

Private Plan Change 81 – Dargaville Racecourse

Section 42A of the Resource Management Act 1991 - Planning Report

Resource Consent Application	
Applicant	Dargaville Racing Club Incorporated
Property to which the proposal relates	Corner of State Highway 14 and Awakino Point North Road, Dargaville legally described as Part Lot 37 DP 7811 (NA692/361) and Part Lot 37 DP 27168 (NA689/300)
Activity Description / Consent/s Sought	To rezone a 47ha site from Rural Zone under the Operative Kaipara District Plan to a Development Area that provides for a mixture of zones including Residential, Neighbourhood Centre, Open Space and light Industrial.
Hearing Commissioner/s	Cm Mark Farnsworth (Chair) Cm Michael Campbell Cm Cr Jonathan Larsen.
Notification Period	29 August 2022 - 27 September 2022
Further Submission Period	1 November 2022 – 15 November 2022
Hearing Date	27 March 2023 - 29 March 2023
Hearing Location	Lighthouse Function Centre at the Dargaville Museum.

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- K. Lands and Survey Stormwater response
- L. Second Memo Stormwater Infrastructure Engineer - AWA

Abbreviations used in this report:

ALE	Assessment of Landscape Effects
CDP	Comprehensive Development Plan
CEA	Civil Engineering Assessment
CTC	Commute Transportation Consultants
DAP	Development Area Plan
DRC/Applicant	Dargaville Racing Club Incorporated
EIA	Economic Impact Assessment
Geotech	Geotechnical Assessment
GRA	General Residential Area
ITA	Integrated Transportation Plan
KDC	Kaipara District Council
KDP	Operative Kaipara District Plan

KDSP 2050	Kaipara District Spatial Plan – Nga Wawata 2050
KSPP	Kaipara Spaces and Places Plan 2021-2030
KWCS 2017	Kaipara Walking and Cycling Strategy 2017
LDE	Land Development and Engineering Limited
LIA	Light Industrial Area
LLRA	Large Lot Residential Area
LTP	Long Term Plan
MDA	Market Demand Analysis
MURD	Multi-Unit Residential Development
NCA	Neighbourhood Centre Area
NES-CS	National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011
NES-FW	National Environmental Standard for Freshwater 2020
NPS-HPL	National Policy Statement for Highly Productive Land 2022
NPS-FM	National Policy Statement for Freshwater Management 2020
NPS-UD	National Policy Statement for Urban Development 2020
NRC	Northland Regional Council
NRPS	Northland Regional Plan
NTA	Northland Transportation Alliance
NZCPS	New Zealand Coastal Policy Statement
OSA	Open Space Area
PPC81	Private Plan Change 81
PRP	Proposed Northland Regional Plan
RAQP	Regional Air Quality Plan
RMA	Resource Management Act 1991
RWSP	Northland Regional Water and Soil Plan
s42A	Section 42A report
SH14	State Highway 14
SIA	Social Impact Assessment
TDA	Trifecta Development Area

UDA	Urban Design Assessment
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1.0 Introduction

1. This report is prepared on behalf of Kaipara District Council (“**KDC**”) under the provisions of Section 42A (“**s42A**”) of the Resource Management Act 1991 (“**RMA**”) for Private Plan Change 81 (“**PPC81**”). The applicant for PPC81 is Dargaville Racing Club Incorporated (“**DRC**” or “**the Applicant**”). The purpose of this report is to assess PPC81 under the relevant provisions of the RMA, taking into account the submissions received and to provide recommendations to the Commissioners on the issues presented.
2. Section 42A(1) of the RMA provides for a Council Officer or Consultant to prepare a report of relevant information provided by the Applicant or any person who made a submission on any matter described in Section 39(1) of the RMA, and allows the decision-maker to consider the report at the hearing.
3. This s42A report has been prepared by Louise Cowan. A statement of qualifications and experience for the author is included below.

Qualifications & Experience

4. My full name is Louise Grace Cowan.
5. I am employed as a Principal Planning and Policy Consultant at 4Sight Consulting Limited (Part of SLR) based in Hamilton.
6. I hold a Bachelor of Resource and Environmental Planning from Massey University and have been employed as a Planner within both the public and private sectors for 22 years. I have experience in the preparation and processing of applications for resource consent, District Plan review processes and private plan changes and have attended Environment Court Mediation and Environment Court proceedings acting on behalf of Ruapehu District Council and Waikato District Council respectively.
7. I have been engaged by KDC to provide planning evidence in respect of the private plan change application described within paragraph 5 above and Section 4.0 below.
8. I declare that I have no conflict of interest regarding this work.
9. I have read the information submitted as part of the Application, including and information supplied in relation to clause 23 of the First Schedule of the RMA.

Expert Witness – Code of Conduct

10. I confirm that the evidence on planning matters that I present is within my area of expertise and I am not aware of any material facts which might alter or detract from the opinions I express.
11. While I acknowledge that this hearing is not bound by the “Code of Conduct for Expert Witnesses” contained in the Environment Court Consolidated Practice Note 2014, I have nevertheless prepared my evidence in compliance with that Code, and I agree to comply with it throughout the hearing process.
12. The opinions expressed in this evidence are based on my qualifications and experience and are within my area of expertise. Where I rely on the evidence or opinions of another, my evidence acknowledges that position, and I explain that reliance.

2.0 The Site and Context

Site and Surrounding Environment

13. The site of PPC81 (hereon referred to as “**the site**”) is located on the corner of State Highway 14 (“**SH14**”) and Awakino Point North Road, Dargaville and is legally described as Part Lot 37 DP 7811 (NA692/361) and Part Lot 37 DP 27168 (NA689/300). Both titles contain a gazette notice declaring part adjoining road SH14 to be a limited access road and both also contain a notice pursuant to Section 91 of the Transit New Zealand Act 1989 (now renamed as the Government Roding Powers Act 1989). I do not consider that these encumbrances will affect the processing of PPC81.
14. The site encompasses an area of 47.0776ha. It is located approximately 3km north-east of the urban edge of Dargaville.
15. The site previously housed the Dargaville Racecourse and contains associated buildings, fencing and infrastructure connected with this past use. The current use of the site includes seasonal kumara cropping inside of the old racetrack, with the remainder of the site being covered in grass. The eastern quarter of the site is leased and grazed as part of a neighbouring dairy farm operation. Other uses at the site include a portion of land in the south-western corner of the site, toward SH14, utilised by Dargaville Pony Club for Club related activities. A portion of the site has been allowed to become overgrown with a mix of gorse, pampas, pine and native shrubland species including manuka. It appears that this area was used in the past for cross country eventing, and a number of the jumps and obstacles remain.
16. The site is mostly flat with a low lying landscape that reflects its riverine formative processes. The site is located within a wide meander of the Wairoa River,¹. The low lying landscape has been historically drained and there are a number of drains evident within the site. The site also contains an area of rolling topography rising up along the north-eastern boundary culminating in a hillside knoll at the northern corner of the property.
17. The receiving environment beyond the site is predominantly pastoral grazing, including some kumara cropping, with a number of rural residential properties present given the proximity to Dargaville. The Northland Field Days site is located approximately 500m to the south on Awakino Point East Road. This property is visually separated from the site by vegetation, although glimpse views of the site are possible from the road to the east of the show grounds property.
18. A number of rural residential properties occupy the elevated land on the north-western boundary of the site. These lots, along with a property immediately to the north, form a small, clustered settlement. Awakino Point North Road defines the south-eastern boundary of the site. A number of rural residential properties are accessed from this road. Dwellings within several of these properties offer relatively proximate views across the road to the site.
19. The south-western, and mid sections of Awakino Point North Road reflect the open and exposed character of the flood plain landscape. Unsealed, and with only occasional dwellings located close to the road, the corridor displays a strongly rural character. The character of the north-eastern end of the road is

¹ Appendix 10 Assessment of Landscape Effects Section 4.2.

influenced by the presence of a cluster of dwellings, including a number within smaller properties. Some of these have established gardens and this lends the road corridor a rural residential character. A similar pattern of sporadic small residential lots are accessed from Awakino Point East Road². Within the wider landscape, land holdings tend to be more extensive, but to the south-west along the State Highway 14 corridor a ribbon of lots extend to the south-west to link with the eastern end of Dargaville.

20. Dargaville is the closest town, being a community of around 5,000 residents, with the town centre located on the banks of the Northern Wairoa River to the south and at the intersection of SH14 and SH12.
21. A site visit was undertaken on 28th September 2022. Photographs which illustrate parts of the site description above are provided as Figure 1 to Figure 3 below.



Figure 1 Example of existing structures within the site.



Figure 2: View across the site looking north-east. Raised knoll to the left. Disused jump structures in foreground.

² Appendix 10 Assessment of Landscape Effects Section 4.4.



Figure 3: View across the site toward elevated land to the north west.

District Plan Context

22. In accordance with the provisions of the Kaipara District Plan (Operative 2013) (“KDP”) the site is zoned Rural (Map Series One) and is not subject to any Sites, Features or Units (Map Series Two). Refer Figure 4 and Figure 5 below.



Figure 4: Map Series One: Land Use – Site Outlined in Yellow.



Figure 5: Map Series Two: Sites, Features and Units – Site Outlined in Yellow.

- 23. It is noted that D32, being the designation for Railway Purposes, is located just to the west of the site along with D54 for State Highway purposes. A 50kV Electricity Transmission Line runs to the west and north (orange dashed line) while Reserve Management Unit 11, being a local purpose reserve, is located to the east of the site (refer Figure 5).
- 24. As identified in Appendix C: Flood Susceptibility Areas (Map 1 of 2) of the KDP the site is identified, in part, as being an Area Susceptible to Flooding (Purple colour within Figure 6 below). However, this part of the site is comparatively small. In contrast, as can be seen from the map below, many of the nearby sites closer to Dargaville and/or the Northern Wairoa River are identified as being entirely susceptible to flooding.

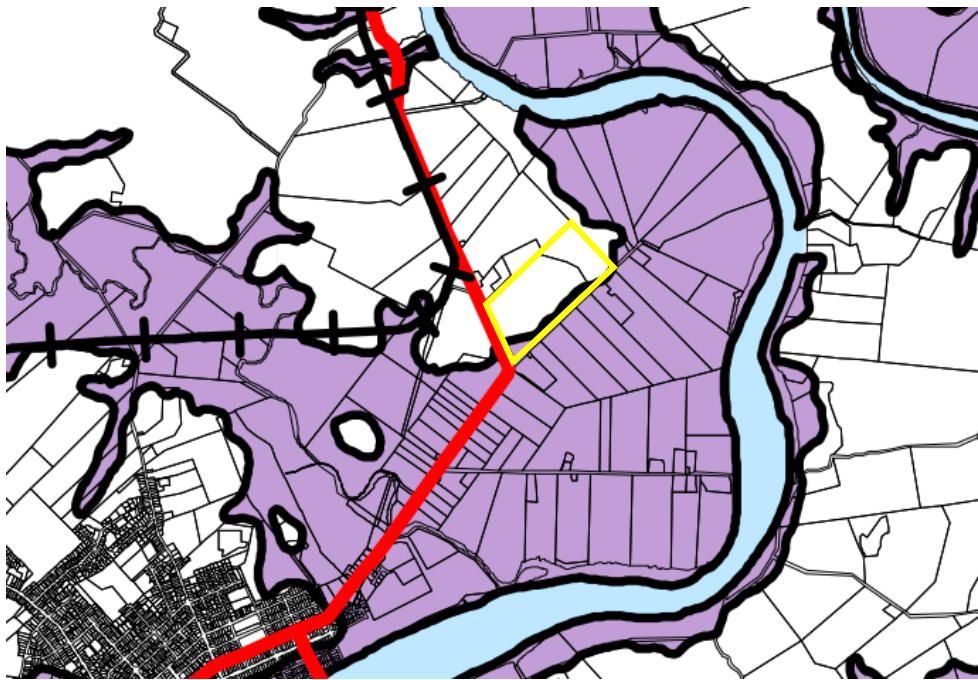


Figure 6: Flood Susceptibility Areas: Site Outlined in Yellow.

25. SH14 is identified within Appendix D: Road Hierarchy of the KDP as State Highway. There are no arterial or collector roads within the vicinity of the site. The site has frontage to SH14 and Awakino Point North Road, being a local road.
26. The site is not identified as containing Kiwi Habitat, nor are there any Outstanding Natural Landscapes associated with the site.
27. The adjoining sites consist entirely of Rural zoned land, portions of which, as noted above, are also within the Flood Susceptibility Areas.
28. For further context it is noted that the site adjoins, but does not fall within, the Greater Structure Plan Policy Area for Dargaville, that identifies land for future urban development (Chapter 3 of the KDP). The site is outlined in red within Figure 7 below, showing its proximity and relationship to the Greater Structure Plan Policy Area.

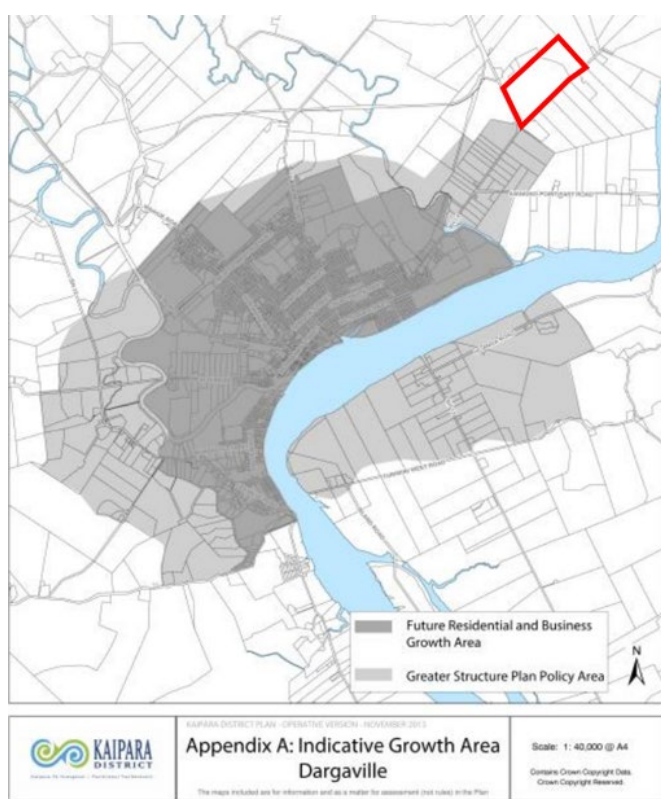


Figure 7: Indicative Growth Area Dargaville. Site Outlined in Red. Greater Structure Plan Policy Area Light Grey.

3.0 Description of the Plan Change

29. As noted above, the site comprises approximately 47ha of land which is zoned entirely as Rural within the KDP.
30. PPC81 is detailed at length within paragraphs 57 to 130 of the document titled “*Dargaville Racecourse Private Plan Change Request – Statutory Assessment Report – Corner State Highway 14 and Awakino Point North Road – Dargaville Racing Club Inc*” prepared by Lands and Survey. For clarification a summary of PPC81 is provided below.

31. PPC81 seeks to rezone the site, via the provision of an entirely separate KDP chapter, to provide for a mixture of residential, light industrial, neighbourhood centre (including the Hauora Hub) and open space areas.
32. The Applicant has provided a 'working title' for the PPC81 chapter of 'Trifecta Development Area'³ ("**TDA**"). The TDA chapter is to include objectives, policies, rules and information requirements for the different areas.
33. The Applicant seeks that Map 10 (Series One and Two) of the KDP be amended to reference the TDA. The Applicant also seeks the inclusion of an additional map (identified as 10A) showing the spatial extent of the different areas, the Hauora Hub and the indicative layout for the roads and the blue/green network.
34. The Applicant has noted:
- Some of the KDP rules have been utilised in the TDA Chapter, including rules in relation to excavation and fill.
 - The Applicant has utilised the Whangarei District Council Engineering Standards for the indicative design work for the Plan Change, e.g. indicative street layout.
 - PPC81 seeks a revised planning framework for the TDA compared to the framework used in the KDP, particularly for the two residential areas and the neighbourhood centre. The Applicant has stated that the "*ODP planning framework does not align with the NP [National Planning] Standards, the Tripartite Group's vision, best practice urban design and planning principles.*"⁴
35. I am of the opinion that picking up the names of zones from the National Planning Standards and replacing the word 'zone' with 'area' could lead to confusion, as the actual base zone will be a Special Purpose Zone, rather than the site being split zoned into NZ Planning Standard zones. It is my suggestion that the Applicant reconsider the drafting of the TDA provisions to identify the Trifecta Residential Area or similar to make it clear that these are a set of rules for this bespoke zone only. In my opinion there is no need for the names of the different areas themselves to align with the National Planning Standards.
36. The five different areas proposed within the TDA are identified as follows:
- General Residential Area – ("**GRA**") – 23.67ha
 - Large Lot Residential Area – ("**LLRA**") – 3.44ha
 - Light Industrial Area – ("**LIA**") – 9.53ha
 - Neighbourhood Centre Area – ("**NCA**") – 0.28ha
 - Open Space Area – ("**OSA**") – 5.75ha
37. The Development Area Plan ("**DAP**") for the TDA is attached as Appendix 2 to the Application and is reproduced as Figure 8 below.

³ The Applicant has requested that the working title of 'Trifecta' Development Area will be replaced before a decision is released on the Plan Change. A consequential amendment is sought to enable this.

⁴ Paragraph 62 of Dargaville Racecourse Private Plan Change Request Statutory Assessment Report.

