevant overlay, Auckland-wide and zone standards apply to the activities listed in Activity Table IX.4.1 unless otherwise specified below. All activities listed in Activity Table IX4.4.1 must also comply with Standards IX4.6 and within IX.9 Special Information Requirements.

Where there is any conflict or difference between standards in this Precinct and the Auckland-wide and zone standards, the standards in this Precinct will apply.

<u>Unless captured in Activity Table IX.4.1 above, any infringement of standards will be a restricted discretionary activity pursuant to Clause C1.9(2).</u>

I1.6.1. Wastewater Infrastructure

Purpose:

- To ensure that there is sufficient bulk water supply and wastewater infrastructure with sufficient capacity is available to support development within the Precinct.
- (1) The Subdivision and the construction of any new dwellings within the Precinct can only proceed following the completion and commissioning of the Pump Station at 23-27 Brigham Creek Road bulk water supply and wastewater infrastructure required for wastewater servicing of all development within the Precinct.

Note: Standard IX.6.1 will be considered to be complied with if the identified upgrades are constructed and operational prior to the lodgement of a resource consent application OR form part of the same resource consent, or a separate resource consent, which is given effect to prior to release of section 224(c) certificate of the Resource Management Act 1991 for any subdivision OR prior to occupation of any new-dwelling(s) for a land use only.

11.6.2. Subdivision

- (1) Prior to consent being granted, all transport infrastructure listed in table I.6.3.1 must be constructed.
- (2) Prior to the Council issuing a section 224(c) certificate for subdivision other than infrastructure, the transport infrastructure listed in Table I6.3.1 must have been constructed.

I1.6.3. Stormwater Infrastructure-Management

Purpose:

 To ensure that there is sufficient stormwater infrastructure capacity in place at the time of development and that flooding risks within the precinct and further downstream are not exacerbated by development within the Precinct.

- (1) Stormwater infrastructure Capacity:
 - (a) Discharge of stormwater runoff from subdivision and development cannot occur until the necessary stormwater infrastructure in Mamari Road is in place or until appropriate mitigation exists to mitigate downstream flood effects.

(2) Water quality

- (a) Stormwater runoff from all impervious areas other than roofs <u>and pervious</u> pavers must be either:
 - treated at-source by a stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)' or 'Stormwater treatment Devices Design Guideline Manual (TP10)'; or
 - ii. treated by a communal stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)' that is designed and authorised to accommodate and treat stormwater from the site.
- (b) Stormwater runoff from roofs must be:
 - Roofs must be constructed of inert building materials.—and directed to an approved stormwater management device. Roofs must be constructed of inert building material with runoff directed to a tank sized for the minimum of 5mm retention volume for non-potable reuse within the property.
- (3) Dry detention based on stormwater ponds
 - (a) In the event that dry detention basin or stormwater ponds are proposed, these shall be designed by a suitable qualified and experienced person to:
 - i. <u>Minimise bird settling or roosting (including planting with species</u> unlikely to be attractive to large and/or flocking bird species); and
 - ii. Full drain down within 48 hours of a 2 per cent Annual Exceedance
 Probability (AEP) storm event; and
 - iii. Have side slopes at least as steep as 1 vertical to 4 horizontal (1:4) except for:
 - 1. Any side slope treated rock armouring; or

2. Any area required for vehicle access, provided that such vehicle access has a gradient of at least 1 vertical to 8 horizontal (1:8).

(4) Birdstrike

- (a) Roofs must have a minimum gradient of 15 degrees to minimise the potential for birds to nest or roost; or
- (b) <u>If roof gradients are less than 15 degrees, netting and/or spikes are</u> required to discourage bird roosting on the roof of the structure.

11.6.4. Lighting

Purpose:

- To manage reverse sensitivity effects on the RNZAF Base Auckland
- <u>To avoid or minimise lighting issues for aircraft descending to land at the RNZAF Base Auckland.</u>
- (1) Any subdivision and development must avoid effects of lighting on the safe and efficient operation of RNZAF Base Auckland, to the extent that lighting:
 - (a) Avoids simulating approach and departure path runway lighting;
 - (b) Ensures that clear visibility of approach and departure path runway lighting is maintained; and
 - (c) Avoids glare or light spill that could affect aircraft operations.
- (2) The reflectivity (specular reflectance) of any new building shall not exceed 20% of white light or shall not otherwise cause glare that results in safety issues for the RNZAF Base Auckland.
- (3) No person may illuminate or display the following outdoor lighting between 11:00pm and 6:30am:
 - (a) searchlights; or
 - (b) <u>outside illumination of any structure or feature by floodlight that shines</u> <u>above the horizontal plane.</u>

I1.6.5. Temporary activities and construction

Purpose:

- to avoid safety and operation risk effects on the RNZAF Base Auckland.
- (1) Any application for subdivision and development that requires the use of a temporary structure or construction equipment being erected must inform the RNZAF Base Auckland of:
 - (a) The nature of the works;
 - (b) The structure or construction equipment being erected; and
 - (c) Duration of the works.

11.6.6. Noise

Purpose:

- To ensure that potential reverse sensitivity effects of noise from the adjacent RNZAF Base Auckland on residential amenity are appropriately addressed and provided for within the Precinct.
- (1) A no-complaints covenant shall be included on each title issued within the precinct. This covenant shall be registered with the deposit of the subdivision plan, in a form acceptable to RNZAF Base Auckland under which the registered proprietor will covenant to waive all rights of complaint, submission, appeal or objection it may have under the Resource Management Act 1991 and successive legislation or otherwise in respect of any noise associated with the RNZAF Base Auckland.

I1.6.7. <u>Transport</u> Infrastructure <u>requirements upgrade thresholds</u> Purpose:

- To mitigate the adverse effects on of traffic generation on the surrounding road network.
- To achieve the integration of landuse and transport. ensure that the
 Whenuapai 3 Precinct responds to the anticipated growth within the precinct
 and in the wider Whenuapai area, while also ensuring the safe and efficient
 operation of the transport network.
- (1) Any Subdivision and development, that which involves residential activity as defined by Table J1.3.5 Residential of Chapter J of the Auckland Unitary

 Plan, must comply with the standards in Table IX.6.6.1. Any application that:
 - a) involves residential activity as defined by Table J1.3.5 Residential of Chapter J of the Auckland Unitary Plan, and
 - b) will result in a cumulative number of dwellings within the precinct (either constructed or consented) that exceed the thresholds specified in table IX.6.3.1 transport assessment and upgrade thresholds; shall meet the following requirements:

Table IX.6.63.1 <u>Transport</u> infrastructure upgrade thresholds

Threshold Trigger	Column 1 Threshold – Subdivision or development enabled by transport infrastructure in Column 2	Column 2 Transport infrastructure upgrade required to enable subdivision or development in Column 1 Requirement to exceed the threshold
(T1)4 dwelling	Subdivision or development that enables up to 120 dwellings that has	- Upgrade of the Brigham Creek Road frontage to an urban arterial road standard (as provided on Appendix 1) including footpath.

frontage to or is accessed by Brigham Creek Road.

- berms and separated cycle facilities the full length the precinct frontage and extending along southern side of Brigham Creek Road to the Totara Road/Mamari Road and Brigham Creek intersection; and
- A new or upgraded intersection between Brigham Creek Road and the new local road accessing the Whenuapai 3 Precinct (as shown on Precinct Plan 1) and
- Safe active mode (as shown on Precinct Plan 1) pedestrian crossing facilities across Brigham Creek Road.
- Separate right turn lanes are provided into:
- i. Joseph McDonald Drive, and
- ii. the Precinct.
- Separate left turn lane into the Precinct provided on Brigham Creek Road.
- -Completion of the upgrade of Brigham Creek Road corridor with separate footpath and cycle lane, as identified on Whenuapai 3 Precinct Plan 1
- Completion of Māmari Road extension and upgrade of Māmari Road corridor to an urban arterial corridor with bus priority lanes and separate footpath and cycle lane as identified on the Whenuapai 3 Precinct Plan 1
- -Completion of intersection improvements at the intersection of Brigham Creek Road and Mamari Road for safe pedestrian access to Whenuapai Neighbourhood Centre.
- Completion of the construction and commissioning of the Pump Station at 23-27 Brigham Creek Road for wastewater servicing all development within the precinct.

<u>(T2)</u>	Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Māmari Road enly.	- Upgrade of the Māmari Road Whenuapai 3 Precinct frontage to an urban local road standard including footpath and berms.; and - Provision of safe and accessible pedestrian connection along Māmari Road between the Whenuapai 3 Precinct and the Brigham Creek Road / Totara Road /Māmari Road intersection as identified on Precinct Plan 1.
<u>(T3)</u>	Subdivision or development that exceedsing the threshold under (T1) or (T2) above by enabling a cumulative total of more than 120 dwellings within the Precinct.	 Upgrades required in T1 and T2; and Provision of a local road connection between Māmari Road and Brigham Creek Road through the Precinct.

Note: Table IX.6.6.1 will be considered to be complied with if the identified upgrades are constructed and operational prior to the lodgement of a resource consent application OR form part of the same resource consent, or a separate resource consent, which is given effect to prior to release of section 224(c) certificate of the Resource Management Act 1991 for any subdivision OR prior to occupation of any new-dwelling(s) for a land use only.

I1.6.8. Vehicle Access Restriction

Purpose:

- To limit direct vehicle access to existing and future arterials in recognition of strategic function of those roads and to enhance safety for active modes.
- (1) <u>Sites that front onto Brigham Creek Road or Māmari Road must not have</u> <u>direct vehicle access to those roads. The sites must be provided with access from rear lanes (access lots) or side roads at the time of subdivision.</u>

I1.6.9. <u>Activities sensitive to noise within 50m of an existing or future arterial</u> road

Purpose:

- To ensure activities sensitive to noise adjacent to existing and proposed arterial roads are designed to protect people's health and residential activity while they are indoors.
- (1) Any new buildings or alterations to existing buildings containing an activity sensitive to noise within 50m of the boundary of Brigham Creek Road or

- Māmari Road (shown as arterial and future arterial roads on Precinct Plan 1) must be designed, constructed and maintained so that road traffic noise does not exceed 40 dB LAeq (24 hour) in all noise sensitive spaces
- (2) If windows must be closed to achieve the design noise levels in Standard IX.6.9(1), the building must be designed, constructed and maintained with a mechanical ventilation system that meets the requirements of E25.6.10(3)(b) and (d) to (f).
- (3) A design report must be submitted by a suitably qualified and experienced person to the council demonstrating that compliance with Standard IX.6.9(1) and (2) can be achieved prior to the construction or alteration of any building containing an activity sensitive to noise located within the areas specified in IX.6.9(1). In the design, road noise for the Auckland Transport designations W2 and W3 (Māmari Road Upgrade and Brigham Creek Road Upgrade) is based on future predicted noise levels.