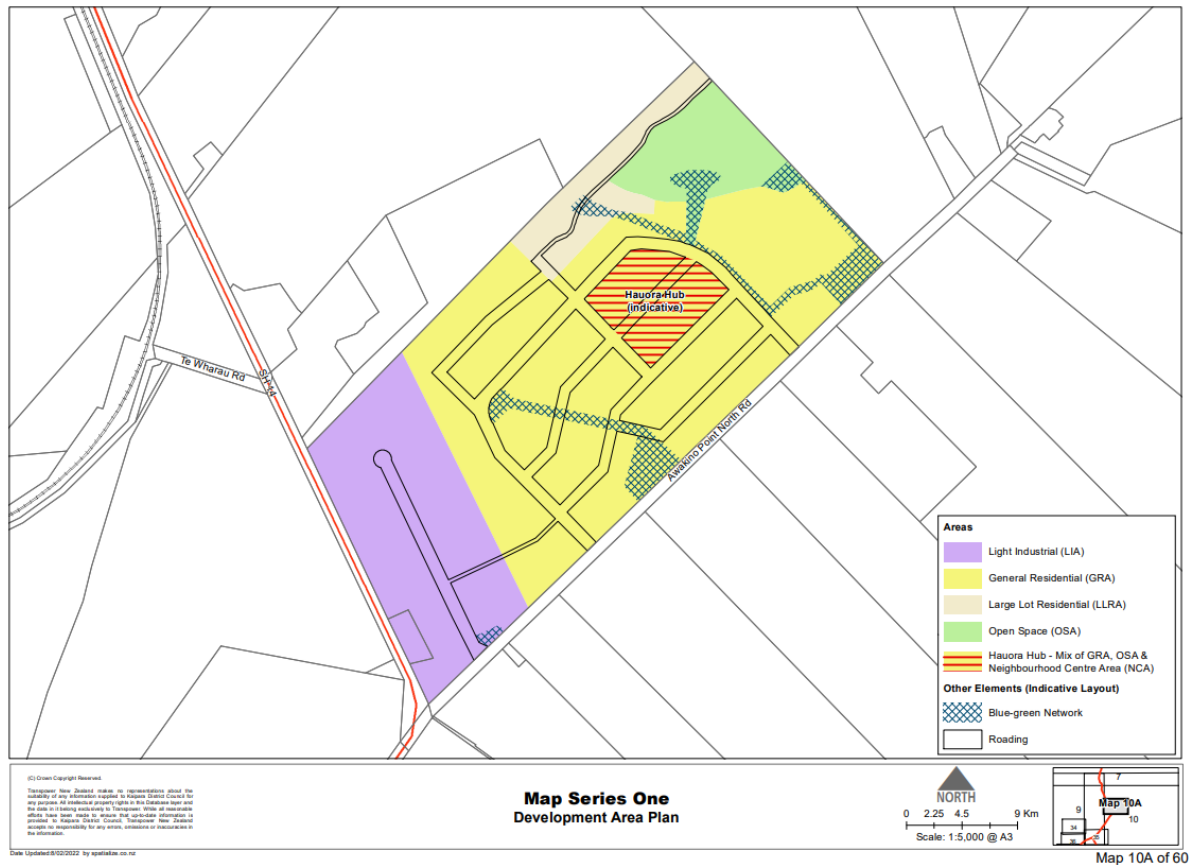


Figure 8: Map Series One – Development Area Plan

38. It is noted that the National Planning Standards identify a development area as a means to spatially identify and manage areas where plans such as concept plans, structure plans, outline development plans, master plans or growth area plans apply to determine future land use or development. When the associated development is complete, the development area spatial layer is generally removed from the plan, either through a trigger in the development area provisions or as part of a later plan change. It is noted that no such trigger to remove the DAP is included in the provisions as provided by the Applicant.
39. Additionally, the application documentation indicates that development of the site is likely to be undertaken in stages, due to the overall size of the development and implementation costs. An indicative staging plan was provided as part of the Comprehensive Development Plan (“CDP”) included with Appendix 8 of the Application. This plan is reproduced as Figure 9 below. No staging triggers, restrictions or assumptions are identified within the provisions as provided by the Applicant.

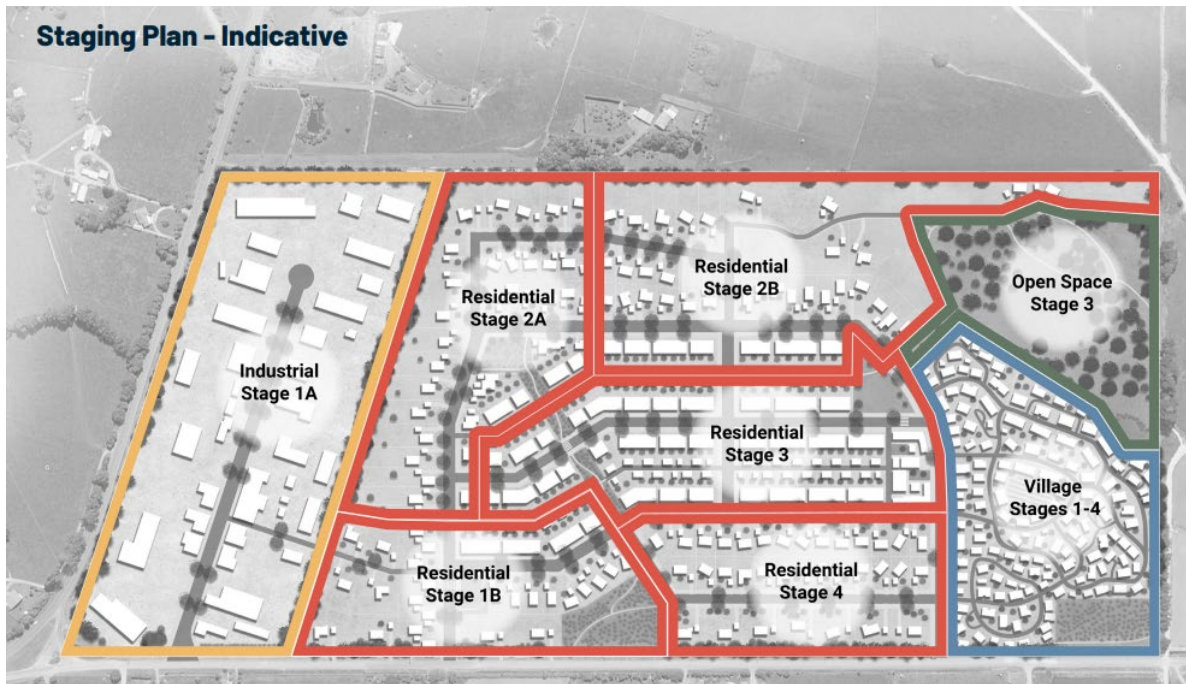


Figure 9: Indicative Staging Plan

40. The Applicant has identified design principles: environmental sustainability; intergenerational resilience; Hauora (community wellbeing) through being people-centred – connected, safe and inclusive; and complement not compete with Dargaville.
41. The Applicant has identified a key factor of the development as the Hauora Hub, this was discussed as follows:
42. *“The TDA map shows a centrally located hatched area called the Hauora Hub. The Hauora Hub denotes the spatial extent within which a mix of three land use Areas will establish, being the NCA, a connected OSA, with the remaining spatial area being taken up with the GRA. The final orientation and positioning of the NCA and OSA within the Hub’s extent will be determined by a resource consent implementing a CDP. The Development Area rules require that the CDP is undertaken before the GRA is developed. The CDP map shows an example of how the three different land uses could establish within the Hauora Hub, once implemented. It is noted that the CDP is for illustrated purposes only.”*
43. *“From a planning perspective, the Hauora Hub is largely an implementation tool. The intent of the Hauora Hub is to give a degree of flexibility for where the NCA and connected OSA are spatially located, while giving enough certainty that these two Areas will be established within the spatial extent shown as the Hauora Hub. Once implemented through the Comprehensive Development Plan, the Hauora Hub will be replaced by the three Areas. However, the outcome of Hauora or community wellbeing will be enduring through GRA and OSA objectives, policies and rules.”*
44. *“‘Hauora’ is a Māori concept of holistic health and wellbeing. The Hauora Hub is intended to be the heart of this new neighbourhood. Local shops and community facilities and services will be located within the NCA. The GRA within the Hauora Hub will be provided with convenient access to amenities, as it is co-located with the commercial activities, community facilities and OSA. This supports Hauora – holistic community health and wellbeing. This is also seen as an opportunity for multi-generational living. This outcome will also be achieved through objectives and policies that support compact density for the GRA*

when located in proximity to the NCA, because of the proximity to services, facilities and amenities. The OSA located within the Hauora Hub will be spatially connected to the NCA which supports the outcome of Hauora. Collectively creating wellbeing for this community - Hauora.”

45. *“The concept of Hauora is an overarching outcome desired for the whole Development Area, i.e. this new neighbourhood achieves an outcome of community wellbeing. From an urban design perspective, outcomes for each Development Area have been developed to align with and give effect to the concept of Hauora.”*
46. I note that the Applicant has not clearly identified why the Hauora Hub is essentially another layer over the top of the NCA, OSA and GRA. It is also not shown as a separate “stage” in the staging plan.
47. The Applicant has advised that once implemented through the Comprehensive Development Plan (“CDP”), the Hauora Hub will be replaced by the three Areas. I consider the role of the CDP is not as a mechanism that can replace any part of the DAP, merely that it can provide more specificity for what happens within the Hub. The Applicant has identified that Community Wellbeing outcomes are intended to be specified through the objectives, policies and rules of the GRA and OSA. However, it is noted that there are no specific separate objectives in relation to the GRA or OSA provided with the TDA provisions.
48. The different “Areas” proposed within the TDA are identified as follows:
- General Residential Area
49. Average Lot size and area per dwelling unit of 500m², with a minimum area of 400m², as a Permitted Activity.
50. Three or more attached or detached residential units, less than 500m² average density, or less than 400m² but not less than 300m² minimum per dwelling, as a Restricted Discretionary activity. Applications would be required to provide an Urban Design Statement and address traffic and stormwater issues.
51. Multi-Unit Residential Development (“**MURD**”) is provided for, including Retirement Village and Papakainga style living, which may include shared facilities, amenities or services. To ensure a well-functioning urban environment, applications for MURD will require an Urban Design Statement, the contents of which will be guided by the Information Requirement GRA-REQ1.
52. Higher residential density is supported through objectives and policies when it is located in proximity to the Neighbourhood Centre Area.
53. Additional setbacks for buildings and screen planting are required when residential development is proposed on sites adjoining the Rural zone, the Light Industrial Area, or Awakino Point North Road to manage any potential reverse sensitivity and compatibility effects.
54. For dwellings fronting the Primary Access Road [not defined or identified on the DAP], rear laneways are intended for vehicle access, garaging, etc. It is acknowledged that the Roding layout is indicative and the road design to be implemented will be undertaken at time of subdivision or comprehensive development.
55. The Applicant has indicated that a CDP is to be completed for the design and layout of the three Areas (including the GRA) within the Hauora Hub before the GRA is developed. Matters of discretion guide the

development of this CDP. I note that the provisions that require the development of the CDP and how this will influence consent applications going forward, are not clear.

Large Lot Residential

56. Minimum Lot size of 4,000m².
57. On site servicing for three waters - water, wastewater & stormwater.
58. As a Permitted activity can establish 1 dwelling unit per site, plus a minor residential unit. If more residential units, or smaller Lot size than 4,000m² is proposed, then will require a Discretionary Activity Resource Consent.
59. Papakainga style living and Retirement Villages are not provided for in this Area.
60. Additional setbacks for buildings are required if adjoining the Rural zone to manage any potential reverse sensitivity effects.

Neighbourhood Centre Area

61. The intention of the Neighbourhood Centre Area (“**NCA**”) is to provide for accessible neighbourhood community activities that provide goods, services and facilities to meet the day to day needs of the surrounding community. The local shops within NCA provide a limited range of everyday goods and services. Community facilities can include shared community spaces (e.g. hall), health care facilities, and early childhood facilities (e.g. kohanga reo). The NCA will be located within the Hauora Hub. The NCA will be fully serviced by reticulated wastewater, water and stormwater.
62. The provisions include a maximum Gross Floor Area (GFA) of 200m² per individual commercial activity premise, and 300m² for each community activity.
63. A CDP to be completed for the design and layout or the design and layout of the three Areas (including the NCA) within the Hauora Hub before the NCA is developed. Matters of discretion guide this CDP.
64. If adjoining a GRA, the potential compatibility effects will be managed by controlling potential adverse effects at their source rather than at the receiving site. For example, noise generating activities within the NCA will be required to control noise at the source.

Open Space Area

65. There are four types of Open Space Area (OSA) within the TDA:
 - Hillside OSA located on the elevated portion of the TDA. This OSA will be vested as public reserve in Council.
 - Hauora OSA connected with the Neighbourhood Centre Area.
 - Neighbourhood OSA (‘pocket park’) in easy walkable proximity to be used by the surrounding neighbourhood for a variety of outdoor informal recreational activities and community uses, such as walking, running, cycling, relaxing, socialising and picnics.
 - Blue-Green OSA, having the dual purpose for stormwater management and walking/cycling linkage.

66. Only the Hillside OSA and the Blue-Green OSA (indicative layout) is shown on the Development Area map (Figure 8). The Hauora OSA connected to the NCA will be determined when the CDP is undertaken for the Hauora Hub. The Neighbourhood OSA will be determined at time of subdivision or comprehensive development within the GRA. The Blue-Green OSA will be determined when the Stormwater Management Plan is undertaken at time of subdivision.
67. The OSA provisions provide for a CDP to be completed for the design and layout of the three Areas within the Hauora Hub before the OSA is developed. Matters of discretion guide this CDP. The provisions also encourage the area as a habitat for mahinga kai (food gathering) and cultural harvest.

Light Industrial Area

68. The LIA is intended to provide for industrial activities that do not generate objectionable odour, dust or noise. The Applicant has noted that the LIA activities anticipated are unlikely to give rise to significant adverse effects beyond the boundary of the site and include activities such as warehousing, storage, light manufacturing, production, logistics, transport, distribution and servicing activities. Light industrial activities can range in scale and nature.
69. The Applicant has noted that the LIA also provides for trade retail activities that are compatible with industrial activities such as a garden centre, trade supplies, motor vehicle sales or hire premises. Supporting activities such as cafes and takeaway bars are also provided for. Types of commercial activities are restricted so that the LIA complements, and does not compete with, Dargaville.
70. Other non-industrial activities are discouraged so that LIA land is preserved for light industrial and trade type activities. Sensitive activities are restricted within LIA. The external boundaries of the LIA will be managed to ensure reverse sensitivity and compatibility effects are mitigated. This will be achieved through a combination of setbacks, screen plantings, and a 50m buffer from the boundary with the GRA within which only low noise generating activities may establish. Access to the external roading network will be restricted to Awakino Point North Road. Direct access from LIA to SH14 will not be available. The LIA will be fully serviced by reticulated wastewater, water and stormwater.
71. The LIA provisions provide for:
- Light Industrial activities to be undertaken with minimal controls except for sites with an external boundary with the GRA, Rural zone, SH14 or Awakino Point North Road. A combination of screen planting/bund, setbacks or buffers will be required when a LIA site adjoins these areas.
 - Gross Floor Area (GFA) controls and restrictions on the range of commercial activities that can establish in the LIA to ensure retail is restricted to small-scale shops supporting the LIA workers e.g. lunch bars, or retail as a small component of the LIA business, e.g. a small showroom for products manufactured on-site, or trade retail.
 - Storage and parking areas to be screened if located adjacent to SH14 or Awakino Point North Road.

4.0 Statutory Context

72. There are a range of statutory provisions under the RMA that are of relevance to the consideration of requests for private plan changes. These include the provisions applicable to both public and private plan changes as well as specific provisions in the First Schedule of the RMA for private plan changes.

Part 2 of Schedule 1 of the RMA

73. As a private plan change application, the proposal has been initiated by DRC as the Applicant pursuant to Section 73(2) of the Act. Part 2 of Schedule 1 of the Act addresses the procedure for receiving and processing a request to change a District Plan. The application has followed this process as outlined below:

- a. The application was lodged with KDC in the appropriate form on 21 February 2022 by Lands and Survey, a consultant on behalf of DRC. The application was supported by a Planning Assessment and a number of technical reports including:
 - i. Geotechnical Report by Land Development and Engineering, dated 10/02/2022;
 - ii. Civil Engineering Assessment by Lands and Survey, dated 9 February 2022;
 - iii. Integrated Transport Assessment by Stantec, dated February 2022;
 - iv. Economic Impact Assessment by The Urban Advisory, dated December 2021;
 - v. Market Demand Analysis by The Urban Advisory, dated December 2021;
 - vi. Urban Design Assessment by The Urban Advisory, dated January 2022;
 - vii. Social Impact Assessment by The Urban Advisory, dated December 2021;
 - viii. Assessment of Landscape Effects by Simon Cocker Landscape Architecture Limited, dated 9 February 2022;
 - ix. Cultural Impact Assessment prepared by Landform Consulting Limited on behalf of Te Kūihi Hapū, Te Uri O Hau, Te Roroa and Te Parawhau Hapū, dated November 2021;
 - x. Archaeological Report prepared by Horizone Archaeology, dated 20 April 2021; and
 - xi. Acoustic Assessment prepared by Marshall Day Acoustics, dated 21 February 2021.
- b. The application was reviewed by Paul Waanders, District Planner of KDC at that time, and a request for further information / clarification was made pursuant to Clause 23(1) of Part 2 of the First Schedule of the RMA on 26 March 2022. No formal date was specified for receiving the final further information and feedback, but a decision was made on 19 July 2022 to submit PPC81 to Council for a clause 25 decision. Several further reports have been commissioned, including in relation to transportation and infrastructure.
- c. KDC “accepted” PPC81 under clause 25(2)(b) of the RMA on 27 July 2022.
- d. The Plan Change was notified on 29 August 2022 in accordance with Clauses 26 and 29 in Part 2 of the First Schedule.10 The submission period closed at 4:30pm on 26 September 2022. Full

copies of the submissions received can be viewed on KDC's website and a summary of submissions is included as Appendix A.

- e. The summary of submissions was notified on 1 November 2022, with the further submission period closing at 5.00pm on 15 November 2022. Full copies of the further submissions can be viewed on KDC's website, with a summary of the further submissions included as Appendix B.
- f. A Hearing for PPC81 has been scheduled to commence on 27 March 2023.