For the purposes of this Standard, future predicted noise levels shall be either based on computer noise modelling undertaken by a suitably qualified and experienced person on behalf of the applicant or those levels modelled as part of the Auckland Transport NoR/designations W2 and W3 (Māmari Road Upgrade and Brigham Creek Road Upgrade).

Should noise modelling undertaken on behalf of the applicant be used for the purposes of the future predicted noise levels under this standard, modelling shall be based on an assumed posted speed limit of 50km/h, the use of an asphaltic concrete surfacing (or equivalent low-noise road surfacing) and a traffic design year of 2048.

I1.6.10. Building Setback and Connectivity

Purpose:

- To enable for the future required widening of Brigham Creek Road and Mamari Road.
- (1) A 10-metre-wide building setback must be provided along the entire frontage of the land adjoining Brigham Creek Road measured from the legal road boundary that existed at 22 September 2022. No buildings, structures or parts of a building shall be constructed within this setback.
- (2) A 11.86 metre wide building setback must be provided along the frontage of the land adjoining Mamari Road measured from the legal road boundary. No buildings, structure or part of a building shall be constructed within this 11.86 metre setback.
- (3) A minimum 2.5 metre front yard setback shall be measured from the building setbacks in (1) and (2) above.
- (4) Provision for a road connection between Mamari Road and Brigham Creek.

11.6.11. Lighting

Purpose:

- to avoid reverse sensitivity effects on the Whenuapai Airbase
- to avoid or minimise lighting issues for aircraft descending to land at the Whenuapai Airbase.
- (1) Any subdivision and development must avoid effects of lighting on the safe and efficient operation of Whenuapai Airbase, to the extent that lighting:
 - (a) avoids simulating approach and departure path runway lighting;
 - (b) ensures that clear visibility of approach and departure path runway lighting is maintained; and
 - (c) avoids glare or light spill that could affect aircraft operations.

I1.6.12. Temporary activities and construction

Purpose:

- to avoid reverse sensitivity effects on the Whenuapai Airbase.
- (1) Any application for subdivision and development that requires the use of a temporary structure being erected must inform the New Zealand Deference Force of:
 - (a) The nature of the works;
 - (b) The structure being erected; and
 - (c) Duration of the works being erected.

11.7. Assessment - controlled activities

There are no controlled activities in this precinct.

11.8. Assessment - restricted discretionary activities

I1.8.1. Matters of discretion

The Council will restrict its discretion to all of the following matters when assessing a restricted discretionary activity resource consent application, in addition to the matters specified for the relevant restricted discretionary activities in the overlays, Auckland-wide or zones provisions:

- (1) Matters of discretion for all restricted discretionary activities (including otherwise permitted activities that infringe a permitted standard)
 - (a) Whether the infrastructure required to service any development is provided
 - (b) Whether stormwater and flooding are managed appropriately
 - (c) Whether the proposal will provide for safe and efficient functioning of the current and future transport network <u>including considering</u>;

- i. <u>Location and design of the transport network and connections with</u> <u>neighbouring sites</u>
- ii. Provision for active modes
- iii. Design and sequencing of upgrades to the existing road network
- iv. <u>The integration of the proposal with the future planned upgrades to Brigham Creek Road and Māmari Road;</u>
- (d) Whether stormwater and flooding are managed appropriately; and
- (e) The location, orientation and spill from lighting associated with development, structures, infrastructure and construction activities; and
- (f) Effects on the operation of the RNZAF Base Auckland including reverse sensitivity effects and any measures to avoid, remedy or mitigate these effects.
- (2) The extent to which any adverse effects on navigable airspace, representing a hazard to the safety or regularity of aircraft operations, are avoided or mitigated.
- (3) Non-compliance with Standard IX.6.7 Road Design
 - (a) The design of the road and associated road reserve and whether it achieves policies IX.3(5) and (6).
 - (b) Design constraints.
- (4) For a new vehicle crossing to Brigham Creek Road or Māmari Road:
 - (a) adequacy for the site and the proposal:
 - (b) design and location of access;
 - (c) effects on pedestrian and streetscape amenity; and
 - (d) effects on the existing and future transport network.
- (5) Non-compliance with Standard IX.6.9 Activities sensitive to noise within 50m of an existing or future arterial road.
 - (a) Effects on human health and residential amenity while people are indoors.
 - (b) <u>Building location or design features or other alternative measures that will</u> mitigate potential adverse health and amenity effects relating to noise.

11.8.2. Assessment criteria

The Council will consider the assessment criteria below for restricted discretionary activities, in addition to the assessment criteria specified for the relevant restricted discretionary activities in the overlays, Auckland-wide or zones provisions:

- (1) For subdivision and development
 - (a) Whether the proposed subdivision and / or development includes the construction of transport infrastructure identified on table IX.6.3.1 IX.6.6.1

 Transport infrastructure upgrade thresholds;
 - (b) Whether the proposed transport infrastructure road corridors and transport connections will service the precinct in a safe and efficient manner; and
 - (c) Whether the proposed subdivision enables development that would require <u>transport road</u>-infrastructure upgrades to be provided <u>in accordance</u> with Table IX.6.6.1.

For the safe and efficient operation of the current and future transport network:

- (a) Whether the frontage along Brigham Creek Road is designed and constructed to an urban standard, achieving a well-functioning urban environment, including (as a minimum) footpath and cycle lanes, and connectivity to the wider footpath network;
- (b) Whether a road connection between Brigham Creek Road and Mamari Road is enabled through the design and layout of subdivision within the precinct.
- (2) For Stormwater management not complying with Standard IX.6.23 infrastructure upgrade thresholds:
 - (a) Stormwater and Flooding
 - i. Whether development and/or subdivision is in accordance with any approved Stormwater Management Plan and Policies E1.3(1) (14);
 - The design and efficiency of stormwater infrastructure and devices (including communal devices) with consideration given to the likely effectiveness, whole lifecycle costs, ease of access, operation and integration with the surrounding environment;
 - iii. Whether the proposal for development and/or subdivision provides sufficient floodplain storage, including attenuation storage, within the precinct to avoid increasing flood risk within the receiving environment; and
 - iv. Whether there is sufficient infrastructure capacity to provide for flood conveyance and protect land and infrastructure.

(b) Servicing

 Whether there is sufficient capacity in the existing or proposed stormwater network to service the proposed development that is enabled by the precinct and

- ii. Where adequate network capacity is not available, whether adequate mitigation is proposed being consistent with an integrated stormwater management approach.
- (c) Assessment criteria E9.8.2(1) apply.
- (3) For stormwater detention/retention ponds/wetlands not complying with the standards in IX.6.2(3), the extent to which the proposal minimises the attraction of birds the could become a hazard to aircraft operating at RNZAF Base Auckland
- (4) The effects on the operation of the RNZAF Base Auckland including potential reverse sensitivity effects and effects on aircraft safety, in relation to
 - (a) Lighting:
 - (b) Temporary structure and construction; and
 - (c) Noise

Lighting associated with development, structures, infrastructure and construction:

- (a) The effects of lighting on the safe and efficient operation of Whenuapai Airbase, to the extent that the lighting:
- i) avoids simulating approach and departure path runway lighting;
- ii) ensures that clear visibility of the approach and departure path runway lighting is maintained; and
- iii) avoids glare or light spill that could affect aircraft operations.
- (5) For the safe and efficient operation of the current and future transport network:
 - (a) Whether a sagfe and legible pedestrian connection is provided along Brigham Creek Road between the Precinct and Brigham Creek Road and Māmari Road intersection. If safe pedestrian connection cannot be fully provided along the southern side of Brigham Creek Road, then whether safe crossing facilities are provided to the pedestrian and cycle network on the northern side of Brigham Creek Road; the frontage along Brigham Creek Road is designed and constructed to an urban standard, achieving a well-functioning urban environment, including (as a minimum) footpath and cycle lanes, and connectivity to the wider footpath network;
 - (b) Whether a road connection between Brigham Creek Road and Māmari Road is enabled through the design and layout of subdivision within the precinct.
 - (c) Whether the location and design of the road network and connections with provided to neighbouring sites are provided to achieve an integrated network, appropriately provide for all modes;

- (d) Whether the precinct frontages along Brigham Creek Road and Mamari Road are designed and constructed to an urban standard.
- (e) Whether a safe and legible pedestrian connection is provided along Māmari Road between the Precinct and the intersection with Brigham Creek Road.
- (6) Non-compliance with Standard IX.6.7 Standard IX.6.4 Road Design
 - (a) Whether there are constraints or other factors present which make it impractical to comply with the required standards;
 - (b) Whether the design of the road, and associated road reserve achieves policies IX.3(5) and (6);
 - (c) Whether the proposed design and road reserve:
 - i. incorporates measures to achieve the required design speeds;
 - ii. can safely accommodate required vehicle movements;
 - iii. can appropriately accommodate all proposed infrastructure and roading elements including utilities and/or any stormwater treatment;
 - iv. <u>assesses the feasibility of upgrading any interim design or road</u> <u>reserve to the ultimate required standard.</u>
 - (d) Whether there is an appropriate interface design treatment at property boundaries, particularly for pedestrians and cyclists.
- (7) For a new vehicle crossing to Brigham Creek Road or Māmari Road:
 - (a) Whether appropriate alternative access can be provided to / from the site;
 - (b) Effects on the location and design of the access on the safe and efficient operation of the adjacent transport network having regard to:
 - i. <u>future widening and upgrade of Brigham Creek Road and Māmari</u>
 Road and their strategic transport role as existing and future arterial
 roads servicing growth in the wider area;
 - ii. visibility and safe sight distances;
 - iii. existing and future traffic conditions including speed, volume, type, current accident rate, and the need for safe manoeuvring;
 - iv. proximity to and operation of intersections;
 - v. existing active mode users, and estimated future active mode users having regard to the level of development provided for in this Plan; and
 - vi. existing and proposed community or public infrastructure located in the adjoining road, such as bus stops, bus lanes and cycle facilities.

- (8) Non-compliance with Standard IX.6.9 Activities sensitive to noise within 50m of an existing or future arterial road
 - (a) Whether activities sensitive to noise adjacent to Brigham Creek Road or Māmari Road existing and future arterial roads are designed to protect people from adverse health and amenity effects while they are indoors.
 - (b) Whether any identified building design features, or the location of the building or any other existing buildings, will mitigate any potential health and amenity effects.
 - (c) The extent to which alternative mitigation measures avoid, remedy or mitigate the effects of non-compliance with the noise standards on the health and amenity of potential building occupants.

11.9. Special information requirements

- (1) Stormwater management:
 - (a) All applications for development and subdivision must include a plan demonstrating how stormwater management requirements will be met including:
 - i. areas where stormwater management requirements are to be met on-site and where they will be met through communal infrastructure;
 - ii. the type and location of all public stormwater network assets that are proposed to be vested in council;
 - iii. consideration of the interface with, and cumulative effects of, stormwater infrastructure in the precinct; and
 - iv. <u>Bird strike risk management including design elements to reduce the</u> attraction of birds and monitoring and corrective actions.

(2) Transport Design Report:

- (a) Any proposed new key road intersection or upgrading of existing key road intersections illustrated on the Precinct Plan must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming that the location and design of any road and its intersection(s) supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents.
- (b) In addition, where an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered.

I1.10. Precinct plans

(1) 11.10.1 1 Whenuapai <u>3 Precinct Plan 1</u>

Appendix 1: Road Function and Design Elements Table

Road name (refer to Precinct Plan 1)	Proposed role and function of road in precinct area	Minimum road reserve (subject to note 1)	Total number of lanes (subject to note 2)	Speed limit (design)	Access restrictions	<u>Median</u>	Bus provision (subject to note 3)	On street parking	Cycle provision	Pedestrian provision
Brigham Creek Road interim upgrade—precinct frontage	Arterial road	<u>30m</u>	4	50kph posted	Yes	Yes	Yes	Some existing	Yes - On precinct side only.	Yes - existing on north side. Yes - on precinct frontage with safe crossing point on Brigham Creek Road
Māmari Road interim upgrade - precinct frontage	Interim local road [future 30m arterial]	Variable [future 30m]	2	50kph posted	Yes	<u>No</u>	<u>No</u>	Some existing	<u>No</u>	Yes Both sides.
Local roads	Local	<u>16m</u>	2	30kph	<u>No</u>	<u>No</u>	<u>No</u>	Optional	No	Yes Both sides

Note 1: Typical minimum width which may need to be varied in specific locations where required to accommodate network utilities, batters, structures, stormwater treatment, intersection design, significant constraints or other localised design requirements.

Note 2: Any interim, hybrid, constrained or ultimate upgrades must be designed and constructed to include a new road pavement and be sealed to their appropriate standard in accordance with the Proposed Role and Function of the Road.

Note 3: Carriageway and intersection geometry capable of accommodating buses.

APPENDIX 2

SECTION 42A SPECIALIST ADDENDUMS

IN THE MATTER of the Resource

Management Act 1991

AND

IN THE MATTER of a request to Auckland

Council for Private Plan Change 86: Whenuapai 3 Precinct under clause 21 of

Schedule 1 of the

Resource Management Act

1991.

S42A Addendum (Transport) GARY BLACK ON BEHALF OF AUCKLAND COUNCIL 23 October 2023

Introduction

- **1.** My full name is Gary Black.
- 2. I am the Transportation Manager at Harrison Grierson based in Auckland. I have held this role since November 2022. Prior to this, I held the position of Technical Director Transportation at Harrison Grierson.
- I am a Chartered Professional Engineer with Engineering New Zealand and hold a Bachelor of Engineering degree with Honours in Civil Engineering. I have 33 years' experience in traffic and transportation engineering, both in the United Kingdom and New Zealand. I arrived in New Zealand in 2005 and have 18 years New Zealand experience.
- I have provided traffic engineering advice to Auckland Council on several previous applications for various plan changes and resource consent applications. My traffic and transportation advice to Auckland Council includes Plan Change 42 (Private) Auckland Regional Landfill Waybe Valley and Plan Change 44 (Private) George Street Precinct, Newmarket.
- **5.** I have read and agree to comply with the Code of Conduct for Expert Witnesses, which is contained in the Environment Court of New Zealand Practice Note 2023, in clauses 9.1-9.3.
- 6. I am authorised to give this evidence on Council's behalf, in relation Plan Change 86 ("PC 86") application under Schedule 1 of the Resource Management Act 1991 ('RMA') of by 41-43 Brigham Creek Joint Venture ("the Applicant"). I refer to the land associated with PC 86 at 41-43 Brigham Creek Road as the ('Site').
- **7.** This evidence will:
 - (a) Be an addendum to the Section 42A hearing report
 - (b) Respond where necessary to evidence received post the notification of the PC 86 S42A hearing report on the Councils website on 03 July 2023
 - (c) Provide a recommendation to the hearings commissioners on PC 86.

Transport Assessment Report prepared by Mr Khorasani (Technical Specialist Report to contribute towards Council's Section 42A Hearing Report)

8. Prior to the hearing, Mr Khorasani of Harrison Grierson previously advised Auckland Council on traffic related matters associated with PC 86. In this role, Mr Khorasani prepared a memo titled 'Private Plan Change 86 – 41-43 Brigham Creek Road – Transport Assessment' report ('TAR') This report is appended to the Section 42A Hearing Report prepared by Mr Elder. As advised in the Section 42A Hearing Report, Mr Elder has relied on the technical information within the TAR.

Mr Khorasani was under my supervision in my role as the Transportation Manager at Harrison Grierson. Occasionally, Mr Khorasani sought my professional opinion and advice when preparing his TAR. I also completed a technical review of his final report, and I am a named author within the report. I confirm that the TAR is the professional opinion of Mr Khorasani and was reviewed and approved by me prior to issue.

9. Mr Khorasani has subsequently left the employment of Harrison Grierson. I have read the Transportation Assessment Report again, and I confirm I agree with the finding of Mr Khorasani.

Applicant Evidence

- 10. Statement of Evidence of Mr Todd James Langwell Transport I have read the Statement of Evidence by Mr Langwell on behalf the Applicant and there are new traffic assessments that address, in part, some of the comments raised within Section 42A Hearing Report and TAR. Specifically, these relate to the following:
 - (a) Changes to the transport environment relating to Plan Change 69 (Private) Spedding Block, ('PPC 69')
 - (b) The proposed upgrades to Brigham Creek Road and Māmari Road
 - (c) The trip generation rate adopted in the original Integrated Transport
 Assessment Report ('ITA') prepared by Traffic Planning Consultants Limited,
 dated November 2021
 - (d) The SIDRA traffic modelling included within the original ITA prepared by Traffic Planning Consultants Limited.

- 11. PPC 69 became operative in the AUP on the 12 May 2023 and relates to land to the south and west of the Site. Once developed, additional vehicle demand from PPC 69 will utilise Brigham Creek Road (and other roads in the area). This additional vehicle demand will pass the Site's frontage on Brigham Creek Road and continue through the signalised intersection of Brigham Creek Road, Māmari Road and Totara Road.
- 12. Road infrastructure upgrades are required to accommodate future traffic demands from PPC 69 to the west of the Site on Brigham Creek Road, however these upgrades are remote from the Site. I consider the PPC 69 infrastructure upgrades to be inconsequential to this Plan Change.
- 13. In his evidence, Mr Langwell considered the future transport demand associated with PPC 69 and has incorporated the trips generate by PPC 69 into his SIDRA traffic modelling. He has also adopted year 2028 for his analysis, including the full development of Spedding Block Precinct. I support this approach and provide further commentary below on the updated SIDRA traffic modelling.
- Mr Langwell discusses elements of the traffic assessment as part of the SIDRA traffic modelling. For the travel mode share, he adopted 2016 figures within the ITA for the Whenuapai Structure Plan. These are: 91% trips by private car, 4% trips public transport, 3% walking trips and 1% Bicycle trips. He has also adopted a higher generation rate of 0.9 vehicles per hour per dwelling. I support this approach and consider 0.9 vph per dwelling appropriate trip generation rate for this development. I have also reviewed Mr Langwell's assumptions on trip distribution and consider them appropriate.
- **15.** Mr Langwell identifies infrastructure upgrades and associated threshold triggers depending on the location and level of development:
 - (a) 'Signalisation of Brigham Creek Road, Joseph McDonald Drive and the new road into the Site with active mode crossing facilities'
 - (b) 'Provision of a safe and accessible pedestrian connection between the site and the Brigham Creek Road / Māmari Road intersection'
 - (c) 'Provision of a local road connection between Brigham Creek Road and Māmari Road through the precinct"
 - (d) 'Upgrades to the Brigham Creek Road frontage to an arterial road standard including footpath"
 - (e) 'Upgrades to the Māmari Road frontage to a local road standard including footpaths and a berm'

- (f) 'Vehicle access restriction on both Brigham Creek Road and Māmari Road to recognise both the existing and future arterial road status of each corridor'
- (g) 'Road function and design elements for any road within the precinct or upgrade of existing roads.'

I note that Mr Langwell supports these provisions and states that together with the AUP E27: Transport and E38: Urban Subdivision provisions, any future subdivision or development within the plan change area can be appropriately assessed at the time of the application. While I agree with this statement, Mr Langwell omits to consider the proposed precinct text within the S42A Hearing Report and the requested changes to the proposed precent text offered within the evidence of Ms Rivai.