Section 32 Evaluation

- 74. DRC completed and evaluation of PPC81 in accordance with section 32 of the RMA. Section 32(1) states that an evaluation must:
 - a. Examine the extent to which the objectives and policies of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
 - b. Examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by –
 - i. Identifying other reasonable practicable options for achieving the objectives; and
 - ii. Assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
 - iii. Summarising the reasons for deciding on the provisions; and
 - c. Contain a level of detail that corresponds to the scale and significance of the environment, economic, social and cultural effects that are anticipated from the implementation of the proposal.
- 75. An assessment under section 32(1)(b)(ii) must –
 - a. Identify and assess the benefits and costs of the environmental, economic, social and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for –
 - i. Economic growth that are anticipated to be provided or reduced; and
 - ii. Employment that are anticipated to be provided or reduced; and
 - b. If practicable quantify the benefits and costs referred to in paragraph (a); and
 - c. Assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.
- 76. KDC, in addition to meeting the requirements under s74 and s75 of the RMA is also required to meet a number of specific matters contained in s32 of the RMA relating to costs and benefits, risks of acting or not acting, efficiency and effectiveness, economic growth and employment.
- 77. With regard to section 32 analysis provided by the Applicant, I note an assessment of three potential options for the site were provided, being option 1, "*status quo*", option 2, "*rezone in accordance with the Dargaville Spatial Plan as part industrial and part rural*", and option 3 the "*proposed plan change*".
- 78. To my mind both the Kaipara District Spatial Plan and the Exposure Draft Kaipara District Plan identify all of the site for future industrial purposes. As such the assumptions made within the EIA with regard to cost benefit are not entirely comparative with potential future development. I note that the Economic

Impact Assessment identified that industrial development would only occur around 5 years, assumed on the basis that PPC81 does not proceed. Due to the distance between the racecourse land and Dargaville, it was assumed that no development is expected to take place immediately. After 5 years, the front section of the Racecourse site (the area bordering State Highway 14 marked as Light Industrial in the proposed development) is assumed to be developed into large industrial lots which become occupied. The rest of the Racecourse site remains undeveloped and used for grazing. The analysis assumes that any future development of the rest of the Racecourse site, including any infrastructure development required, does not occur until at least 10 years after the Spatial Plan Zoning is implemented.

79. These assumptions do not provide a clear comparison between the potential economic growth and employment opportunities that may occur based on the various options available for the development of the site. In light of this, I consider the current section 32 analysis to be unable to provide an accurate comparison. I would expect to see the following options addressed:
- Status quo;
 - Whole site industrial;
 - Whole site residential; and
 - As proposed with a split between light industrial and residential development.
80. The provisions for PPC81 as currently provided do not follow a formative cascade with clear linkages between the objectives, policies and the consequential rules. I have noted in a number of locations throughout this report, where the current drafting of the PPC81 provisions is not the most appropriate to achieve the identified objectives.
81. The Applicant may wish to provide an amended set of provisions prior to the hearing, however at this time I do not consider the provisions proposed achieve do not efficiently or effectively achieve the desired objectives.
82. These matters are discussed in further detail within my assessment of effects below.
83. Overall, as matters stand, and noting the gaps in information provided in the application as identified here and elsewhere in this report, I am currently unable to conclude, as required under section 32 of the RMA, that the objectives proposed in PPC81 are the most appropriate way to achieve the purpose of the Act, and that the provisions proposed (including the zoning of the land) are the most appropriate way to achieve the objectives.

5.0 Purpose of the Report

84. The purpose of this report is to assess PPC81 under the relevant provisions of the RMA, taking into account the submissions, and further submissions received, and to provide a recommendation to the Commissioners on the issues. It has been prepared in accordance with s42A of the RMA to assist the Commissioners with deliberations.
85. The report includes recommendations to the Commissioners to accept, accept in part or reject submissions collectively by theme under topic headings from the summary of submissions. Where appropriate, it also includes recommended changes to the plan change provisions. In response to

submissions, I have in every instance considered efficiency, effectiveness and appropriateness and my recommendations represent the most appropriate response in accordance with s32AA. In accordance with section 32AA(1)(c), the assessment of each change has been undertaken at a level of detail that corresponds to the scale and significance of the proposed changes.

86. In accordance with clause 29(4)(b) of Part 2 of the First Schedule of the Act, I have provided reasons for my recommendations to allow or not allow submissions or further submissions generally by themes.

6.0 Structure of the Report

87. The report has been structured to provide an assessment of the submissions and further submissions received by KDC, arriving at my recommendation to the Commissioners.

88. All submissions received have been categorised based on themes under topic and subtopic headings used in the summary of submissions (see Columns E and F of the summary of submissions and further submissions table in Appendix A and Appendix B). As some submissions relate to multiple topics, cross references are included to refer to the discussion and recommendation sections of other topics.

89. Topic headings for the submissions assessed within this report are identified within Table 1 as follows:

Topic	Subtopic
PPC81 as Proposed	Proceed as Proposed
	Modify
	Retain as Rural
Roading	Design
	Safety
	Timing
Infrastructure	Three Waters
	Stormwater
	Fire and Emergency
Statutory	Crown Entity
	NPSUD
	Emissions Reduction Plan
	Planning Documents
	Fire and Emergency
	Education
Plan Provisions	Precinct Plan
	Subdivision
	Signage
	Lighting
	Transport
	Objectives and Policies
	Definitions
	Three Waters

	New Provision
Landscaping	Landscaping
Other Matters	Community Facilities
	Pony Club
	Council Decision
	Economic Effect
	Density
Light Spill	Light Spill
Reverse Sensitivity	Reverse Sensitivity
	Set Back
	Economic Effect

Table 1: Summary of Submissions Topic and Subtopic List.

90. While all submitters have been acknowledged in the summary of submissions (Appendix A and Appendix B), due to the similarity of relief sought and reasons given along with the volume of submissions, responses have not necessarily been written for each individual submission point. Responses have been written for individual submissions that raise matters that differ from other submissions within the same thematic group or that request specific amendments to the private plan change provisions.
91. Responses have not been written for all further submissions because the further submissions generally:
- Sought to emphasise the content of the corresponding original submission.
 - Did not present new or additional evidence; or
 - Stated either support or opposition to the original submissions of other submitters.
92. Where further submissions present additional evidence these have been dealt with within the report where the primary submission point has been addressed.
93. The assessment of submissions generally follows the following format:
- Submission Information – summarises matters raised in the submissions with a brief outline of relief sought.
 - Discussion – discusses responses to the relief sought.
 - Recommendation – outlines a recommendation to the Commissioners in response to the relief sought.
94. Given that in my opinion there are aspects of PPC81 where I consider information is inadequate, I have not recommended changes to the notified provisions as part of this report. Subject to the receipt of sufficient information and/or redrafted provisions from the Applicant in evidence, I may provide an updated or amended set as part of an Addendum document.

7.0 Relevant Statutory and Non-Statutory Documents

95. Section 75(3) of the RMA states that a District Plan must give effect to any national policy statement; any New Zealand coastal policy statement; and any regional policy statement. Section 75(4) of that RMA

states that a District Plan must not be inconsistent with a regional plan for any matter specified in section 30(1).

96. The application was submitted with an assessment of statutory and non-statutory documents within sections 242 to 328 of the AEE. Below I provide an assessment of relevant statutory and non-statutory documents for PPC81.
97. Since the notification of PPC81 it is important to note that new national direction came into effect on 17 October 2022 in the form of the National Policy Statement for Highly Productive Land (NPS-HPL). This has not been considered by the Applicant as part of their AEE but will be addressed within my report below.

New Zealand Coastal Policy Statement

98. The New Zealand Coastal Policy Statement (“**NZCPS**”) guides local authorities in their management of the coastal environment. Although the site itself is not located within the coastal environment, activities inland can have impacts on coastal water quality.
99. Objective 6 of the NZCPS seeks to enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that: the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits.
100. Given the distance of the site from the coastal marine area (defined as the area between the line of mean high water springs, being the landward boundary of part of the beach covered by the ebb and flow of the tide, and the outer limits of the territorial sea) there is more than adequate separation between any activities that may occur on the site and any of the more sensitive parts of the coastal environment. As such, any “effects” from the activity will relate solely to indirect impacts on the coastal environment from potential site run off as opposed to the proposal itself being located in a coastal environment.
101. With regard to the above, the plan change proposes the implementation of controls around the disposal of stormwater and construction management techniques to ensure that sediment does not unnecessarily enter waterways during periods of construction and so on. This will ensure that PPC81 gives effect to the Objectives and associated Policies of the NZCPS.

National Policy Statement for Urban Development 2020

102. The National Policy Statement: Urban Development (“**NPS-UD**”) came into force on 20 August 2020 and was amended in May 2022. The NPS-UD applies to all local authorities that have all or part of an “urban environment” within their district and affects planning decisions by any local authority that affect an “urban environment.” Local authorities are either classified as a tier 1, 2 or 3. The Kaipara District is not classified as a tier 1 or 2 area under the NPS-UD. Dargaville is not identified in the NPS-UD as a tier 1 or tier 2 urban environment (urban areas with populations over 50,000 people). However, Dargaville would be classed as a tier 3 urban environment if it fell within the definition of “urban environment” under the NPS-UD.
103. KDC obtained an economic opinion of “urban environment” from Formative, and this is attached as Appendix C to this report. This memo has noted that “*an urban environment that extended no more than*

about 5km from the edge of the current towns' urban areas could be considered to be predominantly urban in character, whereas an area of much greater spatial extent than that would cease to be predominantly urban in character, and would be instead a small urban core (less than 6km across) with a large surrounding rural area." The memo concludes that "in economic and demographic perspective I [the memo author] would not consider Dargaville to be classified as an urban environment under the NPSUD definition."

104. If Dargaville were to fall within the definition of an "urban environment", then PPC81 must give effect to objectives and policies in the NPS-UD. Urban environment is defined under the NPS-UD as:

"Urban environment means any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:

a) Is intended to be, predominantly urban in character; and

b) Is, or is intended to be part of a housing and labour market of at least 10,000 people."

105. As such an "urban environment" must be predominantly urban in character and be part of a housing or labour market of at least 10,000 people.

106. In my opinion, predominantly means a broader urban environment anchored by a core urban area. Based on those parameters, and consistent with the Formative memo (Appendix C of this report), the Dargaville urban area can be considered to be broadly a circle with a 3km radius, and a surrounding ring that extends another 5km, giving an overall "urban environment" equivalent to, in general terms, an 8km radius circle. In my opinion it would be unrealistic to say that any more than a 5km hinterland would contain an environment predominantly urban in character.

107. The growth projections for Dargaville, based on a population of 5,214 people in 2022, are that the population is likely to increase to 6,167 in 2054⁵. As such, Dargaville will not form part of an environment that is predominantly urban, consisting of at least 10,000 people over the life of the upcoming PDP for Kaipara⁶. Dargaville does not form part of a "combined" labour market with other closely located towns and villages as Dargaville represents a geographic area that is relatively self-sufficient in employment terms, with low in-flow and out-flow.

108. These matters will be addressed in greater detail in the legal submissions of Warren Bangma, Counsel for KDC, but in my opinion the NPS-UD does not apply to PPC81.

National Policy Statement for Freshwater Management 2020

109. The National Policy Statement for Freshwater Management ("NPS-FM") came into effect on 3 August 2020, was amended in February 2023 and replaces the National Policy Statement for Freshwater Management 2014 (as amended in 2017). The provisions are to be given effect to "as soon as reasonably practicable".

⁵ Table 1 Sub-District Population Growth – Kaipara District population projections for KDC January 2023 - Infometrics

⁶ Approximately the next 10-15 years depending on the date of the PDP notification and the length of time taken for the PDP to be made operative.

110. The NPS-FM introduces new requirements relating to:
- The management of freshwater in a way that 'gives effect' to Te Mana o te Wai;
 - The improvement of degraded water bodies, and to maintain or improve all others using bottom lines defined in the NPS-FM;
 - An expanded framework of national objectives;
 - Avoidance of any further loss or degradation of wetlands and streams;
 - Identification and working towards target outcomes for species abundance, diversity and fish passage;
 - Setting an aquatic life objective for fish and address in-stream barriers to fish passage over time; and
 - Monitoring and reporting annually on freshwater.
111. PPC81 is required by Section 75(3)(a) of the RMA to give effect to the NPS-FM. The application document specifies in paragraph 250 that there "*are no known water bodies or wetland located within the Plan Change area, and therefore the NPS-FM is not considered relevant to the Plan Change*". However, it is noted in paragraph 251 that "*there is a number of springs on the elevated portion of the subject site, one of which has been modified into a man-made pond for stock water purposes. The proposed blue-green network incorporates these springs*".
112. Wetland as defined in the RMA is as follows:
- Wetland includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.*
113. The definition of natural inland wetland as provided within the NPS-FM is as follows:
- Natural inland wetland means a wetland (as defined in the Act) that is not:*
- (a) *in the coastal marine area; or*
 - (b) *a deliberately constructed wetland, other than a wetland constructed to offset impacts on, or to restore, an existing or former natural inland wetland; or*
 - (c) *a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body; or*
 - (d) *a geothermal wetland; or*
 - (e) *a wetland that:*
 - (i) *is within an area of pasture used for grazing; and*
 - (ii) *has vegetation cover comprising more than 50% exotic pasture species (as identified in the National List of Exotic Pasture Species using the Pasture Exclusion Assessment Methodology (see clause 1.8)); unless*
 - (iii) *the wetland is a location of a habitat of a threatened species identified under clause 3.8 of this National Policy Statement, in which case the exclusion in (e) does not apply.*

- 114. Although I am not an ecologist, I have visited the site, and it is my opinion that the site potentially contains areas of wetland/natural inland wetland as defined above.
- 115. Photographs from my site visit are attached as Figure 10 to Figure 12 below. Both vegetation, including rushes and Machaerina sedges which are obligate (completely dependent) wetland species, and landform are indicative of wetlands although some of these areas may meet the pasture exclusion rules. However, without an assessment from a suitably qualified ecologist I am unable to determine whether the pasture exclusion rules will apply.



Figure 10: Looking north-east across the abandoned jumps area.



Figure 11: Looking north toward the elevated portion of the site.



Figure 12: Looking east across the site from the slightly elevated land to the north.

116. The NPS-FM contains a single objective, which establishes a hierarchy directing how freshwater resources are to be managed, as follows:

The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:

(a) first, the health and well-being of water bodies and freshwater ecosystems;

(b) second, the health needs of people (such as drinking water);

(c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

117. Of particular relevance to this proposal are policies 1, 2, 3, 6, 9 and 15. These are set out in Appendix D to this report.

118. With regard to Te Mana o te Wai and tangata whenua involvement, details are specified within section 8.2 of the Cultural Impact Assessment (Tripartite Group) in relation to potential effects on surrounding waterways. It is noted that there may be the potential for physical change or discharge to waterways or activities that threaten the natural integrity and mauri of the waterways. Specific mitigation measures are proposed within the CIA to ensure Mana Tāngata values and obligations are upheld. These measures include:

- Appropriate erosion and sediment controls shall be established prior to any works commencing on site.

- All land disturbance activities, including the placement of material or structures near waterways, shall be managed by use of appropriate plan change provisions. Such provisions should allow for monitoring by kaitiaki monitors, as appointed by Tāngata Whenua at the time of works, to ensure they are carried out in accordance with tikanga Māori.
- The plan change provisions shall ensure existing waterways/watercourses within the whenua are safe guarded from adverse effects. These provisions shall include no build areas and appropriate setbacks from the puna (spring) and waterways across the whenua.
- Kaitiaki Monitors shall be on site prior to, during and post any earthworks.
- The disposal of wastewater may be provided via on site disposal or Council's reticulated network.
- In accordance with tikanga māori, it is imperative that the discharge of wastewater is cleansed via Papatūānuku.
- The plan change provisions shall ensure where on-site disposal of wastewater is proposed that the system has been designed in accordance with tikanga māori and avoids existing waterways and accounts for the shallow ground water conditions.

119. These matters are addressed further within the CIA (Te Roroa) which notes that the *“health of waterways in the project area is highly significant to Mana Whenua. Any degradation through poor sediment controls are of high concern.”* Specifically, the CIA requests that *“any proposed development is constructed away from wetlands or with bunding measures and collection of contaminated water for treatment, disposal at an approved location or re-use facility.”*

120. At this time, as the Applicant did not consider the NPS-FM of relevance to the site, the provisions of PPC81 as currently drafted do not sufficiently give effect to Te Mana o te Wai or the directions identified within the CIA's in relation to the management of water bodies in accordance with tikanga Māori.

121. Appendix 4 submitted with the application includes Stormwater Management provisions, which have been prepared alongside PPC81 to provide for the management of stormwater from the development. As assessed further within this s42A report below, and relying on the advice received from KDC, the approach to stormwater management proposed as part of PPC81 is aligned with current best practice stormwater management and the implementation of this can be appropriately addressed at the time of resource consent.

122. Policy 6 requires no further loss of extent of natural inland wetlands, including the protection of the values of existing wetlands and the promotion of the restoration of wetlands. Policy 9 requires the protection of habitats of indigenous freshwater species. PPC81 proposes to retain the existing drainage network and watercourses on the site for use within the blue-green network. However, there are no associated objectives, policies or rules within the current provisions which suggest how this could be achieved or how enhancement or protection of any existing habitats can be managed.

123. As the Applicant does not currently consider that there are wetlands/natural inland wetlands within the site, consideration has not been given to the relevance of the NPS-FM to the site.

124. In my opinion information must be provided to confirm that the NPS-FM does not apply to the site. Until such information is provided, I cannot consider that the protection of existing wetland values, the

promotion or restoration of existing wetlands and the protection of habitats of indigenous freshwater species is given effect to through the current provisions of PPC81. Further supporting information and amendments to the PPC81 provisions to address these outstanding concerns would be required prior to the hearing in order for me to amend my position.

National Policy Statement for Highly Productive Land 2022

125. The National Policy Statement for Highly Productive Land 2022 (“NPS-HPL”) came into force on 17 October 2022. The NPS-HPL should be read in conjunction with the guidance document (National Policy Statement for Highly Productive Land - Guide to implementation) published by the Ministry for the Environment in December 2022.

126. The sole objective of the NPS-HPL is:

“Highly productive land is protected for use in land-based primary production, both now and for future generations.”

127. The NPS-HPL contains policies (1 to 9) to support this key objective including policies relating to:

- Avoiding urban or rural lifestyle rezoning or the subdivision of highly productive land;
- The protection of highly productive land from inappropriate use and development;
- The protection of primary production activities on highly productive land from reverse sensitivity effects.