- 16. Ms Rivai's extent of the upgrade of Brigham Creek Road and Marami Road and associated trigger thresholds is different to those proposed by Mr Elder in the S42A Hearing Report. This includes Mr Elder's Recommend Precinct Provisions ('Recommended Precinct Provisions (Mr Elder)')
- 17. Mr Elder proposed the upgrade of the Brigham Creek Corridor including separate footpath and cycleway along the frontage of the development, extending to the east between the Site and the existing signalised intersection.
- 18. I support the proposed upgrade to Brigham Creek Road recommended by Mr Elder. The upgrades provide a continuous walking and cycling facility on the southern side of Brigham Creek Road for these vulnerable road users between the site, the existing signalised intersection, and the Whenuapai Neighbourhood Centre.
- 19. I have also reviewed the evidence of Ms Natasha Anne Rivai. Ms Rivai provided alternative Recommended Precinct Provisions ('Recommended Precinct Provisions (Ms Rivai)')
- 20. Ms Rivai alternative precinct text limits the physical extent of the upgrade of Brigham Creek Road to the length of Site boundary fronting Brigham Creek Road only. I do not support this as this provides a discontinuous footpath and cycleway facility on Brigham Creek Road. Cyclists who are travelling westbound from the Whenuapai Neighbourhood Centre to the Site are forced to share the road with existing traffic and would be less safe than using a safe, continuous, separated, or protected cycle facility. Eastbound cyclists would be required to cross Brigham Creek Road to use the existing 1.8m wide eastbound

cycle facility on its northern side. Cyclists would be required to dismount, cross at the safe pedestrian facilities before continuing their journey.

- 21. If a pedestrian chooses not to cross at the new intersection crossing facilities, they would be required to cross midblock and jaywalk across Brigham Creek Road. I acknowledge the precinct provisions would provide a safe route for pedestrians to access the Whenuapai Neighbourhoods Centre crossing via the signalised intersection, however a continuous footpath on the southern side would provide an improved level of service and safety for pedestrians.
- 22. For Marami Road, the Recommended Precinct Provisions (Mr Elder) includes an upgrade of Marami Road to 'an urban arterial corridor with bus priority lanes and separate footpath and cycle lanes' for the length of Site fronting Māmari Road extending northwards to the existing signalised intersection. Alternative precinct provisions recommended by Ms Rivai in the Transport Infrastructure Upgrade table, include the following:
 - (a) ' Upgrade of the Māmari Road frontage to an urban local road standard including footpath and berms.'
 - (b) '- Provision of safe and accessible pedestrian connection between the Precinct and the Brigham Creek Road / Māmari Road intersection.'

As Māmari Road will remain a local road until the wider Supporting Growth Alliance roads are implemented, I concur with the alternative provisions proposed by Ms Rivai. Pedestrians can utilise the 'pedestrian connection' and cyclists can remain on the road along Māmari Road, as it is a low volume no-exit road. I note that Ms Katherine Julie Dorofaeff, representing Auckland Transport, does not seek to alter the text proposed by Ms Rivai in her evidence. I discuss Ms Dorofaeff evidence later in my submission.

I have reviewed the threshold trigger for the road infrastructure upgrades with the Recommended Precinct Provisions (Mr Elder). Mr Elder proposed a one dwelling threshold for the upgrades on Brigham Creek Road and Marami Road and the intersection upgrades of Brigham Creek Road and Māmari Road. The alternative Recommended Precinct Provisions (Ms Rivai) presented in her evidence is detailed below.

Table IX.6.6.1 Transport Infrastructure Upgrade Thresholds (Ms Rivai)

	Column 1 Threshold – Subdivision or development enabled by transport infrastructure in Column 2	Column 2 Transport infrastructure upgrade required to enable subdivision or development in Column 1
(T1)	Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Brigham Creek Road.	Upgrade of the Brigham Creek Road frontage to an urban arterial road standard including footpath, berms and separated cycle facilities. - A new or upgraded intersection and safe pedestrian crossing facilities. - Separate right turn lanes are provided into: i. Joseph McDonald Drive, and ii. the Precinct. - Separate left turn lane into the Precinct provided on Brigham Creek Road.
(T2)	Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Māmari Road only.	 Upgrade of the Māmari Road frontage to an urban local road standard including footpath and berms. Provision of safe and accessible pedestrian connection between the Precinct and the Brigham Creek Road / Māmari Road intersection.
(T3)	Subdivision or development that exceeding threshold under (T1) or (T2) above.	 Upgrades required in T1 and T2. Provision of a local road connection between Māmari Road and Brigham Creek Road through the Precinct.

- 24. From a traffic engineering perspective, I consider the threshold of one dwelling proposed by Mr Elder may not be warranted or required in the early stages of development. Once development progresses, the proposed intersections on Brigham Creek Road should be able to operate safely and without excess traffic delays on Brigham Creek Road for a period. As development continues, intersection upgrades would be required due to traffic capacity or road safety perspectives. Additionally, access via the Māmari Road and existing signalised intersection could be adopted as this would be safer and less costly to implement early in the development. I consider that these could be assessed through any future sub-division or land use consent at the Site.
- **25.** Similarly, the threshold provision presented by Ms Rivai is also not supported and, in my opinion, lack clarity or certainty. These thresholds provide flexibility in the implementation

of any future development at the Site. However, they also provide uncertainty as to when the infrastructure upgrades would take place. The threshold provisions could provide an opportunity for any sub-division and land use consent to occur without triggering the thresholds until later in any development build.

- 26. I have also reviewed alternative precinct provision recommended proposed by Ms Dorofaeff ('Recommended Precinct Provisions (Ms Dorofaeff)') and I generally support the recommendations provided. Again, I discuss this further in my submission.
- 27. Within the Assessment of Transport Effects of his evidence, Mr Langwell provides commentary of walking and cycling trips and the infrastructure upgrades proposed within the proposed precinct provisions. Mr Langwell supports the infrastructure upgrades as supporting the movement of pedestrians and cyclists through the area. I support Mr Langwell's position on the benefits of the infrastructure upgrades.
- 28. Notwithstanding the above, Mr Langwell omits to comment about the timing of the infrastructure upgrade, or the physical extend of the upgrade proposed by Ms Rivai. As discussed earlier, I do not support the timing of the upgrades through the threshold trigger, or the extent of the upgrades proposed by Ms Rivai.
- The current schedule bus service near to the site is the service #114 which travels along Totara Road and Brigham Creek Road to the east. This service is schedules at 40 minutes intervals. Mr Langwell comments that the bus service is currently limited, however the site is within walking distance of bus stops and services and passenger transport is viable option at the site. I concur with Mr Langwell's assessment however the walking distance from a dwelling to the bus stops on Totara Road varies between 300m and 650m. The low frequency bus service and walking distance to the bus stops could discourage people from moving away from the private passenger car for travel.
- **30.** Mr Langwell completed additional SIDRA traffic modelling and is discussed in his evidence Paragraphs 4.8 4.16. I provided commentary on some of the assessment methodology earlier in my submission.
- **31.** Within the SIDRA traffic modelling, Mr Langwell incrementally increased the trips to determine how many vehicle trips can be accommodated by each intersection while maintaining the following intersection performance criteria:
 - (a) Maintain a degree of saturation on any approach below 0.90;

- (b) Maintain queue lengths less than 300 metres on the Brigham Creek Road approaches to ensure there are no upstream impacts on other key intersections;
- (c) Maintain, if possible, a Level of Service ("LOS") for any movement no worse than LOS E; and
- (d) Maintain signal cycle times no greater than 130 seconds.
- While these performance criteria appear reasonable, I consider them more appropriate for a later subdivision or land use consent application, or a consent within an already built-up area. A degree of saturation of 0.9 provides limited residual capacity on that approach or for the intersection. Based on my own experience of traffic modelling and operational use, once an approach reaches saturation, queues form quickly, the average delay increases and LOS increases to F. Mr Langwell proposed a maximum queue length of 300m, and I consider this appropriate and acceptable for eastbound traffic. For westbound traffic I consider the maximum queue length of 300m is too long. The approximate distance between the existing traffic signals and the proposed traffic signals is 220m. Noting that the existing traffic signals provides two lanes westbound departing the intersection with an approximate length of 70m, the effective length of storage 290m, rounded to 300m. Accordingly, the maximum queue length of 300m provides no spare capacity for queueing and traffic risks backing up to the existing signalised intersection.
- **33.** Mr Langwell modelled three development scenarios in his evidence and have been assessed using SIDRA:
 - (a) 120 Dwellings accessing Brigham Creek Road only,
 - (b) 120 Dwellings accessing Marami Road only,
 - (c) 260 Dwellings accessing Brigham Creek Road and Māmari Road
- **34.** To simplify my submission, I provide commentary on scenario (c) 260 dwelling only, as this is the worst-case scenario.
- **35.** In the AM peak, for the proposed signalised intersection outside the Site, the traffic modelling predicts the following operational results:

Proposed Signalised Intersection – Brigham Creek Road / Site / Joseph McDonald Drive - AM Peak

Approach	Movement	Degree of	Level of	Average	95%
		Saturation	Service	delay (s)	Queue
					Length (m)
South: Site Access	Left	0.36	D	45.9	43

	Through	0.36	D	53.7	43
	Right	0.36	E	58.2	43
East: Brigham Creek	Left	0.006	С	34.4	1.0
Road	Through	0.85	D	35.7	258
	Right	0.04	E	74.8	1.6
North: Joseph	Left	0.226	С	24	15.2
McDonald Drive	Through	0.226	D	37.6	15.2
	Right	0.226	D	41.5	15.2
West: Brigham Creek	Left	0.77	D	42.9	223
Road	Through	0.77	D	38.3	223
	Right	0.31	E	76.0	258

In the PM peak, the traffic modelling predicts the following operational results:

Proposed Signalised Intersection – Brigham Creek Road / Site / Joseph McDonald Drive - PM Peak

Approach	Movement	Degree of	Level of	Average	95%
		Saturation	Service	delay (s)	Queue
					Length (m)
South: Site Access	Left	0.10	D	45.9	12.2
	Through	0.10	Е	53.7	12.2
	Right	0.10	Е	58.2	12.2
East: Brigham Creek	Left	0.02	D	34.4	3.9
Road	Through	0.86	D	35.7	299
	Right	0.10	F	74.8	6.6
North: Joseph	Left	0.07	С	24	4.6
McDonald Drive	Through	0.07	D	37.6	4.6
	Right	0.07	D	41.5	4.6
West: Brigham Creek	Left	0.66	D	42.9	194.3
Road	Through	0.86	D	38.3	194.3
	Right	0.31	F	76.0	66.0

36. The SIDRA modelling results for the proposed intersection in the AM peak show acceptable traffic operation at the intersection. The through movements are at LOS D and the queue lengths are a maximum of 258m on Brigham Creek Road. In the PM peak the traffic modelling shows acceptable operational results, except the queue length of 299m for the westbound approach. As identified, this risks potential traffic back up effects on the existing signalised intersection.