128. The Applicant has supplied a Land Use Capability map of the site, a snippet of which is reproduced as Figure 13 below, the original is included as part of the Additional information on the KDC website [Private Plan Change 81 - Dargaville Racecourse, Kaipara District Council](#). This map identified LUC Class 2, 3 and 4 within the site.



Figure 13: Portion of Land Use Capability map supplied by the Applicant.

129. For the purpose of this report, KDC has also produced a close-up map, based on the Manaaki Whenua online map, which shows the location of various soil types within the site. The map, provided as Figure 10 shows that the LUC 3 land within the northern portion of the site is LUC3e12. There is a strip of land adjoining Awakino Point North Road, identified as nz2-w5 which, in my understanding, equates to LUC 2 land.

130. PPC81 seeks to rezone the LUC 2 land from Rural to a bespoke urban zone (equivalent to a special purpose zone in the National Planning Standards). This urban zone would enable a combination of light industrial and residential activities on the LUC 2 portion of the site, with parts of this land also forming parts of the OSA blue-green network. The LUC 3 land is intended to be used for a combination of large lot residential activities and will also form part of the OSA.

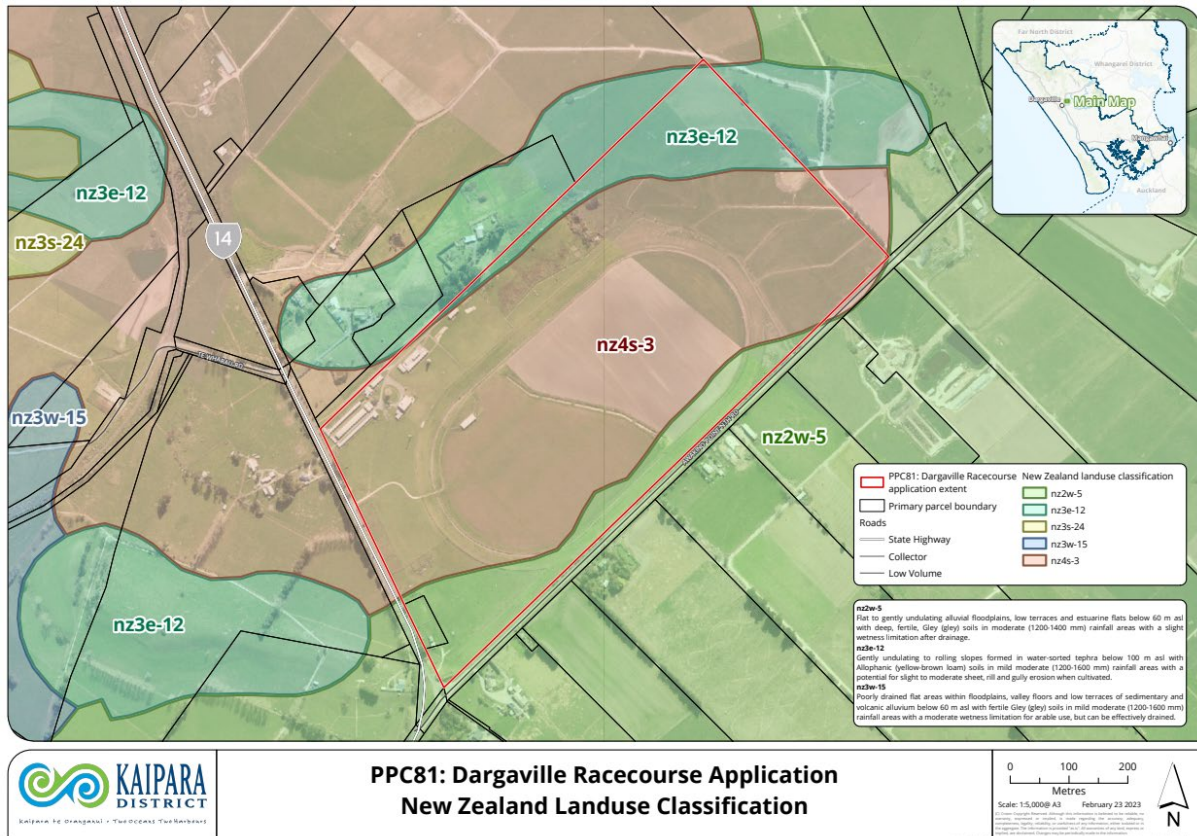


Figure 14: New Zealand Land Use Classification Map produced by KDC

131. The NPS-HPL contains a number of policies, including most relevantly for present purposes:
- “Policy 5: The urban rezoning of highly productive land is avoided, except as provided in this National Policy Statement.”*
132. If the site contains “highly productive land”, and the NPS-HPL applies, then PPC81 will be required to give effect to the objectives and policies of the NPS-HPL under section 75(3)(a) of the RMA.
133. Under the NPS-HPL “highly productive land” is defined as:
- “...land that has been mapped in accordance with clause 3.4 and is included in an operative regional policy statement as required by clause 3.5 (but see clause 3.5(7) for what is treated as highly productive land before the maps are included in an operative regional policy statement and clause 3.5(6) for when land is rezoned and therefore cases to be highly productive land)”*
134. As at the time of writing this report, the Northland Regional Council (“**NRC**”) has not yet notified changes to its regional policy statement to give effect to the NPS-HPL. However, it has until 17 October 2025 (being 3 years from the commencement date of the NPS-HPL) to do so.

135. In the meantime, an “interim” definition of highly productive land applies, under clause 3.5(7) of the NPS-HPL as follows:

“Until a regional policy statement containing maps of highly productive land in the region is operative, each relevant territorial authority and consent authority must apply this National Policy Statement as if references to highly productive land were references to land that, at the commencement date:

(a) Is:

(i) Zoned general rural or rural production; and

(ii) LUC 1, 2, or 3 land; but

(b) Is not:

(i) Identified for future urban development; or

(ii) Subject to Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle.”

136. As mapped above, a small part of the site running down the site’s boundary with Awakino Point North Road is identified in the New Zealand Land Resource Inventory data base as LUC 2 land, with a small portion to the north as LUC 3.

137. In light of the above, the parts of the site that are LUC 2 or LUC 3 are “highly productive land” under the NPS-HPL because as at 17 October 2022 (the commencement date) the site was zoned rural (clause 3.5(7)(a)(i)) and part of the site contains land that is LUC 2 or LUC 3 land (as defined under the NPS-HPL) (clause 3.5(7)(a)(ii)).

138. With respect to the exclusion in clause 3.7(5)(b)(ii), PPC81 was publicly notified on 29 August 2022 (before the commencement date of the NPS-HPL on 17 October 2022) and seeks to re-zone land from general rural to urban. However, the exclusion in clause 3.7(5)(b)(ii) only applies where such plan changes were “initiated” or “adopted” by the Council. As PPC81 is a plan change request that was “accepted” by the Council under clause 25(2)(b) of Schedule 1 of the RMA, this exclusion does not apply.

139. With respect to the exclusion in clause 3.5(7)(b) where, as the commencement date, land was “identified for future urban development” this is defined in the NPS-HPL as:

(a) Identified in a published Future Development Strategy as land suitable for commencing urban development over the next 10 years; or

(b) identified:

(i) in a strategic planning document as an area suitable for commencing urban development over the next 10 years; and

(ii) at a level of detail that makes the boundaries of the area identifiable in practice.

140. With respect to part (a) of the definition, KDC does not have any published “Future Development Strategy”. These are only required under the NPS-UD for tier 1 and 2 local authorities.

141. With respect to part (b) of the definition the site is identified in a strategic planning document, the Kaipara District Spatial Plan – Nga Wawata 2050 (“**KDSP 2050**”), as being future industrial land (i.e. urban).

142. However, the KDSP 2050 has a 30-year time frame. There is nothing in the KDSP 2050 indicating that the site will be industrial within the next 10 years. Furthermore, in my opinion the maps in the KDSP 2050 do not provide a level of detail that means future boundaries of the future areas to be rezoned urban are identifiable in practice. Guidance from the Ministry for the Environment on this matter is that proposals for new urban growth areas signalled in a strategic planning document that cannot meet these two tests are not considered sufficiently well-advanced to justify land being excluded from the transitional definition of highly productive land under the NPS-HPL.
143. KDC consulted on an Exposure Draft Kaipara District Plan in 2022. This document has no statutory weight. However, it is noted within the Exposure Draft that the site is proposed to be zoned heavy industrial, along with another pocket of land to the western side of SH14, shown as purple area in Figure 15 below.



Figure 15: Draft Proposed Kaipara District Plan

144. Additionally, the site is not identified within the Greater Structure Plan Policy Area for Dargaville, which identifies land that is intended for development at some point in the future. Refer Figure 16 below. The land is currently zoned Rural, and there is no specific or “planned” intention for this to change. As such, the land is not identified for “future development” and is therefore not specified within the NPS-HPL as being “suitable for commencing urban development over the next 10 years”. Consequently, the site is not identified for development in a manner that would justify an exemption under clause 3.5(7)(b).

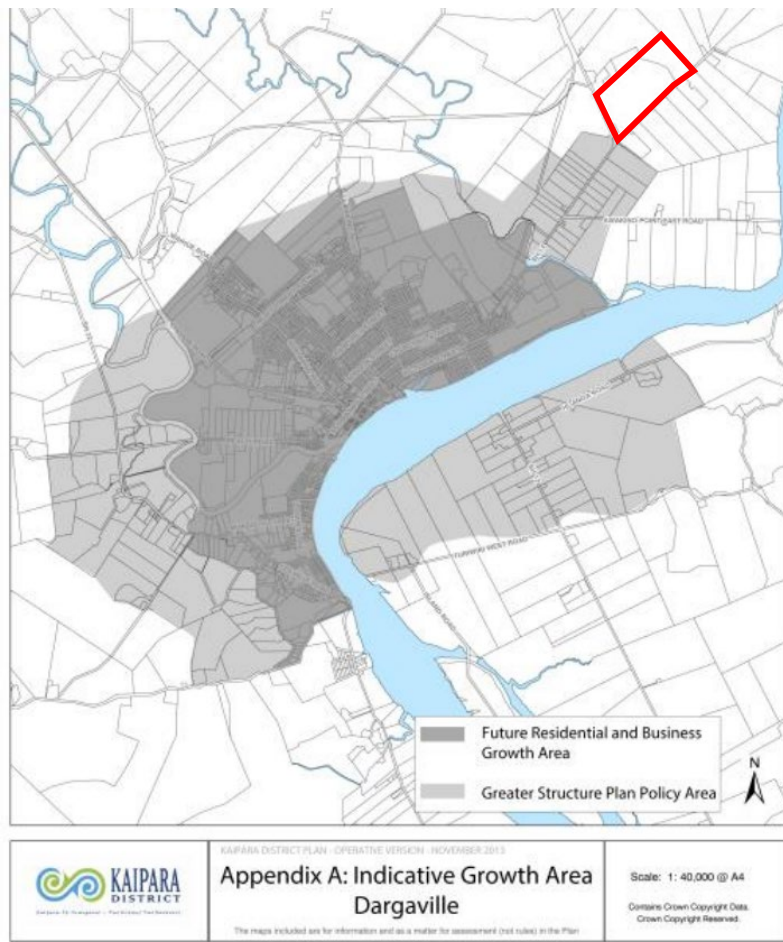


Figure 16: Indicative Growth Area Map for Dargaville – PPC81 site outlined in Red..

145. In my opinion, and on the basis of the above, a small portion of the site to the north containing LUC 3 land and the strip of land within the site that contains LUC 2 soils and runs along the site's boundary with Awakino Point North Road is "highly productive land" and subject to the NPS-HPL.
146. The balance of the site, that contains LUC 4 soils, does not come within the definition of "highly productive land" under the NPS-HPL and the NPS-HPL does not apply. The Guidance from the Ministry for the Environment confirms that where the transitional definition of highly productive land applies to only part of a land parcel and the balance of the land parcel is LUC class 4-8, the NPS-HPL will only apply to that part of the lot that is highly productive land under the transitional definition.
147. Given this, along with the clear direction provided by the NPS-HPL that the urban rezoning of highly productive land is to be avoided, at this time re-zoning of the land identified as LUC 2 into various urban zones is inconsistent with Policy 5 of the NPS-HPL. Additionally, the rezoning of land identified as LUC 3 is inconsistent with Policy 6 of the NPS-HPL which identifies that rezoning and development of highly productive land as rural lifestyle is avoided, except where provided in the NSP-HPL.
148. In my considered opinion I have insufficient information to determine whether rezoning the parts of the site that are LUC 2 and LUC 3 against the urban rezoning tests in clause 3.6 of the NPS-HPL is appropriate or valid.
149. In my opinion a concise and separate assessment in relation to part 3.6 of the NPS-HPL needs to be completed by the Applicant prior to the Hearing.

National Environmental Standard for Freshwater 2020 (NES-FW)

150. Similar to the NPS-FM the National Environmental Standards for Freshwater 2020 (“**NES-FW**”) came into force on 3 September 2020. The NES-FW establishes requirements for carrying out certain activities that pose risks to freshwater and freshwater ecosystems. These provisions are relevant insofar as they relate to the existing watercourses and drainage systems, springs and any potential wetlands that have been identified within the site.
151. However, pursuant to Regulation 5, these regulations deal with the functions of regional councils and not with the functions of territorial authorities. Therefore, potential future infringements of the regulations will require resource consent application to the relevant regional council, which in this instance would be NRC. As such, potential future compliance, or otherwise, with NES-FW is not a relevant consideration as part of PPC81.

National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES-CS)

152. The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (“**NES-CS**”) were gazetted on 13th October 2011 and took effect on 1st January 2012. The standards are applicable if the land in question is, or has been, or is more likely than not to have been used for a hazardous activity or industry and the applicant proposes to subdivide or change the use of the land, or disturb the soil, or remove or replace a fuel storage system.
153. The standards are addressed in paragraph 258 of the AEE. A basic evaluation of the site has been undertaken with regard to the NES-CS using aerial photography and information supplied by the Applicant. The Applicant has advised within the AEE that no HAIL activities appear to have been undertaken on the site. I concur with this assessment.

Northland Regional Policy Statement

154. The Northland Regional Policy Statement (“**NRPS**”) was made operative on 9th May 2016. It identifies significant issues for the region and provides broad direction and a framework for the management of natural and physical resources of the Northland Region and Coastal Marine Areas.
155. An assessment of the relevant objectives and policies of the NRPS is included in Appendix E. The main findings of that assessment are set out in the following paragraphs.
156. The Applicant is proposing enhancement of waterways throughout the site as part of the blue-green network. As noted above on receipt of additional information in relation to the NPS-FM will confirm the ability of the proposal to maintain the extent and diversity of indigenous ecosystems and habitats and give effect to policy 3.3 and 3.4.
157. Confirmation still to be provided regarding the feasibility of the bridging of the Awakino River for wastewater servicing in a manner that will give effect to objective 3.8.
158. Matters in relation to the availability of raw water supply or appropriate alternatives for potable water to be addressed by the Applicant to show how PPC81 can give effect to objective 3.10.

159. Regarding objective 3.13 in relation to natural hazard risk it is noted that the proposed site is the least floodable of other similar sites within the vicinity. Assessment provided within the technical memo (Appendix I) notes “any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we [the author] are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage”. Subject to appropriate design the proposal will give effect to objective 3.13.
160. The Applicant is proposing stormwater detention via the blue-green network. This will give effect to policy 4.2.1. The Applicant is also proposing water storage, although the methods of achieving this are not currently specified through the provisions of PPC81. Water harvesting and storage to meet additional raw water demands will give effect to policy 4.3.4.
161. With regard to the guidance provided by Policy 5.1.1 a although the technical assessment of PPC81 indicates that technical solutions to supplying sufficient potable water to the site are possible (and a design solution could be proposed at the resource consent stage), the provisions of PPC81 do not reflect the potential water supply constraints. As such I cannot fundamentally conclude that there will be sufficient raw water to appropriately supply potable water to development proposed as part of PPC81. Additionally, as noted previously Confirmation is yet to be provided regarding the feasibility of the bridging of the Awakino River for wastewater servicing. As the feasibility of the shared pedestrian/cycleway is yet to be confirmed and this is a key component in relation to providing an opportunity to access a range of transportation modes. The proposal does not give effect to the guidance provided by Policy 5.1.1 a.
162. Policy 5.1.1 b requires subdivision, use and development to be designed, planned and co-ordinated in a manner that is guided by Appendix 2, Part B – Regional urban design guidelines. These guidelines require new developments to have consideration of urban design matters, including context, character, choice, connections, creativity, custodianship and collaboration. An assessment of the proposal against these guidelines is included within the Urban Design Assessment supplied by the Applicant. I concur that this assessment is consistent with the Appendix 2 Part B of the NRPS.
163. Along with confirmation of matters in relation to the NPS-HPL the Applicant should clarify, given the identification of LUC 2 and LUC 3 within the site whether the net public benefit of PPC81 exceeds the reduced potential for soil-based primary production activities to give effect to policy 5.1.1 f.

Northland Regional Water and Soil Plan

164. The Northland Regional Water and Soil Plan (“**RWSP**”) was originally made operative on 28 August 2004, with amendments made in 2014 to address an earlier version of the NPS-FM. The RWSP manages the effects of land use activities on water and soil resources throughout Northland by imposing specific controls on discharges, land uses, and the taking, use, damming and diversion of water. The RWSP is briefly addressed in paragraph 280 of the AEE. PPC81 must not be inconsistent with the
165. Having reviewed the RWSP and taking into account the relevant provisions in it, I consider that PPC81 can, subject in part to application for appropriate consents for wastewater discharge and application of acceptable standards of stormwater and sediment control, be consistent with the provisions of the RWSP.

Northland Regional Air Quality Plan

166. The Regional Air Quality Plan for Northland (“**RAQP**”) was made operative on 1 August 2005. The RAQP assists NRC, together with the resource users of Northland, to promote the sustainable management of the region’s air resources and to maintain the existing high air quality the region experiences. The RAQP is not considered within the AEE.
167. However, given the existing provisions within the RAQP, RWSP and Proposed Regional Plan (addressed below) relating to earthworks and air quality, I am satisfied that activities undertaken as part of PPC81 can be consistent with this document.

Proposed Northland Regional Plan

168. The Proposed Northland Regional Plan (“**PRP**”) was notified on 6 September 2017 and submissions closed on 15 November 2017. Hearings were completed in 2018 with NRC’s decision being issued on 4 May 2019. The latest Appeals Version of the PRP was made available in August 2020.
169. In relation to PPC81, the Commissioners must have regard to the PRP in accordance with section 74(2)(a) of the RMA. The PRP seeks to manage the use, development, and protection of Northland's natural and physical resources. It combines the current operative regional plans into a single regional plan for the Northland Region. The PRP will not be deemed fully operative until all Environment Court appeals are resolved. At the time of preparing this section 42A report, all appeals on the PRP have not yet been resolved.
170. Portions of the site are identified as being subject to flooding in 10-year, 50-year and 100-year extents. This is indicated by the light, medium and dark blue shading respectively, in Figure 17, following.



Figure 17: Northland Regional Council Natural Hazards Map

171. However, it is noted that the technical advice received in relation to stormwater has confirmed that PPC81 is serviceable in terms of stormwater. But it is also noted that this will be subject to further investigation and detailed engineering design at the Resource Consent stage for the development to ensure it meets Kaipara District Council's level of service and avoids adverse effects on the neighbouring properties, asset owners and receiving environment.
172. An assessment of the relevant objectives and policies of the PRP is included in Appendix F. Overall the proposal is consistent with the PRP, apart from those matters raised previously in relation to water quality (Policy F1.2).

Kaipara District Plan

173. The Kaipara District Plan (“**KDP**”) was made operative on 1 November 2013 and has been subject to five operative plan changes. There are five parts to the KDP:
- Part A – District Wide Strategy: introduces the plan, its structure and identifies significant resource management issues responded to through the Plan.
 - Part B – Land Use: identifies provisions that apply to the various Zones and Environmental Overlays mapped in the District. This Part of the Plan contains the Operative Chapter 16 provisions.
 - Part C – Sites Features and Units: identifies provisions which relate to specific sites or areas of the Kaipara District, such as heritage, landscapes and notable trees.
 - Part D – Other: This part contains other chapters such as financial contributions, monitoring and definitions.
 - Part E – Maps.
174. This application proposes the introduction of a “Trifecta Development Area” rule set within Part B and the introduction of a new planning map in Part E.
175. The site is zoned Rural Zone (refer Figure 4) and is subject, in part, to flood susceptibility as is set out in Figure 6 of this report.
176. An assessment of the proposal against the objectives and policies of the KDP is included in Appendix G. The main findings of that assessment are set out in the following paragraphs.
177. In the main I accept the assessment of the objectives provided within the Applicant's further information response dated 20 April 2022, apart from those matters that have been previously raised, including provisions in relation to raw water supply, bridging of the Awakino River in relation to wastewater servicing, feasibility of pedestrian/cycle link to Dargaville, and specific points in relation to the NPS-HPL and NPS-FM.
178. It is acknowledged that KDC is in the middle of a review process with regard to the KDP, and an Exposure Draft was released for public feedback last year, with notification expected later in 2023. Although the Exposure Draft does not have legal effect, it does indicate that the district plan will be moving to align with the structure specified in the National Planning Standards and it would be appropriate to align the structure of PPC81 with the future PDP structure rather than the operative structure.

Iwi Management Plans and Acts

179. According to s74(2A) of the RMA, Council must take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on the resource management issues of the district. At present, within Kaipara District there are two such documents:

- Te Roroa Iwi Environmental Policy Document.
- Te Uri o Hau Environmental Management Plan

Te Uri o Hau Kaitiakitanga o Te Taiao - Te Uri o Hau Environmental Management Plan 2011.

180. The Te Uri o Hau Kaitiakitanga o Te Taiao environmental management plan provides a comprehensive plan to support Te Uri o Hau kaitiakitanga (guardianship) and rangatiratanga (authority) responsibilities in natural resource management within the statutory area of Te Uri o Hau. This document includes Te Uri o Hau values, and has set objectives, policies and methods in response to identified natural resource issues. This includes the natural environment like freshwater, air, takutai moana (marine and coastal area and harbours), as well as resource management issues like customary fisheries, oyster reserves, biodiversity, cultural landscapes, growth and development.

181. Part 2 Implementation sets out Te Uri o Hau Relationship Principles which includes 'early involvement in policy development'. The Applicant has advised that consultation with Te Uri o Hau has taken place through the CIA process. It is considered that this Plan Change will not hinder Te Uri o Hau's kaitiaki role nor will the Plan Change affect any sites of significance to Te Uri o Hau.

Nga Ture mo Te Taiao o Te Roroa - Te Roroa Iwi Environmental Policy Document 2019

182. Nga Ture mo Te Taiao o Te Roroa states that this Policy Document is to be taken into account in the preparation of all district and regional plans and policies (and similar relevant policy instruments of all government agencies) that are relevant to the management of resources within their rohe (area).

183. The Environmental Policy Document contains guidance on Te Roroa's policy and processes for kaitiakitanga (guardianship). Issues, objectives, policies and methods are set out in respect of matters such as waahi tapu, cultural landscapes, changing land uses, amenities and infrastructure.

184. The Policy Document states that it should not be treated as a substitute for engagement kanohi ki te kanohi (face to face). Based on the kanohi ki te kanohi engagement through the CIA process, and the commitment by the Applicant to ongoing involvement by tangata whenua in future development enabled by this Plan Change (refer Appendix 11 of the AEE), it is considered that PPC81 is respectful of Te Roroa's kaitiaki role.

Iwi Management Plan Summary

185. Through the process of preparing the CIA, addressed by the Applicant in Appendix 11 of the AEE, face to face consultation was undertaken between the applicant and Te Kuihi, Te Roroa, Te Uri o Hau and Te Parawhau. The CIA identified potential cultural effects associated with PPC81 and recommended mitigation measures. The Applicant has considered the mitigation measures and agreed to adopt most of the recommended mitigation measures into the TDA provisions. In addition, a mechanism for on-going

involvement and consultation with mana whenua is proposed. A summary of the Applicant's response to the mitigation measures is included with the CIA as part of Appendix 11.

Non-Statutory Documents

186. The following non-statutory documents are considered:

Kaipara Spaces and Places Plan 2021 - 2030

187. The Applicant has addressed the Reserves and Open Space Strategy within paragraphs 317 and 318 of the AEE. However, I consider the Kaipara Spaces and Places Plan 2021 -2030 ("KSP") to be the more relevant document. The KSP is a facility-focused plan that helps support the regional strategy for play, active recreation and sport. The KSP provides a pathway to achieving a well planned facilities network.
188. The OSA associated with PPC81 includes, in the main, "Play and Recreation Facilities" as addressed in section 9.7 of the KSP. The provisions in the KSP seek to improve walking and cycling connectivity, the provision of neighbourhood parks and open space that suit local community needs and provide opportunities for tamariki and rangatahi for informal, spontaneous, informal and casual play and recreation. The Applicant has agreed that PPC81 must meet its own needs for parks and reserves.
189. Having reviewed this document and taking into account the relevant provisions in it, I consider that the intent of PPC81 is consistent with this document noting that the intention of PPC81 is to address the provision of additional areas of green space through the subdivision process.

Kaipara Walking and Cycling Strategy 2017

190. The Kaipara Walking and Cycling Strategy 2017 ("KWCS 2017") provides a framework for increasing walking and cycling participation in Kaipara District for both local journeys as well as long distance touring to support economic growth. The KWCS 2017 identifies key routes that support local and commuter trips, and linkages for recreational and tourism journeys.
191. The KWCS 2017 lists an 'opportunity' for Kaipara to contribute to the Aspirational Regional Cycle Trail Framework for Northland by having a trail between Dargaville and Whangarei. This has been given a timeframe of medium to long term. This project is also listed in the KWCS 2017 Implementation Plan. It is noted that a walking and cycling linkage along SH14 is also included as a Key Move in the KDSP 2050.
192. Objective 2 of the KWCS 2017 is to partner with key stakeholders to deliver walking and cycling projects, including Waka Kotahi, to provide for cycling on the State Highway network. The partnering approach also includes working with developers to ensure access and linkages from new subdivisions to the existing network are provided.
193. An objective of PPC81 is to facilitate active transportation options for residents and workers both internally within the TDA, and externally with a shared path linkage to Dargaville along SH14. The Applicant has advised that Waka Kotahi have been consulted regarding this and have agreed in principle. The achievability of the external shared path along SH14 is yet to be confirmed as addressed within the memo from Commute Transportation Consultants in Appendix I, however, in theory, the proposal is considered to be consistent with the KWCS 2017.

Kaipara District Spatial Plan – Nga Wawata 2050

194. KDC are required, to the extent relevant, to have regard to management plans and strategies prepared under statutes other than the RMA⁷. It is noted that the application document⁸ address the Kaipara District Spatial Plan – Nga Wawata 2050 (“**KDSP 2050**”), in some detail.
195. The KDSP 2050 is relevant to the assessment of PPC81 insofar as it has had the benefit of public consultation and community engagement, and at the current time, sets KDC’s high level vision for future growth and development in Dargaville. While I accept that non-statutory documents, such as the KDSP 2050 provide useful information to inform considerations around PPC81, it is still the statutory RMA documents that are key to the consideration of PPC81 and should be given primary regard and weighting.
196. It is noted that the proposed “industrial zoning” for the site within the KDSP 2050 has no legal weight, it is simply another matter for decision makers to ‘have regard to’. It is up to the Hearing Commissioners to determine if the provisions of PPC81 as put forward in the application are the most appropriate use of the site.

Statutory Acknowledgements

197. There are no statutory acknowledgement areas in relation to the site.

Part 2 of the RMA

198. Section 32(1)(a) of the RMA requires assessment Section 32(1)(a) of the RMA requires assessment of whether the objectives of a plan change are the most appropriate way for achieving the purpose of the RMA in Part 2. Section 72 of the Act also states that the purpose of the preparation, implementation, and administration of district plans is to assist territorial authorities to carry out their functions in order to achieve the purpose of the RMA. In addition, section 74(1) provides that a territorial authority must prepare and change its district plan in accordance with the provisions of Part 2.
199. The role Part 2 plays in decision-making processes for plan changes was refined by the Supreme Court in *Environmental Defence Society Incorporated v The New Zealand King Salmon Company Limited*⁹ (“King Salmon”).
200. The Supreme Court held that in the absence of invalidity, incomplete coverage or uncertainty of meaning in the relevant higher order statutory planning documents, there is no need to refer back to Part 2 of the RMA when determining a plan change.¹⁰ This is because the higher order planning document is assumed to already give effect to Part 2. However, if one or more of these three caveats apply, reference to Part 2 may be justified and it may be appropriate to apply the overall balancing exercise.¹¹

⁷ Section 74(2) in addition to the requirements of section 75(3) and (4), when preparing or changing a district plan, a territorial authority shall have regard to (b)(i) management plans and strategies prepared under other Acts.

⁸ Section 50 to 53 and 292 to 297 of the Dargaville Racecourse Private Plan Change Request Statutory Assessment Report.

⁹ King Salmon, above n6.

¹⁰ At [85] and [88].

¹¹ At [88].

201. In this instance I do not think that any of the three caveats i.e. invalidity, incomplete coverage or uncertainty of meaning in the planning documents, apply. However, should the Commissioners form a different view I have undertaken a brief Part 2 assessment to assist the Commissioners in their decision making.
202. In terms of Section 5 of the RMA, the matters raised in relation to the NPS-HPL and the NPS-FM, along with confirmed feasibility of infrastructure suggest that the current drafting of PPC81 is not managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—
- (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
 - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
 - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.*
203. Section 6 of the RMA sets out a number of matters of national importance that must be recognised and provided for. I consider that PPC81 recognises and provides for these matters in the following ways:
- The archaeological assessment submitted with the application does not identify any specific archaeological or heritage sites requiring protection.
 - The relationship of Māori with their ancestral lands, water, sites, waahi tapu and other taonga has been recognised and provided for via consultation, the provision of CIA documents and the ongoing opportunities for participation in the process surrounding PPC81.
 - The risk from natural hazards has been addressed through technical reports prepared by Lands and Survey and AWA.
204. However, based on the information before me I consider that PPC81 as currently drafted does not recognise and provide for:
- The preservation of the natural character of wetlands and the protection of them from inappropriate subdivision, use and development.
205. Section 7 of the RMA identifies a number of other matters to be given particular regard. I consider that PPC81, has regard to a number of these matters because:
- The proposal has acknowledged the kaitiakitanga role of Te Roroa and Te Uri o Hau and consultation and ongoing engagement has been undertaken with respect to PPC81.
 - While there will be a change in amenity values of the site due to the progression of development, the ALE and UDA provided with the application suggest the provision of design guidelines to be implemented via the rules of the TDA that will ensure the maintenance and enhancement of amenity values associated with the site.
 - The Applicant is intending to maintain and enhance the quality of the environment via planting of the blue-green network.

206. Section 8 requires that the principles of the Treaty of Waitangi are taken into account. The application for PPC81 is supported by two CIA.

8.0 Assessment of Environmental Effects

207. An Assessment of Environmental Effects (AEE) was undertaken and is specifically referenced within paragraphs 146 to 240 of the application document. The AEE was supported by a comprehensive range of technical reports which are detailed in Section 5.0 of this s42A report. Additional information was requested from the Applicant on 16 March 2022. A partial response to this information was received. At the time of writing this report, the following requested information from the Applicant is still outstanding:

- Whether a bridge crossing over the Awakino River is feasible in relation to access to the Dargaville WWTP. If not, what alternatives are available to connect the development to the Dargaville WWTP.

208. Following the close of the notification period, KDC engaged technical consultants in the following fields to review and assess a number of specific areas of concern that were raised by submitters and Council staff:

- Transportation
- Civil Engineering

209. Additional memoranda in relation to Civil Engineering and Transportation are appended to this section 42A report as Appendix H, J, K and L.

210. The conclusions and recommendations contained in the additional technical assessments are discussed in detail, with reference to submissions made, within Section 11.0 below.

211. The specific effects identified by the Applicant include the following:

- Landscape Quality and Character and Visual Amenity
- Noise
- Social impacts
- Built Environment including Open Space and Community Facilities
- Economics
- Reverse Sensitivity and Compatibility
- Natural Hazards
- Cultural Values
- Archaeology and Heritage
- Infrastructure Servicing
- Stormwater Management
- Transport
- Earthworks

- Productive Potential
- Soil Contamination
- Ecology and Biodiversity

212. Where I have adopted the Applicants assessment, I have noted this below, otherwise I have provided further specific assessment in relation to the nature and extent of the effects.

Landscape Quality and Character and Visual Amenity

213. An Assessment of Landscape Effects (“ALE”) has been completed by Simon Cocker Landscape Architecture and included as Appendix 10 to the original application. This assessment has identified adverse landscape and visual effects that could potentially be generated by PPC81. Regarding possible landscape mitigation measures, these effects were broadly grouped into four main areas:

- Light Industrial Area interface with surrounding areas;
- General Residential Area interface with surrounding areas;
- Large Lot Residential Area additional controls; and
- Site entrance enhancements

Light Industrial Area interface and General Residential Area Interface

214. For the interface between the LIA and the GRA and locations outside of the site, the ALE recommends visual softening of the built form when views of the LIA may be experienced from adjoining areas. The potential mechanisms to achieve this ‘softening’ outcome are listed in the ALE and include earth bunds and/or plantings, setbacks and fencing. Where the LIA adjoins SH14, the landscape assessment considers that the outcomes suggested in the KDSP 2050 could be achieved, including the proposed Gateway and greening of the State Highway corridor, as well as screening of any visual clutter associated with light industrial businesses, e.g. storage areas.

Blue Green Network interface and Open Space interface

215. The ALE notes that buffering or screening is generally not required within the Open Space Area or Blue Green network interfaces (except for one location), because of the unbuilt vegetated character of these areas. The Blue Green network along the southern end of the north-eastern site boundary will still require interface treatment. This is because of the narrow width of the Blue Green network in this location.

Large Lot Residential Area

216. As the LLRA is located on an elevated portion of the site, the future development of low density dwellings has the potential to be widely visible over an expansive visual catchment and detract from the character of the rural landscape. The ALE recommends mechanisms to avoid or mitigate these effects, including controls on height and external colours of buildings and structures, and controls on the character of fences and services. The assessment offers a suite of guidelines, which have been incorporated into the PPC81 provisions for the LLRA.

Entrance Treatments

217. The ALE considers that the TDA site entrances would benefit from softening and buffering as the views into the site from the adjoining road and properties have the potential to detract from the character of these adjoining areas. The ALE recommends potential mechanisms to avoid or mitigate these potential effects, including landscape planting around the entrance and tree and/or other plantings along the road corridor beyond the site entrance. The Applicant considers that this is a matter that would be considered when the roading layout is being designed, at the time of subdivision or an application for the CDP. It has been included as an assessment matter in the provisions.
218. The ALE also addresses the potential to deliver the KDSP 2050 outcome of creating gateways on SH14 approach to Dargaville, in proximity to the TDA. This is supported as, besides amenity benefits, it would potentially provide a traffic calming benefit before the upgraded intersection with Awakino Point North Road. The Applicant has addressed this via landscaping and fencing requirements associated with the subdivision provisions.

Landscape Quality and Character and Visual Amenity

219. To assess the landscape effects, the ALE first identifies the different landscape values of the site, including geological, experiential, associative and social, archaeological and cultural values (refer sections 5 and 6 of the ALE). The ALE concludes that PPC81 will result in a marked change in the biophysical attributes of the site. However, the sensitivity of the site to change is considered to be low due to its modified condition. The hydrology of the site will be substantially modified, however with the proposed stormwater mitigation measures (e.g. treatment and attenuation), runoff from the site when developed will be captured and will be localised. Any potential adverse effects arising from biotic change (living organisms which shape an ecosystem) in the landscape may be able to be mitigated. Of note it has been confirmed by way of technical evidence (refer Appendix L) that PPC81 is serviceable in terms of stormwater, however, this will be subject to further investigation and detailed engineering design at time of resource consent.
220. PPC81 will result in a change of land use that will in turn change the landscape character. The changes associated with the social, cultural and associative attributes are assessed within the ALE as being small. Overall, the ALE has determined that the landscape effects from PPC81 will be moderate.
221. Regarding visual amenity effects, the ALE identifies the visual catchment within which the site sits and undertakes a detailed analysis of the visual amenity effects relating to the changes that will arise as a result of PPC81. The visual catchment includes the neighbouring properties, users of SH14 and Awakino Point North Road and views from further afield e.g. from the eastern side of the Northern Wairoa River (refer sections 4.3 and 6.3, Table 2 and Appendix 4 in the ALE). The site is low-lying and visually contained on its northern and north-eastern sides by a ridge.
222. The ALE concludes that experiential changes and consequential adverse effects (including visual amenity effects) are assessed as being low for the majority of individuals. For the occupants of a limited number of proximate dwellings, effects initially will be elevated (more than minor) during the construction period (short term), however these effects can be mitigated to a minor or less than minor level in the medium to long term.