37. For the existing signalised intersection at Brigham Creek Road, Totara Road and Māmari Road, the AM peak traffic modelling predicts the following operational results.

Existing Signalised Intersection – Brigham Creek Road / Totara Road / Māmari Road - AM Peak

Approach	Movement	Degree of	Level of	Average	95%
		Saturation	Service	delay (s)	Queue
					Length (m)
South: Māmari Road	Left	0.06	D	42.2	9.6
	Through	0.156	D	49.4	15
	Right	0.156	D	54.6	15
East: Brigham Creek	Left	0.27	С	27.8	61.3
Road	Through	0.33	С	23.7	75.4
	Right	0.16	E	66.8	6.1
North: Totara Road	Left	0.50	С	30.4	53.1
	Through	0.87	Е	61.3	127.0
	Right	0.87	E	66.0	127.0
West: Brigham Creek	Left	0.21	С	33.5	43.5
Road	Through	0.87	D	50.1	278
	Right	0.03	F	86.2	1.3

38. The PM peak traffic modelling predicts the following operational results.

Existing Signalised Intersection – Brigham Creek Road / Totara Road / Māmari Road - PM Peak

Approach	Movement	Degree of	Level of	Average	95%
		Saturation	Service	delay (s)	Queue
					Length (m)
South: Māmari Road	Left	0.02	С	32.4	2.1
	Through	0.04	D	38.5	3.7
	Right	0.04	D	43.2	3.7
East: Brigham Creek	Left	0.55	D	35.5	98.3
Road	Through	0.65	С	31.9	114.6
	Right	0.39	E	61.8	15.7
North: Totara Road	Left	0.23	С	24.0	17.4
	Through	0.53	D	42.8	51.0

	Right	0.53	D	47.5	51.0
West: Brigham Creek	Left	0.36	С	28.6	62.5
Road	Through	0.76	С	34.5	158.7
	Right	0.08	Е	65.9	2.9

- 39. In the AM peak, the SIDRA modelling shows and acceptable operational outcomes. However, the queue length for the eastbound through movement predicts a queue length of 278m. There is a risk of back up effects occurring at the proposed signalised intersection at the Site. The PM peak traffic SIDRA results provide acceptable operational outcomes.
- I have reviewed existing signalised intersection layout and the SIDRA traffic modelling results and provide the following higher-level commentary. Westbound traffic on Brigham Creek Road is provided with two through lanes at the existing signalised intersection. This approach is at LOS C with an acceptable queue length of maximum 114m and a maximum degree of saturation 0.65. The Eastbound approach on Brigham Creek Road is provided with a single through lane, and a separate left lane. On the departure side of the intersection, there are two traffic lanes, only one of which is required for the through traffic. Reviewing this, I consider the existing intersection has been designed (and future-proofed) to provide two through lanes in the eastbound direction when traffic demand increases in the wider Whenuapai area. The eastbound through movement operates with degree of saturation of 0.87, a LOS D, and 95% queue length of 278m. Should two eastbound through lanes be provided at this intersection, the operational criteria should show significant improvement in the operational results, with an appropriate reduction in queue length and degree of a saturation.
- 41. In summary, the existing signalised intersection at Brigham Creek Road, Māmari Road, and Totara Road has sufficient residual capacity to accommodate the additional traffic from the Site, PPC69 and other future developments in the Whenuapai area.
- 42. I have completed a similar high-level summary for the proposed signalised intersection at the Site. The SIDRA modelling is predicting that the existing signalised intersection will have sufficient capacity to accommodate the additional traffic from the Site and PPC 69. However, with the current traffic modelling results, the proposed signalised intersection is predicted to have limited residual capacity for growth in traffic within the Whenuapai area.

- 43. From a traffic modelling perspective, I envisage that a proposed signalised intersection at the Site may require two through lanes in the westbound direction at some point in the future. I note that there are no specific provisions in the PC 86 to future proof the corridor to enable this occur prior to any Supporting Growth Alliance corridor upgrades.
- **44.** I acknowledge that this be assessed as part of any future sub-division or land use consent at the Site.

Submitter Evidence

- 45. Statement of Auckland Transport of Ms Kathrine Dorofaeff (Auckland Transport) –
 A statement was received by Ms Kathrine Dorofaeff (Planning and Traffic) on behalf of
 Auckland Transport ("AT"). I have read the Statement of Evidence by Ms Dorofaeff
 relating to traffic, summarised as:
 - (a) Subject to amendments to PC 86, PC 86 will be able to give effect to the NPS-UD and AUP-RPS
 - (b) PC 86 is limited to give effect to the NPS-UD and AUP-RPS objectives and policies about reducing dependence on private vehicle trips and provision for and enabling walking, cycling and public transport.
 - (c) Amendments are required to PC 86 relating to the following matters:
 - (i) Connections Through to Adjacent Sites
 - (ii) Form of Intersection between Brigham Creek Road and New Local Road
 - (iii) Standard IX6.6 Transport Infrastructure Requirements
 - (iv) 'Other amendments' to the Whenuapai 3 Precinct activity table
- 46. Ms Dorofaeff comments the PC 86 responds favourably to aspects of NPS-UD and AUP-RPS and provides an assessment against objectives and policies for each document. She summarizes, in her view, the NP-UD and AUP-RPS is covered by four themes:
 - (a) 'Integrating development with infrastructure provision including effective, efficient and safe transport. Integration includes ensuring transport infrastructure is planned, funded and staged to integrate with urban growth.'
 - (b) 'Reducing dependence on private vehicle trips by encouraging land use development and patterns that support other modes and reduce the need to travel, and by providing for and enabling walking, cycling and public transport.

- (c) 'Providing for the future development and upgrading of Auckland's transport infrastructure.'
- (d) 'Enabling infrastructure, including by protecting it from reverse sensitivity effects, while managing adverse effects on the health and safety of communities and amenity values. In the context of this evidence, the reverse sensitivity and health and safety effects relate to road traffic noise from existing and future arterial roads.'
- **47.** Themes (a), (b) and (c) relate to traffic and I provide commentary relating to her assessment.
- 48. Should PC 86 be approved, this would enable development to occur prior to implementation of the strategic transportation infrastructure required to support growth in the wider area. Accordingly, PC 86 would be required to include the provision of effective, efficient and safe transport infrastructure for the expected development from the Site. Accordingly, Ms Dorofaeff has recommended amendments to the revised precinct provisions and suggests that PC 86 can 'give adequate effect to these policy matters' subject to the revised provisions.
- **49.** Ms Dorofaeff considers that PC 86 gives limited effect to reducing dependency on the private car and for enabling walking, cycling and public transport and consider PC 86 will not be consistent with the following objectives and policies:
 - (a) NPS UD: Objective 3(b) 'Regional policy statements and district plans enable more people to live in, and more businesses and community services to be located in, areas of an urban environment in which one or more of the following apply: (b) the area is well-serviced by existing or planned public transport.'
 - (b) NPS- UD: Policy 1(c) in relation to 'well-functioning urban environments'....
 'have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport'
 - (c) AUP-RPS: B2.2.1 (1)(d) 'A well-functioning urban environment with a quality compact urban form that enables all of the following: (d) good accessibility for all people, including by improved and more effective efficient public or active transport'
 - (d) AUP-RPS: B2.3.2 (2)(b) 'Encourage subdivision, use and development to be designed to promote the health, safety and well-being of people and

- communities by all of the following: (b) enabling walking, cycling and public transport'
- (e) AUP-RPS: B3.3.1 (1)(e) 'Effective, efficient and safe transport that:.... (e) facilitates transport choices, recognises different trip characteristics and enables accessibility and mobility for all sectors of the community.'
- (f) AUP-RPS: B3.3.2 (5)(b) 'Improve the integration of land use and transport by:....(b) encouraging land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods'
- From a Public Transport perspective, the Auckland Transport Regional Public Transport Plan (RPTP) 2018- 2018 describes 'Rapid' or 'Frequent' bus services as running every 15 minutes for non-city centre services and 'Connector' every 30 minutes. The current schedule bus service near to the site is the service #114 which travels along Totara Road and Brigham Creek Road to the east. This service is schedules at 40 minutes intervals and does not meet AT's own frequency requirement of a Connector service.
- 51. The existing bus stop on Totara Road are located approximately between 300m and 650m walking distance of the Site. ATs 'Public Transport Bus Infrastructure' document states 'Walking network. The layout of streets and walkways may limit access to stops. All properties in new development areas, and as many as practicable in existing areas, should be within 500 m of a bus stop.' I concur with Ms Dorofaeff that the PC 86 is not currently well-serviced by existing or planned public transport.' Bus services are available to residents, however, the low frequency bus service and walking distance to the bus stops could discourage people from moving away from the private passenger car for travel. Any future public transport services improvements would be managed by Auckland Transport, subject to demand and budget availability.
- Regarding walking, cycling, access and mobility within the Proposed Precinct Provisions (Ms Rivai), I concur with Ms Dorofaeff that PC 86 is not consistent with the above policies. The Proposed Precinct Provisions (Ms Rivai) do not include a continuous footpath and cycle facilities on the southern side of Brigham Creek Road. Consequently, the safety and level of service for both pedestrians and cyclists is reduced by the physical extent and timing of the infrastructure upgrades proposed by Ms Rivai.
- 53. I note the Supporting Growth Alliance Notice of Requirement for the North West Local Network: Brigham Creek Road (Auckland Transport) was notified on 23 March 2023. The general arrangement drawing for Brigham Creek Road includes an urban arterial road cross section with two lanes in each direction, a raised median, and walking and cycling

facilities on both sides of Brigham Creek Road. Ms Dorofaeff states that is not necessary to provide and protect for these future projects within PC 86. I agree with this statement and the separate Notice of Requirements process should provide appropriate future proofing outside PC 86.