Conclusion

223. Based on the assessment and recommendations provided within the ALE, and with no technical evidence to the contrary, it is considered that the potential landscape, visual, amenity and character effects from the development enabled by PPC81 can be mitigated over time to a minor effect.

Noise

224. With regard to acoustic effects, given that there is no technical evidence to the contrary, I have adopted the assessment set out with the Acoustic Assessment (“AA”) prepared by Marshall Day Acoustics and included as Appendix 13 of the AEE.
225. The AA has considered the noise effects on neighbouring properties from the additional traffic noise generated by the TDA. The AA notes that dwellings located at 44 and 70 Awakino Point North Road are considered “*likely to experience a considerable increase in traffic noise. It is acknowledged that for these residents, this will be a significant change in the character of the existing noise environment.*” However, the AA considers that the changed traffic noise levels, based on calculated levels, are still reasonable for human amenity.
226. For Awakino Point North Road dwellings located further east, the AA considers that the residents will not experience significant change in noise levels from the additional traffic. Distant traffic noise may be audible, but it will not be the dominant source of environmental noise for these dwellings.
227. For Awakino Point North Road dwellings located further west closer to SH14, the AA considers that the residents are already exposed to moderate levels of road traffic noise from the State Highway. Therefore, any additional traffic noise is likely to result in perceptible, but not significant, increases in overall noise levels.
228. The AA considers that the KDP noise limits relevant to the rezoning would be appropriate and that compliance with these noise limits would result in reasonable noise levels. An analysis of potential noise emission from the proposed areas has been carried out. This has shown that:
- *Compliance with the KDP daytime noise rules at the existing Rural zoned properties is achievable. Some activities may need to carry out due diligence assessments to ensure their operation complies with the noise rules. The AA has indicated that there are many activities that can operate in the area without risk that noise levels would exceed the District Plan noise rules.*
 - *The extent of night-time noise emissions would depend on whether any industries operate in the industrial area at night, as well as their location relative to the existing dwellings. Some activities may not easily comply with the noise rules and may not be able to operate in the Light Industrial area at night. Resource consent may be required if such night-time activity was proposed to be established. In that situation, noise mitigation may be required and would be imposed via resource consent conditions.*
 - *Night-time truck movements on roads within the site would not technically breach the KDP noise rules as roads would be vested in Council ownership. In any event, noise from some low speed truck movements to the site at night would not be significant in the context of the existing rural environment. Occasional truck movements within the Light Industrial area would generate noise*

levels of below 45 dB LAeq when measured at surrounding Rural and Residential dwellings. However activities with significant truck movements may not be able to operate in this area at night without generating noise levels of above 45 dB LAeq.

- *Traffic movements on Awakino Point North Road may increase appreciably if the proposed Residential Areas are developed. The effect of this would vary – some dwellings may experience a significant increase in traffic noise levels and a consequential change in amenity. However, while a significant change in the character of the existing noise environment would occur, overall traffic noise levels would still be reasonable for human amenity.*
- *Reverse sensitivity effects on existing rural land use (e.g. primary production activities) is considered relatively low-risk. Noise measurements of existing rural activities near the subject site do not suggest that existing rural activities would be at significant risk due to the proximity of the proposed GRA.*
- *Construction noise and vibration can be managed and is expected to be compliant with the rules within the KDP and as proposed in the PPC81 provisions. Work occurring across the majority of the site would readily comply with the District Plan construction noise rules. Construction noise may be present in the area for a number of earthworks seasons given the size of the site. Management of piling activities and other noisy construction sources would be necessary but equally able to be managed via appropriate consent conditions.*
- *It is considered that there would be some change to the noise amenity of the area as a result of the proposed Light Industrial area, the increase in residential traffic movements on Awakino Point North Road and the period of construction noise from the site. However, overall we [the Applicant's noise expert's] expect that the proposed areas can operate within the existing environment while complying with relevant KDP noise rules and maintaining an acceptable level of amenity at the surrounding dwellings.*

229. Based on this, it is considered that the potential adverse effects from noise effects will be acceptable, without the need for additional noise mitigation measures, but subject to setback provisions.

Social Impacts

230. The Applicant has addressed the potential social impacts of the PPC81 at Paragraph 62 of the AEE, with reference to the Social Impact Assessment (“SIA”) prepared by The Urban Advisory (Appendix 9 to the AEE). The Applicant has summarised the SIA as follows:

231. The SIA considers the social impact of PPC81 on neighbouring properties to the site and wider Dargaville, with consideration for social impact factors of way of life, community, accessibility, health & wellbeing, economy/livelihoods, amenity and quality of life.

232. The change to this site enabled by PPC81 will result in a positive social impact on the wider Dargaville area. The positive social impact will include employment from both the construction phase and on-going from the businesses that will establish, additional homes being available in a variety of typologies and price points, new public amenities including community facilities, walking and cycling paths and reserves.

233. Establishment of the Northern Wairoa Fund from the proceeds of the sale of the site, will support a variety of community groups and projects through the provision of grant funds. This contestable fund will bestow an enduring benefit on the Dargaville community.
234. The implementation and construction phase are assessed to have low negative social impact across all factors with the mitigation of social impacts during construction, which could include a Construction and Traffic Management Plan and a Noise and Vibration Management Plan.
235. The operation and maintenance phase are assessed to have very low negative social impact on way of life and community, and high positive impact on accessibility, health & wellbeing, economy & livelihoods, and amenity & quality of life. Mitigation of social impacts during operation and maintenance could include good communication with the community, including neighbours to the site.
236. Based on the SIA undertaken, the AEE concludes that *“the potential social impacts will be less than minor or minor. The provision of more housing and employment is considered to be a positive social effect.”*
237. Having reviewed the SIA, I wish to adopt the Applicant’s assessment of social impacts. Specifically, I consider that:
- Any adverse social impacts during the implementation/construction phase will be minimal, and note that there will be some positive social impacts during this time, associated with the establishment of the Northern Wairoa Fund, the opportunity to strengthen partnerships with iwi, and the economic livelihoods of those employed during the construction phase; and
 - The long-term positive effects associated with new walking and cycling infrastructure, impacts on community, culture, health and wellbeing and amenity/quality of life, as described the SIA, collectively outweigh the potential effects.

Built environment including Open Space and community facilities

238. A Concept Design Plan and a Context Analysis Summary have been completed by The Urban Advisory and Matakohe Architecture + Urbanism (Appendix 8 of the application). These documents have identified the site characteristics, its relationship to the surrounding context, the opportunities and constraints presented by PPC81. This has resulted in an indicative CDP.
239. An Urban Design Assessment (“UDA”) has also been undertaken by The Urban Advisory and Matakohe Architecture + Urbanism, which defines the design response that informed the TDA layout and provisions to achieve a well-functioning urban environment.
240. The mixed land use proposal has a balanced layout of light industrial, residential, open space and neighbourhood centre activities with landscaped interfaces between sensitive uses (e.g. rural and residential or residential and light industrial) and enhanced connections between compatible uses (e.g. open space and neighbourhood centre).
241. The technical information provided shows that the design supports safe and convenient movement, with vehicular, walking and cycling access to and through the site, with shared and separated pedestrian pathways for walking and cycling, and a street network in the residential area. Through traffic between residential and industrial areas is limited.

242. A network of blue-green spaces provides opportunities for passive and active recreation, integrated stormwater management, ecological enhancement, access to nature and landscape views across the district. The Hillside OSA is a notable feature of the proposed concept design and is proposed to be vested in Council for public use.
243. A centralised 'Hauora Hub' seeks to enhance community wellbeing, providing a convenient focal point for commercial, recreational and community activities that supports the wellbeing (hauora) of residents.
244. Urban Design Guidelines have been included in the Plan Change provisions to ensure that future development design, for resource consent, and later construction will result in quality good urban design outcomes at the building and neighbourhood scale.
245. The KDP does not have urban design guidelines. However, the RPS presents development guidelines for the Northland region. A summary of these provisions is provided in Appendix 3 of the UDA (Appendix 8 of the application) and included within Appendix E of this report. Urban design outcomes are outlined in section 3.5 of the UDA, to both guide future developments and clarify how the Urban Design Guidelines should be applied to the TDA. The Urban Design Guidelines for PPC81 have been informed by the Northland Regional Policy Statement, Whangārei Urban Design Guidelines for Residential Development and the Auckland Design Manual.
246. I accept the evidence provided by the Applicant in this regard and concur that the urban design components of PPC81 are consistent with the relevant statutory requirements, and the overall effects in relation to the built environment will be appropriately mitigated or managed.

Economics

247. The Applicant has provided an Economic Impact Assessment ("EIA") prepared by The Urban Advisory as Appendix 6 to the s32 report, which incorporated a Development Feasibility Study by The Property Group and a Cost Benefit Analysis by Castalia Advisors. A Market Demand Analysis ("MDA") was also prepared by The Urban Advisory and included as Appendix 7.
248. The Development Feasibility Study determined the financial feasibility of the proposed development, assessing a net profit of \$16.5m or 6.1% of gross development costs. It was noted that the proposed high yield, including medium density development proposed within the provisions of PPC81, was required to form a profitable development proposition, due to the high cost of enabling civil infrastructure.
249. The EIA examined the impact of PPC81 staged over 4 years compared to a counterfactual scenario of the plan change land being used for industrial development over 5 to 10 years. It found that the proposal would provide \$33.5m net economic benefits (net present value) over 30 years, compared to the counterfactual scenario [note the section 32 analysis within the AEE incorrectly referenced \$18.4m]. The benefits were from an increase in:
- Local housing supply
 - Temporary construction employment
 - Permanent ongoing employment in the businesses that would emerge
 - Income to developers

- Provision of papakāinga style housing.

250. The EIA indicated that the proposal was a better economic use of the land than the industrial-only scenario. Although it is noted that this comparison identified that industrial development would only occur around 5 years, assumed on the basis that PPC81 does not proceed. Due to the distance between the racecourse land and Dargaville, it was assumed that no development is expected to take place immediately. After 5 years, the front section of the Racecourse site (the area bordering State Highway 14 marked as Light Industrial in the proposed development) is assumed to be developed into large industrial lots which become occupied. The rest of the Racecourse site remains undeveloped and used for grazing. The analysis assumes that any future development of the rest of the Racecourse site, including any infrastructure development required, does not occur until at least 10 years after the Spatial Plan Zoning is implemented.
251. The MDA found that a large 47ha site in Dargaville was a rare and significant opportunity to respond to the demand for housing and commercial property in Dargaville and Northland. In terms of housing, while Dargaville has historically been a comparatively affordable location within Kaipara, prices have increased significantly over the past 10 years and it is no longer considered affordable. The MDA assesses that there is a severe housing shortage in Dargaville and a greater supply of new housing is needed, including affordable housing options and a mix of typologies and tenures. There is limited precedent for medium density housing in Dargaville, but typologies such as terraces and duplexes could be considered to improve affordability and suit smaller households. Dargaville also has an ageing population and from community engagement there was clear demand for a retirement living product in Dargaville.
252. In terms of commercial and industrial development, Dargaville has a comparatively high unemployment rate, so both land development and construction of the PPC81 site as well as new commercial and industrial premises is an opportunity to boost local employment. In the local context, there is demand for small light industrial premises (60-300m²). Larger scale commercial/industrial activities would not be as likely, however an iwi enterprise or local initiative would be beneficial at the site. The MDA also noted that the site was outside of the Coastal and River Flood Hazard Zone mapping area, unlike all land currently zoned Industrial.
253. Based on the assessments in the EIA and MDA, with no technical evidence to the contrary, I adopt the Applicant's conclusion that PPC81 would provide positive economic effects through net economic benefits to Dargaville that are in excess of an industrial-only scenario for the land, where there is a delay in industrial development, not all of the land is developed for industrial purposes, and a portion remains as rural grazing.
254. In addition to the above, I also acknowledge PPC81's potential to partially accommodate housing demand from the assessed current housing shortage as well as the projected 1,090 population/530 households increase for Dargaville over the next 30 years.
255. I also note that the scenario's raised did not account for full use of the site by light industrial, or a heavy industrial component over a longer term. Additionally in light of the NPS-HPL, and consideration of the clause 3.6 tests for rezoning to an urban zone the Applicant will be required to make a clear argument as to why the land in PPC81 is needed to meet future urban growth demands in Dargaville.

Reverse Sensitivity and Compatibility

256. The Applicant has noted in the AEE that the land use around the site is characterised by a mix of rural lifestyle properties and rural production farming, e.g. dairy or cropping. The TDA will result in a mix of mostly urban land uses within the site. The subject of reverse sensitivity and compatibility has been considered for this site with regard to both its external and internal boundaries. The site has external boundaries with neighbouring rural properties, SH14 and Awakino Point North Road. Once developed, the TDA will have internal boundaries between the LIA and the GRA, and between the NCA and the GRA.
257. I agree that, as the Applicant has noted, reverse sensitivity effects can arise when a sensitive use e.g. a dwelling, is located close to an existing land use that is producing adverse effects, e.g. noise, odour, and the existing land use is pressured to alter or cease their operations due to complaints by the sensitive activity. Compatibility of activities needs to be considered particularly at zone or area interfaces.
258. It is considered that there are three main mitigation options to address potential reverse sensitivity and compatibility effects. First through landscape and visual mitigation measures, second through noise generation controls, and third through setback controls for buildings.
259. The Applicant has proposed, based in part on the ALE, that the same measures to mitigate landscape and character effects will also work to reduce the potential for reverse sensitivity effects. These measures include earth bunds, planted buffer strips and building/structure setbacks. The Applicant has advised that these can be addressed through specific PPC81 provisions. Provisions in the TDA chapter provided as Appendix 2B to the application include rules relating to screening, landscaping and setbacks along with maximum height and height in relation to boundary requirements. This is consistent with similar provisions already in place within the KDP.
260. With regard to acoustic matters, as noted in the AA and discussed in the noise assessment portion of this report above, spatial separation of noise generating activities is proposed, along with requirements to comply with specific noise standards. These provisions are consistent with the operative provisions of the KDP. The AA notes in relation to reverse sensitivity effects on existing rural activities, that *"In our view the reverse sensitivity risk posed by the plan change to existing Rural activity is not likely to be significant given the existing rule framework. Our measurements do not suggest that existing farming activity is causing significant noise emission on Awakino Point North Road and we do not consider existing rural noise to be unreasonable. Any reverse sensitivity noise risks likely relate to future expansion of existing rural operations, (for instance, the hypothetical establishment of future frost fans and bird scaring guns), rather than constraint on existing operations."*
261. The Applicant has, based on the AA, also proposed a 50m "buffer area" within the LIA where the range of supported industrial land uses is restricted to lower noise producing activities. A set of specific rules relate to the placement of these activities in relation to the GRA.
262. As there is no technical evidence to the contrary, I am of the opinion that the proposed measures as set out within the AA will appropriately mitigate potential noise effects and thereby the reverse sensitivity effects associated with noise related activities.