- Ms Dorofaeff comments on future road connections to adjacent properties and the importance for PC 86 to provide for these road connections within the revised precinct provisions. Ms Dorofaeff identifies indicative future road connections at the eastern boundary with #45 Brigham Creek Road, western boundary with #39 Brigham Creek Road and the southern boundary with #5 Māmari Road. From a land use and transport planning perspective, I support the revised precinct provisions and indicative future road connections. They will ensure adjacent developments are connected to meet the objectives and policies of NPS-UD and AUP-RPS, along with Policy 6 of the proposed precinct provisions. The potential application for a supermarket by Woolworth NZ Ltd at #45 Brigham Creek Road is noted and future road connections can be addressed at the time of any future consent.
- 55. The Recommended Precinct Provisions (Ms Rivai) includes provisions for a signalised intersection on Brigham Creek Road with the site and includes prescriptive requirements such as provisions for right and left turn lanes. This intersection form has been modelled within SIDRA and discussed by Mr Langwell in his evidence. Ms Dorofaeff identifies that any non-compliance to these specific requirements would be a non-complying activity, as set out in the activity table.
- Ms Dorofaeff continues to state that the form of any proposed intersection onto Brigham Creek Road requires careful consideration to ensure a safe and functional arrangement. This would also require a technical review of Auckland Transport's Subject Matter Experts. She continues to state that it is probably premature to define the intersection arrangement within PC 86 when AT may prefer an alternative arrangement at the time of any subdivision or land use consent. This should consider both the existing Brigham Creek Road environment at the time of the application, and the longer-term upgrade of Brigham Creek Road by the Supporting Growth Alliance. Ms Dorofaeff suggests alternative precinct provisions to threshold (T1) in column 2 of Table IX.6.6.1 Transport Infrastructure Upgrade Thresholds:

Table IX.6.6.1 Transport Infrastructure Upgrade Thresholds (Ms Dorofaeff)

Column 1	Column 2
Threshold – Subdivision or	Transport infrastructure
	upgrade required to enable

	development enabled by transport infrastructure in Column 2	subdivision or development in Column 1
(T1)	Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Brigham Creek Road.	- Upgrade of the Brigham Creek Road frontage to an urban arterial road standard including footpath, berms and separated cycle facilities A new or upgraded intersection between Brigham Creek Road and the new local road accessing the Precinct and - Safe pedestrian crossing facilities across Brigham Creek Road Separate right turn lanes are provided into: i. Joseph McDonald Drive, and ii. the Precinct Separate left turn lane into the Precinct provided on Brigham Creek Road.
(T2)	Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Māmari Road enly.	 Upgrade of the Māmari Road frontage to an urban local road standard including footpath and berms. Provision of safe and accessible pedestrian connection between the Precinct and the Brigham Creek Road / Māmari Road intersection.
(T3)	Subdivision or development that exceedsing the threshold under (T1) or (T2) above by enabling a cumulative total of more than 120 dwellings within the Precinct.	 Upgrades required in T1 and T2. Provision of a local road connection between Māmari Road and Brigham Creek Road through the Precinct.

57. I consider the revised (T1) threshold proposed by Ms Dorofaeff should be adopted, plus the addition of separate and cycling facilities on the southern side of Brigham creek Road

between the precinct and the Brigham Road/ Māmari Road/Totara Road intersection. This provides flexibility in any future subdivision or land use consent. Any future intersection design for the precinct local road should be considerate of the traffic environment at the time of an application. This also does not preclude an appropriate signalised intersection in any future consent should it be required.

- Ms Dorofaeff provides further commentary on the precinct provisions and transport infrastructure requirements to make the provisions clearer and more robust. For (T2) she recommends: 'Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Māmari Road-only.' She states pedestrian upgrades on Māmari Road should occur irrespective of whether Māmari Road is the only access point. In addition, I support the provision of a pedestrian link along Māmari from the precinct to the Brigham Road/ Māmari Road/Totara Road intersection.
- **59.** For (T3) she recommends: 'Subdivision or development that exceedsing the threshold under (T1) or (T2) above by enabling a cumulative total of more than 120 dwellings within the Precinct. '
- Earlier in my evidence, I raised my own concern about the precinct text provided by Ms Rivai relating to the thresholds. While it provided flexibility for any future subdivision or land use consent, there was an element of uncertainty and could allow development to occur without achieving the threshold to trigger infrastructure upgrades until later in the development.
- Detailed below are the suggested transport infrastructure upgrades proposed by Ms Dorofaeff. I support these revisions and recommend the suggested changes proposed by Ms Dorofaeff be adopted, along with additional active mode facilities connecting the precinct with the Brigham Road/ Māmari Road/Totara Road intersection.

Conclusion

- 62. I have read the evidence statement prepared by Mr Langwell and his revised traffic modelling addresses, in the most part, the concerns raised by my colleague Mr Khorasani and included in the S42A hearing report.
- 63. I consider that traffic modelling is robust and appropriate for PC 86 and that the existing and proposed road network can accommodate the traffic from PC 86 and the consented PC 69 Spedding Block in 2028. The existing signalised intersection of Brigham Creek,

Totara Road and Māmari Road can accommodate the predicted traffic and appears to have sufficient residual capacity at the intersection for other developments in the area. The proposed intersection of Brigham Creek Road, the Site and Joseph McDonald Drive also has sufficient capacity, but has limited residual capacity based on the SIDRA traffic modelling completed by Mr Langwel. A future upgrade of the intersection to two lanes in the westbound direction may be require in the future and can be assessed at the time of any subdivision or land use consent.

- I have reviewed the precinct provision text relating to Table IX.6.6.1 Transport Infrastructure Upgrade Thresholds proposed by Mr Elder in the S42A report, the alternative text proposed by Ms Rivai and the text prepared by Ms Dorofaeff on behalf of Auckland Transport. I recommend that the text prepared by Ms Dorofaeff be used for PC 86 with additional amendments to require active mode facilities.
- 65. I note that Mr Langwell supports the infrastructure upgrades required in the Recommended Precinct Provision (Ms Rivai). Mr Langwell omits to comment on the extent or timing of the infrastructure upgrades proposed by Ms Rivai.
- The appended plan (Whenuapai 3 Precinct Plan 1) to the Recommended Precinct Provisions (Mr Elder S42A) includes infrastructure upgrades from the site frontage on Brigham Creek Road and Māmari Road extending to the existing signalised intersection. Ms Rivai proposes the infrastructure upgrades are limited to the site frontage only. I recommend that the proposals by Mr Elder be adopted.
- 67. Subject to the adoption of Table IX.6.6.1 Transport Infrastructure Upgrade Thresholds proposed by Ms Dorofaeff and the infrastructure upgrades from the precinct extending to the existing signalised intersection proposed MrElder, and showing indicative connections to adjacent land on Whenuapai 3 Precinct Plan 1, I consider the PC 86 provisions would appropriately address transport related matters.

Signature:	G. Black	
	Gary Black	
	23/10/23	
	Date	



Memo: Addendum to technical specialist report to contribute toward Council's section 42A addendum

18 October 2023

To: Todd Elder, Senior Policy Planner, Plans and Places, Auckland Council

From: Jennifer Esterman, Senior Urban Designer, Mein Urban Design and Planning Limited

Subject: Private Plan Change 86 for 41-43 Brigham Creek Road

- Review of Urban Design Evidence on behalf of Auckland Council

- 1.1 In writing this addendum, I have reviewed the Planning Evidence prepared by Ms Rivai which includes an amended version of the Whenuapai 3 Precinct within Attachment 1, the Urban Design Evidence prepared by Mr Knott, the Submitter's Planning Evidence by Ms Dorofaeff and the s42A Hearing Report, dated 30 June 2023.
- 1.2 I agree with the concerns outlined in paragraph 65 and 66 of the s42A report. The key concern relates to an inconsistency with Policy 1c of the NPS-UD due to the standard of accessibility between the site and the Whenuapai Centre.
- 1.3 Two amended versions of the precinct have been provided: within Attachment 1 of Ms Rivai's evidence, and within Attachment 5 of the s42A report. This addendum discusses both versions of the amendment precinct.

Internal road network

- 1.4 In paragraph 6.5 of Mr Knott's evidence, he states that he understands it is now proposed to delete the indicative internal roading network previously illustrated in the Precinct Plan and is comfortable with that approach. I also support this approach as no cross sections are included within the Precinct Plan. This provides flexibility in the design of the internal road layout at resource consent stage.
- 1.5 In paragraph 9.1 of Ms Dorofaeff's evidence she considers that some connections should be indicated on the Precinct Plan as this would be consistent with I1.3 Policy 6 of the revised provisions (within Attachment 1 of Ms Rivai's Evidence) which states, "*'ensure that subdivision and development provide for future road connections to adjoining sites as shown on Precinct Plan 1.*"
- 1.6 From an urban design perspective these road connections do not need to be shown therefore I suggest the wording of this policy (I1.3(6)) be amended to remove reference to Precinct Plan 1. I note this wording is not included in the version of provisions within the s42A report.

Pedestrian Throughfare

- 1.7 In para 6.5 of my memo dated 31 May 2023 I noted that "no precinct provisions are included that reference this pedestrian throughfare. It is therefore recommended that this graphic be removed from precinct plan 1". The revised precinct plan, included in attachment 1 of the evidence of Ms Rivai, has removed any reference to the pedestrian throughfare. I support this amendment. Mr Knott addresses this matter in paragraph 6.7 of his evidence concluding that given the future provision of improved pedestrian connection on the south side of Brigham Creek Road, he does not consider the throughfare to be a critical link to provide walking connections to existing amenities and local services and accepts that it is appropriate to remove this notation from the precinct plan.
- 1.8 In paragraph 9.3 of Ms Dorofaeff's evidence she notes AT support retention of the pedestrian link and that AT's concerns would be satisfied by indicating on the Precinct Plan that an internal road would connect to the boundary of #45. From an urban design perspective, pedestrian connectivity is important, however in my opinion this is a matter that would be better managed at resource consent stage or through agreement with the owners of the adjoining site. As outlined above, the PC provisions will result in improved pedestrian connection on the south side of Brigham Creek Road ensuring safe access is provided.

Amended Precinct Plan

- 1.9 In paragraph 7.2 of Mr Knott's evidence, he discusses the precinct provisions and plan (included at Attachment 1 to the evidence of Ms Rivai). Mr Knott is of the view that the provisions are appropriate as:
 - a. they will ensure the sequencing of associated infrastructure to service the proposed plan change area, including street upgrades.
 - b. the upgraded streets will, in time, provide appropriate walking and cycling connections to existing amenities and local services for residents.
- 1.10 I do not agree with Mr Knott that the precinct provisions (included at Attachment 1 to the evidence of Ms Rivai) will provide appropriate walking and cycling connections to existing amenities and local services. I agree with the concern raised in paragraph 66 of the s42a Report around the standard of accessibility between the site and the Whenuapai Centre. As outlined in paragraph 6.4 of my memo dated 31 May 2023, a key urban design matter is connectivity to the local centre. The amended precinct description, objectives, policies, standards, matters of discretion and assessment criteria address this matter in part by requiring road upgrades along the portion of Brigham Creek Road and Māmari Road owned by the applicant. However, the wording suggested in 'Whenuapai 3 Precinct', within the s42A report more effectively achieves this outcome by requiring Brigham Creek and Māmari Road to be upgraded all the way to the identified intersection, as shown on Precinct Plan 1. This is discussed in further detail below:

Precinct Description

1.11 I note the wording of I1.1 Precinct description has been amended to make it very clear that development is limited in scale unless both the wastewater and transport infrastructure is upgraded. This sets up the rest of the precinct for clear thresholds for transport upgrades. This approach is supported from an urban design perspective as transport infrastructure, including active modes and safe pedestrian crossing facilities along Brigham Creek Road, is required to be in place before subdivision or development of up to 120 dwellings fronting or with access from Brigham Creek Road or Māmari Road is enabled.

Provisions

1.121 support the amendments to provisions related to transport infrastructure, specifically objective I1.2(6) which requires:

- (a) safe walking and cycling connections within the Precinct and to the Whenuapai Local Centre
- (b) supports the planned upgrades to Brigham Creek Road and Māmari Road; and
- (d) Provides connectivity to future subdivision and development of adjacent sites.
- 1.13 I also support the new objective I1.2(7):
 - (7) Subdivision and development does not occur in advance of the availability of operational transport infrastructure.
- 1.14 I support in part the amendments to Policies I1.3(5), (6) and (7).
 - (5) Require subdivision and development to provide the transport infrastructure identified on Whenuapai 3 Precinct Plan 1 and in accordance with Table IX.6.6 and Appendix 1.
 - (6) Ensure that subdivision and development provides for the future road connections to adjoining sites as shown in Precinct Plan 1.
 - (7) Avoid subdivision and development occurring in advance of the availability of operational transport infrastructure.
- 1.15 In relation to Policies I1.3(5) and (6), Whenuapai 3 Precinct Plan 1 does not show a continuous connection between the PPC land and the local centre. This only depicts a road upgrade to the parts of Brigham Creek Road and Māmari Road that directly adjoin the PPC land. In contrast the s42A Whenuapai 3 Precinct Plan (I1.10.1.1) clearly shows the transport upgrades are required to extend from the PPC land to the intersection of Totara Road/Māmari Road/Brigham Creek Road. It is recommended that the approach illustrated in the Precinct Plan within the s42A report be applied to ensure a suitable standard of accessibility between the site and the Whenuapai Centre, in line with the objectives of the NPS-UD for a well-functioning urban environment.
- 1.16 I support in part Standards I1.6.6 Transport Infrastructure Requirements. I support the purpose "to achieve the integration of land use and transport". Table IX.6.6.1 sets out the transport infrastructure upgrades required to enable subdivision or development. Council's transport specialist is best placed to comment on the thresholds. The transport infrastructure thresholds identified in Appendix 1 of Ms Rivai's evidence are different than that provided within the s42A report. I prefer the approach within the s42A report that references Whenuapai Precinct Plan 1, requiring a complete corridor with active modes facilities. From an urban design perspective these requirements will ensure that a safe pedestrian connection is provided between the PPC site and Brigham Creek Road/Māmari Road intersection.
- 1.17 Standard I1.6.4 Building Setback and Connectivity has been removed in the Precinct Provisions (included at Attachment 1 to the evidence of Ms Rivai). In paragraph 6.12 of my memo dated 31 May 2023, I outlined that this standard is not considered necessary as this setback is clearly shown on the precinct plan. In relation to the minimum front yard setback, this is already provided for under standard H5.6.8 (Yards) within the MHU zone.
- 1.18 I support the amendments to I1.8.1 Matters of discretion (c) included at Appendix 1 of Ms Rivai's evidence. This considers provision for active modes and connections to neighbouring sites.
- 1.19 I support the amendments to I1.8.2(5) Assessment criteria in Appendix 1 of the evidence of Ms Rivai, subject to amendment (shown below), These amendments are referred to as (5)(d)-(g) and should be renumbered (5)(a)-(d), . These provisions require an assessment of:

- (a) Whether a safe a legible pedestrian connection is provided along Brigham Creek Road between the Precinct and Brigham Creek Road and Māmari Road intersection. If safe pedestrian connection cannot be fully provided along the southern side of Brigham Creek Road, then whether safe crossing facilities are provided to the pedestrian and cycle network on the northern side of Brigham Creek Road;
- (b) Whether a road connection between Brigham Creek Road and Māmari Road is enabled through the design and layout of subdivision within the precinct;
- (c) Whether the location and design of the road network and connections with neighbouring sites are provided to achieve an integrated network, appropriately provide for all modes;
- (d) Whether the precinct frontages along Brigham Creek Road and Māmari Road are designed and constructed to an urban standard.

These provisions ensure transport infrastructure is well sequenced with land development.

1.20 Overall, I support the amendments to Whenuapai 3 Precinct Plan 1 in part. This now shows the zoning, indicative key road intersections, existing key road intersections, road frontage upgrades and precinct boundary. As outlined above, I prefer the Precinct Plan 1 graphic within the s42A report which shows the requirement for the upgrade of Brigham Creek Road and Māmari Road (inclusive of the part of the road not owned by the applicant) to ensure active mode connections are provided from the PPC site to the local centre.

Jennifer Esterman

MUrbDes, BPlan, Int. NZPI

Technical specialist memo to contribute towards Council's section 42A hearing addendum

16 October 2023

To: Todd Elder – Senior Planner, Auckland Council

From: Amber Tsang – Consultant Planner (on behalf of Auckland Council Healthy Waters)

Danny Curtis - Consultant Engineer (on behalf of Auckland Council Healthy Waters)

Subject: Private Plan Change (PPC) 86 – 41-43 Brigham Creek Road, Whenuapai –

Stormwater and Flooding

1.0 Introduction

We have reviewed the evidence prepared by Mr Moore (Civil) and Ms Rivai (Planning) on behalf of the Applicant and the latest proposed precinct provisions in relation to stormwater and flooding.

The purpose of this memo is to confirm our latest recommendations in response to the evidence. Mr Curtis' comments in response to Mr Moore's evidence is provided in Section 2 (Flooding) and Section 3 (Stormwater Water Quality Treatment) below. Ms Tsang's comments on the latest proposed precinct provisions are provided in Section 4 below.

2.0 Flooding

Mr Moore suggests in 4.9 of his evidence that passing post development flows without attenuation will result in flows from the proposed plan change area (the site) discharging to the harbour before the peak flows from the upstream catchment of the Sinton Stream reaches the site. There has been no evidence provided in the Applicant's Stormwater Management Plan (SMP) to confirm if this is realistic. A simple hydrograph assessment of the main Sinton Stream and the peak discharges to the Sinton Stream is required to confirm this approach. It is important that the hydrographs from the site include the overland flows through third party land to the Sinton Stream and not just discharge from the site alone to account for flow routing through the sub-catchment.

The flows presented in 4.10 of Mr Moore's evidence relate to only one of the five discharge locations from the site. However, this is assuming that the upstream property at 45 Brigham Creek Road would direct its overland flows to the narrowest point in the proposed lot layout.

As discussed in the s42A technical assessment, Healthy Waters have concerns over the proposed public stormwater network servicing illustrated on Drawings C400 – C405 in the SMP related to design, ownership, operation and maintenance. It is noted that the majority of the stormwater infrastructure intended to be vested to Auckland Council is to be located within private lot areas. As indicated on Drawing C400, public stormwater pipes are proposed to be located within private lots, along the rear of retaining walls on the southern boundary and within private Jointly Owned Access Lots (see extract below). This is not good practice and will result in long-term operation and maintenance issues for the Network Utility Operator.

Although many of these issues can be worked through at resource consent stage, it is important to note that what has been presented does not meet the Auckland Council Stormwater Code of Practice and will be difficult to vest. Changes required to the proposed network in the future may affect the flow assessments to 5 Māmari Road.



Extract of Drawing C400

In 5.1 of Mr Moore's evidence, he states that the 10-year flows to Māmari Road will reduce from 1.2 m³/s in the pre-development scenario to 0.8 m³/s in the post development scenario. The plan change development will significantly increase the imperviousness of the site, together with increasing peak runoff rate and volume of runoff. Evidence has not been provided as to where the increased flows will be transferred to, but it is assumed that these will be transferred to 5 Māmari Road.

It is not clear in Section 5.3 of Mr Moore's evidence whether the stormwater pipe within the Māmari Road corridor will be constructed along with this development, or whether it is simply assumed to occur in the future. If it is assumed to be constructed by others, more detail is required on the potential effects of post development discharges on the accessway to 5 Māmari Road.

Flooding effects on 5 Māmari Road are limited to a 100-year event discharging through Road 5 as shown on Drawing C462. This analysis is limited to a static flow-depth calculation undertaken within 5 Māmari Road based on the regionwide LiDAR data and not site-specific survey (refer to Drawing C464 – 'Section H' assumed to be incorrectly labelled as Section G in Drawing C462). There is no similar assessment completed for the other discharge locations to 5 Māmari Road, so it is not possible to quantify the effects of development on 5 Māmari Road. It would be expected that an assessment of stormwater discharges be completed for the 2, 10, 50 and 100-year design storms to allow effects on floodplain extents, frequency of floodplain development and duration of flooding pre and post development to be quantified.