Natural Hazards

Geotechnical Assessment

263. The Applicant has provided a preliminary Geotechnical Assessment (“**Geotech**”) by Land Development & Engineering Ltd (“**LDE**”) (Appendix 3 of the AEE).
264. The assessment states that the site’s immediate vicinity has been mapped as being at risk of coastal and river flooding. The Wairoa River is made up of two separate joint rivers that discharge out into the Kaipara Harbour 30km southwest of the site. Gley soils have been mapped adjacent and encroaching into the site area. This soil type usually occurs in areas with low elevations and high groundwater tables, thus resulting in flood susceptible ground.
265. The Geotech notes that the site forms part a water catchment that feeds into the Wairoa River, which in turn flows out to the Kaipara Harbour. The site sits along the upper extent of the catchment and is bound by the ridgeline of the hill form along the northern boundary of the site and SH14 to the west of the site. The site and surrounding area have been extensively modified through the excavation of multiple irrigation drainage channels that drain in an easterly and northerly direction to the Wairoa River. Most of the site comprises an alluvial plain which is essentially flat.
266. Groundwater depth is fairly consistent across the study area. Within low-lying land, it was encountered near-surface from 1.5m to 3.5m below ground level, whilst beneath elevated areas it can be greater than 5m bgl. During winter, it is anticipated that ground water may be located nearer to the surface within the low-lying lands and may rise to within 0.5m below ground level.
267. The site is in a region of low seismicity. Potential deformations associated with earthquake shaking are expected to be low to negligible. Liquefaction has a low probability of occurring during a Ultimate Limit State event – if it did occur the effects are expected to be nil to minor and within standard design tolerances for settlement.
268. Overall, slope instability is not considered to be a significant geotechnical risk for this development. However, it is recommended that specific investigation and slope stability analysis is undertaken during the development of that land adjacent to or on the slopes.
269. The Geotech identified that consolidation settlement is the main geotechnical risk at the subject site due to the very soft clay soils. The Geotech recommends a number of engineering techniques to mitigate this. Consolidation and settlement analysis should be conducted in more detail and be site specific for the different stages of implementation, with remediation methods considered to overcome potential consolidation settlement. While earthworks, site contouring, retaining and specific analysis and development will be required, these are considered normal for developments of this nature.
270. Based on this, LDE considers that the subject site is geotechnically suitable for light industrial, commercial and residential development. Therefore, it is considered that the geotechnical risk from developing this site for the mix of land uses proposed is able to be managed through the resource consent process and as such the effects are acceptable

Stormwater Management and Flood Hazard

271. A Civil Engineering Assessment (“CEA”) prepared by Lands and Survey has been included as Appendix 4 of the application. Details regarding stormwater methodology, as outlined in the CEA are summarised as follows:
272. There are existing, diagonal stormwater drains across the site, which appear to align with the natural overland flow paths. There are no clear connection or discharge points for these drains, but it is assumed that they discharge to the table drains located on Awakino Point North Road.
273. The proposed management approach maintains the status quo, by attenuating runoff from the developed site to ensure peak discharge post development is equal or less to that estimated for the pre-developed state. This means that three detention ponds with a total storage of 11,884m³ will be required. The depth of the ponds is to be approximately 1.2m to ensure clearance from ground water, which was encountered at a minimum of 1.5m during winter.
274. The outlined management approach is based on a high-level concept design and is likely to be refined during the subdivision process, where the use of diversions, swales, vegetated filters, artificial wetlands and landscaped areas may be utilised in place of storage pond(s).
275. Following an initial review of the stormwater matters within the CEA, additional information was requested from the Applicant, based on the memo from Sejal Sangwai, AWA Stormwater Infrastructure Engineer, dated 18 November 2022, and attached as Appendix J to this report. These matters included the following:
276. *“In summary, whilst the applicant has shown that it may be possible to mitigate some of the adverse impacts of their development, there is missing information that will need to be provided to demonstrate that the development can be adequately serviced in terms of stormwater drainage and flood hazard. The following key findings are noted:*
- *Given the low-lying nature of the site, it is unclear how future stormwater networks and ponds will drain into the existing downstream drains without extensive fill earthworks.*
 - *It is not clear whether the stormwater infrastructure in the area will have capacity to cater to the requirements of design periods for commercial land use i.e. 5% AEP. An upgrade of infrastructure may be required to provide a suitable level of service to the development. The assessment does not appear to have considered the upstream catchment draining into the site which could both be impacted by the proposed development, and could impact the development.*
 - *Whilst the applicant has proposed stormwater attenuation devices to mitigate the effects of increased impervious area, they have not assessed what the potential impact the development will have on downstream flooding, in terms of the displaced ponding on the site.*
 - *There are a large number of unknown culverts in place that the development will need to rely on in terms of stormwater servicing, for which no capacity assessment has been carried out. It is therefore currently unclear whether the site can be designed to meet the required level of service in terms of drainage and flood hazard. It is noted that the permeability rate of the underlain soil is considered very low to negligible and that the site appears to be generally waterlogged. It is*

unclear how this matter will be managed, especially in the areas where detention ponds are proposed. The water table may impact on the ability of detention ponds to provide the necessary storage without substantial engineering/earthworks.”

277. Subsequent to this request, a response was received from Lands and Survey, dated 22 February 2023, which is attached as Appendix K to this report, this response was sent to KDC’s engineers, represented by AWA, for assessment.
278. I received a second memo from the AWA Stormwater Infrastructure Engineer on 2 March 2023, which addressed the information supplied in the memo from Lands and Survey as follows:
- Based on the provided information showing the fall across the site we agree a drainage solution appears to be feasible subject to further investigation and detailed design at the Resource Consent stage
 - Existing road frontages and drainage infrastructure currently comprising of open drains may require upgrade in order to achieve a 5% AEP level of service of drainage. This may be the case irrespective of whether hydraulic neutrality is achieved. However, we are comfortable that infrastructure upgrades will be feasible subject to further investigation and detail design at the Resource Consent stage.
 - Based on the provided information the assessment appears reasonable and any effect on upstream catchments can be managed subject to further investigation and detail design at the Resource Consent stage.
 - : The applicant appears to have misunderstood the purpose of our query. We are not concerned about the effects of the development on flooding from the Wairoa River. We are concerned about potential effects due to displaced ponding on the properties immediately downstream of the site. Any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage.
 - Based on the provided response we agree that the issues can be managed subject to further investigation and detail design at the Resource Consent stage. This may include a detailed geotechnical investigation and assessment of effects on ground water.
279. The memo concluded “we generally agree with Lands and Survey Engineering Ltd that the development is serviceable. However, this will be subject to further investigation and detailed engineering design at the Resource Consent stage for the development to meet Kaipara District Council’s level of service and avoid adverse effects on the neighboring properties, asset owners and receiving environment.”
280. Based on the above technical response, I consider that subject to further investigation and detailed engineering design at the resource consent stage, PPC81 can be adequately serviced in terms of stormwater management and the consequential flood risk will be acceptable and appropriate for the site and surrounding receiving environment.

Cultural Values

281. The Applicant has provided various pieces of information with respect to impacts on cultural values, including Appendix 11A Cultural Impact Assessment (Tripartite Group), Appendix 11B Cultural Impact Assessment (Te Roroa), Appendix 11C Cultural Impact Assessment Mitigation Measures (Tripartite Group) and Appendix 11D Agenda and Notes from Hui with Te Roroa and Te Kuihi.
282. The Applicant has acknowledged that the site occupies ancestral land that is of cultural and historical significance to Tangata Whenua.
283. The Applicant has advised that PPC81, and the resultant future development, was assessed against a framework of cultural values to determine the extent of effects upon these values, adverse, positive or benign. This effects assessment informed a range of mitigation measures to address the potential effects, to ensure positive outcomes for Tangata Whenua, to preserve mana and enhance the mauri (life force) of the whenua (land) and te ao turoa (the environment). The recommended mitigation measures have subsequently been discussed by the Tripartite Group. Most of the mitigation measures have been included in the PPC81 or TDA provisions.
284. The Applicant has confirmed that involvement with Tangata Whenua will be ongoing. As Tangata Whenua are the acknowledged experts with respect to cultural values and assessing the degree to which PPC81 appropriately addresses concerns raised by Tangata Whenua can only be done when considering their feedback.
285. In light of this I note that CIA have be provided by Tripartite Group and Te Roroa, the Applicant has provided a list of mitigation measures, with methods of implementation and action points, and additional hui have been held.
286. In my opinion the Applicant has attempted to address cultural values and is continuing to participate in ongoing dialogue. Following clarification in relation to specific matters around the NPS-FM, I am of the opinion that cultural values have been addressed to an appropriate extent within PPC81.
287. Additionally, I note that details of consultation with the community, iwi and other stakeholders undertaken by DRC prior to the lodgement of PPC81 are detailed in paragraphs 378 to 391, of the AEE submitted with the application.
288. I note that there is no compulsory requirement in the RMA for DRC to consult with the community, iwi or stakeholders prior to the lodgement of the application with KDC.
289. PPC81 was notified in accordance with the relevant provisions of the RMA. This included letters being posted to directly affected landowners, formal Notice published in the newspaper, and on-going information in the newspaper. Full details of PPC81 have been available on the KDC website since the plan change was notified. During the submission and further submission period, KDC staff fielded calls and responded to emails from potential submitters.
290. In my opinion, the consultation on PPC81 undertaken by DRC prior to lodgement with KDC was in excess of that required under the RMA. The formal notification of PPC81 for submissions and further submissions complied with the minimum requirements of the RMA.

Archaeology and Heritage

291. Having reviewed the Archaeological Assessment undertaken by Horizon Archaeology (Appendix 12 of the section 32 report), I wish to adopt the Applicant's assessment of archaeological and heritage effects, outlined in paragraphs 220 and 221 of the Application. Specifically, I agree that:

- There are no recorded archaeological sites within the site and it is unlikely that archaeological features will be found during earthworks, however accidental discovery protocols should be used during ground disturbance.
- No archaeological authority is required from Heritage New Zealand Pouhere Taonga.
- There are no heritage features identified on the Operative (or draft) District Plan maps. The Racing Club was established on site in 1914, however the original buildings have been significantly remodelled and there are no remaining heritage values.
- Any adverse effects of the PPC81, insofar as they relate to archaeology or heritage, will be acceptable.

Infrastructure Servicing

292. Appendix 4 of the Section 32 Evaluation report is a Civil Engineering Assessment (“CEA”), prepared by Lands and Survey, which sets out the way in which the Applicant proposes to service the site. The following assessment sets out the findings of the CEA for each of the three waters, followed by comments from Council's Infrastructure Planner, David Usmar.

Wastewater

293. The proposed Wastewater methodology is summarised in the CEA as follows:

294. There is no reticulated wastewater in proximity to the site, as such collection and disposal will be through a combination of new reticulated gravity and low-pressure systems, including storage. The low-pressure network will require a rigid operation and maintenance regime, however it will provide for improved discharge and flow control and reduce the risk of inflow and infiltration (when compared to a gravity only system).

295. Following collection and storage of wastewater from within the development, it will be pumped to a point of disposal, currently envisaged to be the Dargaville Wastewater Treatment Plant (DWWTP). The DWWTP is located approximately 3km from the site at a mean elevation of 3m above sea level, being lower than the site, which is located at 5m above sea level. The fall provided is not enough to ensure a feasible gravity feed system; as such wastewater will need to be conveyed via a pressure pipeline. A connection to Council's “Pump Station 14” may also be possible, subject to capacity.

296. Disposal at the DWWTP would require the construction of an approximately 3km long 150mm dia PVC-rising main, both within the public road reserve (where available) and across private property. A crossing over the Awakino River on State Highway 14 would also be required. Specific approval for this crossing would be required from Waka Kotahi.

297. The total wastewater generation arising is anticipated to be approximately 375,583.44 litres per day.

298. Six LLRA allotments will rely on on-site wastewater treatment and disposal. A more detailed assessment of those allotments and their ability to dispose of their wastewater onsite will be required at subdivision stage.

Potable Water

299. The proposed supply of potable water is summarised as follows:

300. A network model was developed by AWA Environmental, on behalf of Kaipara District Council, and a high-level analysis was also undertaken by AWA to identify the nodes and links likely to be points of constraint in meeting the demand of the proposed development.

301. The model established that the network will have capacity to meet the additional demand, however a more detailed analysis, including possible staging of PPC81 to align with Council's capital works programme, will be required.

302. Additionally, investigations found that the Dargaville Water Treatment Plant has adequate capacity to meet demand, subject to consistent and reliable raw water supply.

303. Raw water supply continues to be an issue within the network. While several projects have been identified to provide relief for water shortages during dry seasons, status and progress on these projects is unknown.

304. Mr Usmar, KDC's Infrastructure Planner has supplied a memorandum in relation to Dargaville Wastewater Treatment Plant ("WWTP"), and the Dargaville Water Treatment Plant ("WTP"). This memo is attached as Appendix H to this report and has noted the following:

305. From an engineering perspective, the Dargaville WWTP is in proximity (3km) to the PPC81 area. As raised by the Civil Engineering Assessment lodged in support of PPC81 (at page 16), the proposed bridge crossing on State Highway 14 over the Awakino River would be subject to Waka Kotahi approval. I understand that this approval is yet to be given. I am unaware whether any design work has been undertaken to assess the feasibility of the proposed bridge crossing, and am unable to comment further on the feasibility of this.

306. The Civil Engineering Assessment lodged in support of PPC81 states (at page 15) the expected wastewater generated by PPC81, when fully developed, will be 376 m³/d from a total expected population of 1613. This population is within the calculated capacity of the Dargaville WWTP for Scenarios 2 and 3 but not the current Scenario 1. In terms of the ability of the Dargaville WWTP to service the land proposed to be re-zoned under PPC81 at present, this is dependent on the upgrade program and finalisation of the Trade Waste Agreement with SFF. Currently under Scenario 1 the Dargaville WWTP has no capacity for growth. However, KDC is committed to monitoring expected growth so that upgrade projects can be timed to provide capacity for growth without over investment. KDC anticipates that capacity will be provided for PPC81, if approved, through Scenarios 2 or 3. Key to this timing will be understanding the staging of development for PPC81.

307. Based on the above, there is likely to be capacity under scenarios 2 and 3 for all of PPC81.

308. However, the remaining impediment to providing for wastewater disposal and conveyance is the requirement to cross the Awakino River on State Highway 14. As previously noted, this will require the

approval of Waka Kotahi and possibly regional council consents from NRC. I have no additional information at this time to confirm that an agreement has been reached with Waka Kotahi in relation to bridging the Awakino River, nor whether any preliminary feasibility study or consenting assessment has been completed. It would be appropriate for the Applicant to further address these matters in evidence.

309. In relation to the Dargaville WTP, Mr Usmar has noted that as “stated in Civil Engineering Assessment lodged in support of PPC81, both water network and WTP capacity have been confirmed as sufficient. The only current restriction to potable water supply is availability of raw water, which can change seasonally. Water restrictions are routinely in place in the Dargaville area over the summer months. There is currently no investment signalled in the current Long-Term Plan 2021/2031 to upgrade raw water supply. However, there is a ongoing options project to resolve seasonal raw water supply issues and KDC is committed to finalising options and signalling investment. In terms of the ability of the Dargaville WTP and water supply network to service the land proposed to be re-zoned under PPC81 at present, the only restraint is seasonal raw water supply. Projects to increase the supply to the Dargaville WTP over the summer months are currently in the planning phase and KDC expects to progress through the options assessment this year (2023).”

Conclusion

310. As noted above the capacity of the Dargaville WWTP to appropriately treat wastewater PPC81 relies on upgrades, which have not yet been fully scoped, although “*KDC is committed to monitoring expected growth so that upgrade projects can be timed to provide capacity for growth without over investment. KDC anticipates that capacity will be provided for PPC81*”.
311. However, the remaining impediment to providing for wastewater disposal and conveyance is the requirement to cross the Awakino River on State Highway 14. This will require the approval of Waka Kotahi and possibly regional council consents. The likelihood that the necessary approvals will be granted is by no means confirmed and increases the uncertainty as to whether all stakeholders in this process are equally committed to supporting the proposed wastewater upgrades. As such I do not have sufficient information at this time to conclude that PPC81 can be appropriately serviced in relation to wastewater disposal. This is a matter where additional information or evidence from the Applicant and/or Waka Kotahi and NRC would be of assistance.
312. The technical review of the CEA confirms that there is a seasonal constraint with regard to the supply of sufficient raw water to service PPC81. I do not have sufficient information at this this time to determine if measures can be put in place to counteract potential raw water shortages. The Applicant has proposed “*conservative approaches to the management of rainwater runoff and harvesting. Effective rainwater harvesting can reduce the system demand substantially. Groundwater by way of community bore is another potable water source that can be explored. Bores and extraction of groundwater would be subject to resource consent from Northland Regional Council (NRC). An enquiry to NRC was submitted to query the current groundwater model. Initial feedback from NRC indicated that there is an unrestricted supply on site however, drainage through the site to be considered. Water levels and quality is unknown at this stage.*” Although this information indicates that technical solutions to supplying sufficient potable water to the site are possible (and a design solution could be proposed at the resource consent stage), the provisions of PPC81 do not reflect the potential water supply constraints. As such I cannot fundamentally

conclude that there will be sufficient raw water to appropriately supply potable water to development proposed as part of PPC81.

Transport

313. An Integrated Transportation Assessment (“**ITA**”) has been undertaken by Stantec (Appendix 5 of the application) which assesses the transportation aspects of PPC81. No direct access is proposed to SH14 and no direct access from individual lots is proposed to Awakino Point North Road.
314. Instead, a number of new local roads (internal to the site) will provide access for the future lots. There is a proposed hierarchy for the internal local roads, although this hierarchy is not mapped on the CDP. It is intended that these internal roads will be vested with KDC at time of subdivision.
315. The ITA recommends that the existing T-intersection between SH14 and Awakino Point North Road is upgraded to a more standard form of Give Way controlled T-intersection. This is to accommodate the additional trips on the current transport network to ensure safety for all users, and effectiveness of the trips generated from the site, once developed. The assessment also recommended that Awakino Point North Road is sealed to accommodate the additional trips generated from the Plan Change site.
316. The suitability of the provision of a T intersection has been raised within the submissions of both Waka Kotahi and Northland Transportation Alliance (“**NTA**”). The parties agree (Applicant, KDC, Waka Kotahi and NTA) that the intersection upgrade is required and that it needs to be in place prior to residents moving into dwellings on the site. A remaining point of contention is the form of the intersection upgrade.
317. While this is a key issue to resolve through more detailed design of the site, in my opinion it is not a decision that needs to be finalised prior to determining if PPC81 can proceed and can be resolved through the resource consent process. The preference of the submitters is for a roundabout solution. Commute Transportation Consultants (“**CTC**”) on behalf of KDC has noted in their opinion that both an upgraded priority-controlled T-intersection option (with speed calming / reductions) or a roundabout option at the SH14 / Awakino Point North Road intersection could mitigate the effects of PPC81. CTC agree that a roundabout would be the “safest” option for the intersection, however, priority-controlled intersection, with speed mitigation measures to reduce speed (providing they occur) would also adequately mitigate the effects of PPC81. Please refer to the CTC memo attached as Appendix I.
318. It is proposed that the site will be linked to Dargaville by a shared walking and cycling path along SH14. Waka Kotahi and the Northland Transportation Alliance (“**NTA**”) have been consulted regarding this and have subsequently made submissions in relation to this matter. Questions were also raised in a number of other submissions in relation to the usability of the shared path, and whether this could be safely accommodated, given the distance between the site and Dargaville township, and pinch points such as Awakino Bridge.
319. The implementation of the shared path is proposed to be timed for when the GRA is implemented, given the intent is for the shared path to provide an alternate active means of connecting with Dargaville for the residents of the TDA. The memo provided by CTC identified that there are limited, if any, reasonable walking, cycling and public transportation opportunities currently available. The provision of a shared walking/cycling path from the site to Dargaville is considered an acceptable solution, subject to the actual design. The CTC memo identifies that the new pedestrian/cyclist facility connecting the proposed site

and Dargaville to be a vital component of PPC81 being acceptable from a Transport point of view. The CTC memo notes that no details have been provided with regards to an indicative design / layout of the proposed shared path along SH14 and proposed bridge connection. It is thus considered that as part of the Applicant's evidence, concept designs / discussion should be provided demonstrating the proposed shared path is feasible within existing road reserve.