Section 9.2 Flooding Risks f) of Mr Moore's evidence states that additional erosion control measures within the development can be provided to reduce flow velocities before discharging to 5 Māmari Road. It is not clear what this is referring to or why such controls would not be considered at part of the plan change to mitigate the impacts of the land use change. The

proposed drainage layout has bubble ups proposed immediately adjacent to retaining walls up to 1.6m in height. The location of these devices, combined with the public network laid behind these walls could result in problematic operation and maintenance. It is not clear whether any ground water management has been considered for these retaining walls and it is possible that they could connect into the public stormwater network which could impact discharges to 5 Māmari Road.

Ms Tsang advises that Chapter E36 (Natural hazards and flooding) of the Auckland Unitary Plan (Operative in Part – (AUP(OP)) imposes restriction on activities within the mapped flood hazard areas (i.e. 1% AEP floodplains and overland flow paths), but it does not address downstream flood risks resulting from an increase of impervious built development enabled by a greenfield plan change. It would be problematic to rely on Chapter E36 of the AUP(OP) alone to avoid or mitigate flood impacts of upstream greenfield developments on downstream properties.

3.0 Stormwater Water Quality Treatment

In 9.2 a) of his evidence, Mr Moore suggests that inert building materials are considered industry standard practice and an accepted form of treatment for residential development. In Schedule 4 of the Healthy Waters regionwide stormwater Network Discharge Consent the requirement for Greenfield development is to treat all impervious surfaces to GD01. Although there is an opportunity for an application to consider an alternative treatment approach, it is required that this is demonstrated to be the Best Practicable Option. There is no evidence to support this in the SMP. It should be noted that in 10.2 of his evidence, Mr Moore states that all lots will have a pumped reuse tank for rainwater reuse and directs to Section 6.2.3 of the SMP. Within this section of the SMP there is no reference to reuse included. However, if at least 5mm of runoff will be reused within each property this will form an acceptable BPO for treatment of roof areas and provide the retention component of hydrology mitigation for the roof areas.

It should be noted that the stormwater management set out in the SMP does not provide treatment to the turning heads of each of the newly constructed roads. The SMP states in Section 6.2.3 that future developers of 5 Māmari Road will be required to provide for this treatment. Therefore, a Third Party is being required to mitigate the effects of this development at an unknown time in the future.

4.0 Precinct Provisions

As stated in Attachment 1 of Ms Rivai's evidence, the majority of the recommended stormwater precinct provisions have been accepted by the Applicant. The precinct provisions recommended in the s42A technical assessment, the Applicant's latest proposal and Ms Tsang's comments are provided in the table below.

Precinct provision	S42A recommendation	Applicant's proposed provision	Comments
Objective I1.2.(4)	Stormwater quality and quantity is managed to maintain the health and well-being of the receiving environment and is enhanced over time in degraded areas.	Stormwater quality and quantity is managed to maintain the health and well-being of the receiving environment and is enhanced over time in degraded areas avoid, as far as practicable, or otherwise minimise or mitigate adverse effects on the receiving environment, and the attraction of birds that could become a hazard to aircraft operations at the RNZAF Base Auckland.	(a) Disagree with the objective proposed by the Applicant as it doesn't align with the relevant Regional Policy Statement provisions for stormwater management in Chapters B7.3 Freshwater systems and B7.4 Coastal water, freshwater and geothermal water in the AUP(OP). These provisions direct that degraded freshwater systems are enhanced (Objective B7.3.1(1)) and freshwater quality is maintained where it is excellent or good and progressively improved over time where it is degraded (Objective B7.4.1(2)), in addition to adverse effects being avoided, remedied or mitigated.
			(b) No objection to the submission by the RNZAF Base Auckland in relation to bird attraction, however, consider that the two different topics will be better addressed by two separated objectives.
Policy 11.3.(4)	Require subdivision and development to be consistent with any approved stormwater management plan including in particular:	Require subdivision and development to be consistent with any approved stormwater management plan including <u>by</u> in particular:	(a) Disagree with the change of wording from 'enhance' to 'minimise effects on' for the same reasons discussed above.
	(a) Requiring management of runoff from all impervious surfaces to enhance water quality and protect the health of the receiving environment;(b) Promotion of the treatment train approach to achieve water quality and hydrology mitigation;	 (a) Requiring management of runoff from all impervious surfaces to enhance minimise effects on water quality and protect the health of the receiving environment; (b) Promoting a en of the treatment train approach to achieve water quality and hydrology mitigation; 	(d) Disagree with the proposed deletion. Timing of subdivision and development shall align with the provision of stormwater infrastructure as proposed in the Applicant's SMP and discussed in Mr Moore's evidence. This is to ensure that there is sufficient infrastructure capacity in place at the time of

	(c) Requiring appropriate design and location of stormwater outfalls; and (d)Timing of subdivision and development shall align with the provision of stormwater infrastructure along Māmari Road.	(c) Requiring appropriate design and location of stormwater outfalls; and (d)Timing of subdivision and development shall align with the provision of stormwater infrastructure along Māmari Road. (d) The stormwater management outcomes and devices for the site shall be planned, designed and implemented to avoid attracting birds in order to mitigate the potential for bird strike to impact safety and flight operations at the RNZAF Base Auckland.	development and that flooding risks downstream are not exacerbated by development within the precinct. Accept evidence by Ms Rivai regarding the need to provide for flexibility and therefore recommend Policy I1.3.(4)(d) to be amended as follows: Timing of subdivision and development shall align with the provision of stormwater infrastructure along Māmari Road to mitigate downstream flood impacts. No objection to the submission by the RNZAF Base Auckland in relation to bird attraction.
Standard I1.6.2.(1)	 (1) Stormwater Infrastructure Capacity: Purpose: To ensure that there is sufficient infrastructure capacity in place at the time of development and that flooding risks within the precinct and further downstream are not exacerbated by development within the precinct. (a) Discharge of stormwater runoff from subdivision and development cannot occur until the necessary stormwater infrastructure in Māmari Road is in place or until appropriate mitigation exists. 	(1) Stormwater Infrastructure Capacity: Purpose: To ensure that there is sufficient infrastructure capacity in place at the time of development and that flooding risks within the precinct and further downstream are not exacerbated by development within the pPrecinct. (a) Discharge of stormwater runoff from subdivision and development cannot occur until the necessary stormwater infrastructure in Māmari Road is in place or until appropriate mitigation exists.	(a) Accept evidence by Ms Rivai regarding the need to provide for flexibility and therefore recommend Standard I1.6.2.(1)(a) to be amended as follows: Discharge of stormwater runoff from subdivision and development cannot occur until the necessary stormwater infrastructure in Māmari Road is in place or until appropriate mitigation exists to mitigate downstream flood impacts.
Standard I1.6.2.(2)	(2) Water Quality (a) Stormwater runoff from all impervious areas other than roofs must be either: i. treated at-source by a stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management	(2) Water Quality (a) Stormwater runoff from all impervious areas other than roofs and pervious pavers must be either: i. treated at-source by a stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management	(a) No objection to the inclusion of pervious pavers.(b) Based on Mr Moore's evidence and Mr Curtis' advice in Section 3 above, should rainwater reuse be proposed the standard below is recommended:

	Devices in the Auckland Region (GD01)' or 'Stormwater treatment Devices Design Guideline Manual (TP10)'; or ii. treated by a communal stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)' that is designed and authorised to accommodate and treat stormwater from the site. (b) Stormwater runoff from roofs must be: i. Constructed of inert building materials and directed to an approved stormwater management device.	Devices in the Auckland Region (GD01)' or 'Stormwater treatment Devices Design Guideline Manual (TP10)'; or ii. treated by a communal stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)' that is designed and authorised to accommodate and treat stormwater from the site. (b) Stormwater runoff from roofs must be: i. Constructed of inert building materials and directed to an approved stormwater management device. Roofs must be constructed of inert building materials.	Roofs must be constructed of inert building material with runoff directed to a tank sized for the minimum of 5mm retention volume for non-potable reuse within the property.
Assessment criteria I1.8.2(2)	 (a) Stormwater and Flooding i. Whether development and/or subdivision is in accordance with an approved Stormwater Management Plan and policies E1.3(1) – (14). ii. The design and efficiency of infrastructure and devices (including communal devices) with consideration given to the likely effectiveness, whole lifecycle costs, ease of access and operation and integration with the surrounding environment. iii. Whether the proposal for development and/or subdivision provides sufficient floodplain storage, including attenuation storage, within the precinct to avoid increasing flood risk within the receiving environment. iv. Whether there is sufficient infrastructure capacity to provide for flood conveyance and protect land and infrastructure. (b) Servicing 	 (a) Stormwater and Flooding i. Whether development and/or subdivision is in accordance with an approved Stormwater Management Plan and policies E1.3(1) – (14). ii. The design and efficiency of infrastructure and devices (including communal devices) with consideration given to the likely effectiveness, whole lifecycle costs, ease of access and operation and integration with the surrounding environment. iii. Whether the proposal for development and/or subdivision provides sufficient floodplain storage, including attenuation storage, within the precinct to avoid increasing flood risk within the receiving environment. iv. Whether there is sufficient infrastructure capacity to provide for flood conveyance and protect land and infrastructure. (b) Servicing 	All recommended assessment criteria have been accepted by the Applicant.

i. Whether there is sufficient capacity in the existing or	i. Whether there is sufficient capacity in the existing or	
proposed stormwater network to service the proposed	proposed stormwater network to service the proposed	
development that is enabled by the precinct.	development that is enabled by the precinct.	
ii. Where adequate network capacity is not available,	ii. Where adequate network capacity is not available, whether	
whether adequate mitigation is proposed being consistent	adequate mitigation is proposed being consistent with an	
with an integrated stormwater management approach.	integrated stormwater management approach.	
(c) Assessment criteria E9.8.2(1) apply.	(c) Assessment criteria E9.8.2(1) apply.	

5.0 Conclusions and Recommendations

The majority of the recommended stormwater precinct provisions have been accepted by the Applicant. However, no further assessment of flood impacts on 5 Māmari Road has been provided with the evidence. With the limited assessment provided, it is not possible to quantify effects on 5 Māmari Road.

Our recommendation therefore remains.

More detailed assessment is required to ensure that the frequency, duration and extent of flooding on 5 Māmari Road as a result of future developments enabled by PPC 86 are identified and that any potential flooding and stormwater runoff effects will be avoided or mitigated. Until such assessment is provided, we do not support PPC 86 from a stormwater and flooding perspective.