320. Walking/cycling paths will also be provided within the internal road network to encourage active transport, given the walkable size of the TDA. This also delivers on the Hauora intent of achieving community wellbeing.
321. Based on the ITA, the agreed position of both Waka Kotahi and NTA, the peer review of the ITA by CTC and the inclusion of specific mitigation measures and planning controls in PPC81, I consider that the effects of the proposal in relation to the transportation network can be managed appropriately. Decisions relating to the final form of the SH14 and Awakino Point North Road can be resolved through the next stages of detailed site design. However, additional information with regard to the feasibility of the shared walking/cycling link will be required.

Earthworks

322. The Applicant has noted that earthworks have not been specifically assessed for the PPC81 because this activity will be assessed at time of subdivision or comprehensive development. It is anticipated that all excavation and fill will be undertaken in accordance with industry best practice. Provided appropriate mitigation measures are adopted, it is considered that the potential adverse effects from earthworks will be acceptable.

Productive Potential

323. The Applicant has advised that land at the site has limited suitability for rural production activities like growing crops or pastoral use due to the poor soil quality and the low-lying nature resulting in a high water table in winter. This is based on the Regional Soil maps. However, as noted in relation to the NPS-HPL assessment above, LUC mapping has identified areas of LUC 2 and LUC 3 within the site. The rezoning of this land to accommodate urban activities is to be avoided, unless the specific tests in clause 3.6 of the NPS-HPL can be met. As such, with no specific information to the contrary, I consider that the effects of PPC81 in relation to the productive potential of land identified as LUC 2 and LUC 3 are not acceptable.

Soil Contamination

324. The Applicant has provided an assessment in relation to the potential for contaminants to be present within the soil on the site. The Applicant has advised that no HAIL activity was identified to have historically occurred on the site. No potential for contamination was identified that is considered likely to create a risk to human health. As noted previously the provisions of the NES-CS will still apply if an area of unconsolidated fill is discovered during site works or other earthworks.

Ecology and Biodiversity

325. The Applicant has stated that the site is a highly modified parcel of land, covered mostly with exotic grass species and a few exotic trees species. Section 4.3 in the ALE (included as Appendix 10 to the application) provides details on the vegetation within the site and surrounding environment.

326. The Applicant states that there are no waterways, but a number of small springs are present. The overland flow path from the springs have been directed to cut off drains to aid drainage of the racing track. Given the modified nature of the site, there is very limited natural ecology or biodiversity currently present.
327. As noted previously, it is my opinion that information must be provided to confirm that the NPS-FM does not apply to the site. Until such information is provided, I cannot consider that the protection of existing wetland values, the promotion or restoration of existing wetlands and the protection of habitats of indigenous freshwater species is given effect to through the current provisions of PPC81. Further supporting information and amendments to the PPC81 provisions to address these outstanding concerns would be required prior to the hearing in order for me to amend my position.

9.0 Notification and Submissions

Notification and Key Dates

328. Table 1 below outlines the chronology of events of relevance to PPC81 proceedings:

Event	Date
Lodgement of PPC81	22 February 2022
Clause 23 RFI	16 March 2022
Clause 23 RFI Response	Partially Satisfied 20 April 2022
Clause 25 Acceptance	27 July 2022
Notification Period	29 August 2022 – 27 September 2022
Further Submission Period	1 November 2022 – 15 November 2022
Hearing Date	27 to 29 March 2023

Table 2: Chronology of Events for PPC81

Submissions and Further Submissions

329. 18 submissions and 7 further submissions were received on PPC81. Please refer to Appendix A and Appendix B for the summary of submissions and further submissions. The original submission and further submission documents can be found on KDC's website.

Further Information Request

330. Although no formal further information request was sent to the Applicant, subsequent meetings were held between KDC staff and the Applicant, where a variety of issues were raised, including civil engineering matters, transportation issues and matters in relation to iwi consultation.
331. At the time of writing this report the following matters are yet to be fully addressed:
- Civil engineering – issues with regard to raw water supply and alternative means of supply.
 - Civil engineering – issues with regard to the feasibility of bridging the Awakino River with wastewater infrastructure.

- Transportation – specifically in relation to the feasibility of a shared pedestrian/cycle link to Dargaville
- Matters in relation to the NPS-HPL.
- Matters in relation to the NPS-FM.

332. I have identified within my assessment below where I cannot complete an assessment of effects, subject to receiving and assessing all of the required information.

Pre Hearing Meetings

333. No pre-hearing meetings were requested by DRC.

10.0 Consideration of Submissions

Community Facilities

Submission Points
7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 13.1, 13.2, 15.5, 17.8

Submission Information

334. A number of submissions have been made regarding the topic of community facilities. Generally, these submissions are in opposition to the plan change and seek that it be declined or resubmitted with further information and/or the addition of provisions relating to the adequate provision of community facilities. A number of submissions note the lack of appropriate play areas and accessible green space. A specific submission by the Ministry of Education seeks enabling provisions with regard to education facilities.

335. Reasons given generally relate to concerns about the lack of community facilities (e.g. schools, medical centres, sports facilities) provided for in the plan change area and concern that existing community facilities within Dargaville do not have capacity for the increased population that the plan change will enable.

336. Additional concerns have been raised in relation to insufficient pedestrian and cycle access to the recreational facilities.

Discussion

337. I do not support submissions seeking that the plan change be declined on the basis of a lack of community facilities. It is not typical, in my opinion, for planning provisions to be prescriptive when it comes to what community facilities are to be provided within a development area. Such facilities are usually, in my experience, located and developed based on demand. In my opinion, there is sufficient area within the plan change site for such facilities to be developed, particularly within the Hauora Hub. The consideration of the establishment of these facilities will be more efficiently made at the time of subdivision and development, subject to negotiation between the eventual applicant / developer and Council.

338. With regard to access, the Urban Design Assessment (“UDA”) has confirmed the provision of a shared path along the State Highway 14 corridor to provide an active transport link between the site and town.

“This path will be funded by the developer. Overall, a range of access and transport options, to link residents and workers with Dargaville town are provided to support community resilience and reduce car dependence in light of climate change.” The provisions for PPC81 contain a trigger rule for the construction of this shared path.

339. I do support the inclusion of enabling provisions in relation to educational facilities. I agree in part with the submission points raised by the Ministry of Education with regard to a separate definition for education facilities and the need for specific enabling provisions. This will ensure that there are no particular barriers to their development within the site, should the need arise.

Conclusion

340. I recommend that the Commissioners accept in part submission points 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9 and reject the other identified submission points. Amendments to the PPC81 provisions will be required.

Fire and Emergency

Submission Points
8.1 to 8.9

Submission Information

341. Fire and Emergency New Zealand (“**FENZ**”) have made a submission in relation to ensuring that adequate provision is given to fire safety and operational fire fighting requirements.

Discussion

342. With regard to the matters raised by FENZ, I note that Plan Change 4 – Fire Safety Rules (Land Use) has comprehensively addressed the implications and imposition of Fire Safety Rules.
343. Information in relation to this matter can be found at <https://www.kaipara.govt.nz/services/district-plans/plan-changes/plan-change-4-fire>
344. In short, a *“decision on Plan Change 4 was issued via Consent Order from the Environment Court on 24 October 2018, after all parties through negotiations and mediation agreed to a way forward. Generally, the Court’s Consent Order upheld the Commissioners’ decision in relation to land use activities e.g the removal of the need to comply with the NZ Fire Service Code of Practice at time of building, and introduces a new risk-based approach to help with assessment of subdivision applications. The new approach aims to help Council and applicants understand if there are potential fire hazards which may need to be considered at the time of subdivision consent applications, if sufficient firefighting water is not supplied. Plan Change 4 was made operative on Wednesday 18 December 2018.”*
345. In light of the above I do not support the submission of FENZ, but rather recommend that the provisions as embodied via Plan Change 4, are correspondingly applied to PPC81.

Conclusion

346. I recommend that the Commissioners reject the submission points and consequential changes to apply the provisions of Plan Change 4 to the PPC81 area are included.

Flood Hazard and Stormwater

Submission Points
3.3, 12.10,

Submission Information

347. Two submissions have raised concerns in relation to the increase in impervious surfaces at the site and the ability to manage increased stormwater flows, both on site and off-site and the resulting potential for additional flood hazards to occur. These matters were also raised specifically in light of climate change and the potential for future sea level rise.

Discussion

348. With reference to the various technical memos attached as Appendix J, K and L to this report it has been confirmed that PPC81 is serviceable in terms of stormwater. However this will be subject to further investigation and detailed engineering design at the resource consent stage of the development to meet Kaipara District Council's level of service and avoid adverse effects on neighbouring properties, asset owners and receiving environment.

Conclusion

349. I recommend that the Commissioners reject the submission points.

Open/Green Space

Submission Points
12.11, 13.1, 13.2, 15.5, 17.7

Submission Information

350. A number of submissions have been made in opposition to PPC81 on the basis that insufficient open/green space has been provided as part of the proposal, concerns regarding the loss of the pony club and accessibility issues in relation to the hillside space.

Discussion

351. I have relied upon the technical evidence provided within the UDA included with the application. The UDA identifies that a *“range of open space functions and specific areas are proposed in the indicative masterplan and OSA provisions provide for a range of functions and locations for OSA around the neighbourhood area, to provide residents with choice and diverse OSA and convenient access to natural and recreational amenity. All OSA include trees and vegetation (soft landscaping) to enhance the mauri and ecology of the whenua, with planting plan and selection of native plant species to be undertaken in collaboration with tāngata whenua.”*

352. Additionally, the UDA notes that the “*Hillside Reserve*’ is a principal open space for this development. It is located on the elevated area to the north-east of the site, seeking to make best use of the elevation and points of interest, and maintains natural springs and overland flow paths through the Blue-Green Network. A large reserve in this location offers a natural buffer between bordering rural land uses to the north and east, and limits the visual impact of development. This reserve area will also preserve and enhance existing features including overland flow paths, existing mature trees on the north-east boundary, several springs and a man-made dam/pond...The outcomes for the ‘Hillside Reserve’ support the intention to provide a low maintenance reserve, with native vegetation.”
353. The UDA also notes that the ‘*Neighbourhood Open Space*’ forms part of the Hauora Hub, with a strong, integrated relationship with adjacent General Residential and Neighbourhood Centre Areas, offering opportunities for cultural harvest, active play, passive recreation and ecological restoration which provide for hauora, holistic health and community wellbeing. This OSA is an important opportunity to express appropriate cultural narratives (identified and applied in collaboration with tāngata whenua) through the design of the public realm, supporting positive sense of place relationships for tāngata whenua, residents and manuhiri, reinforcing shared identity, and promoting community pride and social cohesion.”
354. In light of the technical evidence presented above, I consider that adequate provision has been made for open/green spaces within the development area. I accept that provision of additional open/green space may also be most efficiently and effectively determined at time of subdivision consent. However, it is appropriate that the Hillside Reserve and Neighbourhood Open Space are included within the TDA DAP.

Conclusion

355. I recommend that the Commissioners reject the submission points.

Retain as Rural

Submission Points
3.1, 10.1, 14.1, 15.1, 16.1, 17.1, 18.1

Submission Information

356. A number of submissions have requested that the site be retained as Rural. Generally, these submissions raise concerns in relation to the density of development and more specifically the loss of rural productive land.

Discussion

357. As mapped above, a small part of the site running down the site’s boundary with Awakino Point North Road is identified in the New Zealand Land Resource Inventory data base as LUC 2 land, with a small portion to the north as LUC 3.
358. Given this, along with the clear direction provided by the NPS-HPL that the urban rezoning of highly productive land is to be avoided, at this time re-zoning of the land identified as LUC 2 into various urban zones is inconsistent with Policy 5 of the NPS-HPL. Additionally, the rezoning of land identified as LUC

3 is inconsistent with Policy 6 of the NSP-HPL which identifies that rezoning and development of highly productive land as rural lifestyle is avoided, except where provided in the NSP-HPL.

359. In my considered opinion I have insufficient information to determine whether rezoning the parts of the site that are LUC 2 and LUC 3 against the urban rezoning tests in clause 3.6 of the NPS-HPL is appropriate or valid.
360. In my opinion a concise and separate assessment in relation to part 3.6 of the NPS-HPL needs to be completed by the Applicant prior to the Hearing.

Conclusion

361. I recommend that the Commissioners accept the submission points and the portions of the site identified as LUC 2 and LUC 3 be retained as rural, however I would agree to revise my position on this should sufficient evidence be supplied to confirm the validity of the proposal in light of the tests under clause 3.6 of the NPS-HPL.

Reverse Sensitivity

Submission Points
10.2, 12.4, 12.5, 12.6, 17.3,

Submission Information

362. Submissions have been made in relation to the potential for reverse sensitivity effects. The submitters specifically raise concerns such as:
- Children with idle time and nothing to do could decide that a working farm, that has many potentially dangerous hazards, is a playground for them.
 - The operation of the farm may be compromised by complaints from the new residents, for the noise associated with normal rural activity including tractors, motorbikes, trucks, firearms and harvesting machinery and also the smells that are associated with farming.
 - The inappropriateness of high density of housing adjacent to working farms and general farming activities, given the noise from livestock, harvesting machinery, heavy trucks, firearms, tractors, motorbikes and aircraft, along with the smells from silage, dairy effluent, agri-chemicals and dust.
 - Inadequacy of setback distances, and requesting increased set backs between noise sensitive activities and farm related activities of 300m.

Discussion

363. Reverse sensitivity effects on existing rural land, is considered within the AA as discussed above. The AA considers reverse sensitivity effects on existing rural land use (with respect to noise) is considered relatively low risk. Noise measurements of existing rural activities near the subject site do not suggest that existing rural activities would be at significant risk due to the proximity of the proposed GRA.

364. Without technical evidence to the contrary, I accept the evidence provided in the AA that reverse sensitivity effects in relation to noise will be low risk.
365. For clarification I note that the KDP only requires 300m setbacks in instances where there is an existing intensive farming activity, not as a standard separation distance for all sensitive land uses from all rural activities.
366. Reverse sensitivity effects are further considered within paragraphs 256-262 of my report. I again, considering no evidence to the contrary, accept the expert evidence provided by the Applicant, based in part on the ALE, that measures to mitigate landscape and character effects will also work with regard to reducing the potential for reverse sensitivity effects. These factors include earth bunds, planted buffer strips, building and structure setbacks. The Applicant has advised that these can be addressed through specific PPC81 provisions. Provisions included within the TDA chapter rules provided as Appendix 2B to the application include rules relating to screening, landscaping and setbacks along with maximum height and height in relation to boundary requirements. This is consistent with similar provisions already in place within the KDP.

Conclusion

367. I recommend that the Commissioners reject the relevant submission points and no further changes are required.

Roading Infrastructure

Submission Points
3.2, 4.2, 4.3, 4.4, 4.5, 5.1, 5.6, 5.7, 5.8, 5.9, 5.16, 5.17, 5.18, 5.19, 6.1 – 6.5, 9.1, 10.3, 12.7, 12.8, 12.9, 14.2, 15.2, 15.6, 16.2, 17.4, 17.5, 18.4

Submission Information

368. A significant number of submissions have been made regarding the topic of Roothing Infrastructure. Generally, these submissions raise concerns in relation to road safety, road design, traffic volumes and pedestrian linkages.

Discussion

369. As noted above Commute Transportation Consultants (“**CTC**”) on behalf of KDC has noted in their opinion, provided within the memo attached to this report as Appendix I, that both an upgraded priority-controlled T-intersection option (with speed calming / reductions) or a roundabout option at the SH14 / Awakino Point North Road intersection could mitigate the effects of PPC81. CTC agree that a roundabout would be the “safest” option for the intersection, however, priority-controlled intersection, with speed mitigation measures to reduce speed (providing they occur) would also adequately mitigate the effects of PPC81.
370. It is proposed that the site will be linked to Dargaville by a shared walking and cycling path along SH14. Waka Kotahi and the Northland Transportation Alliance (“**NTA**”) have been consulted regarding this and have subsequently made submissions in relation to this matter. Questions were also raised in a number

of other submissions in relation to the usability of the shared path, and whether this could be safely accommodated, given the distance between the site and Dargaville township, and pinch points such as Awakino Bridge.

371. The implementation of the shared path is proposed to be timed for when the GRA is implemented, given the intent is for the shared path to provide an alternate active means of connecting with Dargaville for the residents of the TDA. The memo provided by CTC identified that there are limited, if any, reasonable walking, cycling and public transportation opportunities currently available. The provision of a shared walking/cycling path from the site to Dargaville is considered an acceptable solution, subject to the actual design. The CTC memo identifies that the new pedestrian/cyclist facility connecting the proposed site and Dargaville to be a vital component of PPC81 being acceptable from a Transport point of view. The CTC memo notes that no details have been provided with regards to an indicative design / layout of the proposed shared path along SH14 and proposed bridge connection. It is thus considered that as part of the Applicant's evidence, concept designs / discussion should be provided demonstrating the proposed shared path is feasible within existing road reserve.
372. Walking/cycling paths will also be provided within the internal road network to encourage active transport, given the walkable size of the TDA. This also delivers on the Hauora intent of achieving community wellbeing.
373. Based on the ITA, the agreed position of both Waka Kotahi and NTA, the peer review of the ITA by CTC and the inclusion of specific mitigation measures and planning controls in PPC81, I consider that the effects of the proposal in relation to the transportation network can be managed appropriately. Decisions relating to the final form of the SH14 and Awakino Point North Road can be resolved through the next stages of detailed site design. However, additional information with regard to the feasibility of the shared walking/cycling link will be required.

Conclusion

374. I recommend that the Commissioners seek out further information from the Applicant and appropriate KDC staff through the hearing process to ascertain the feasibility of the shared walking/cycling link between the site and Dargaville.

Water Supply and Wastewater Disposal

Submission Points
5.8, 9.2, 15.3, 15.4, 17.2,

Submission Information

375. Several submissions have raised matters in relation to inadequate and aging infrastructure and the inability of existing council assets to adequately service PPC81 requirements.

Discussion

376. These matters have been addressed in some detail within the Infrastructure Servicing section of this report above. I will reiterate here that the capacity of the Dargaville WWTP to appropriately treat

wastewater PPC81 relies on upgrades, which have not yet been fully scoped, although “KDC is committed to monitoring expected growth so that upgrade projects can be timed to provide capacity for growth without over investment. KDC anticipates that capacity will be provided for PPC81”.

377. However, the remaining impediment to providing for wastewater disposal and conveyance is the requirement to cross the Awakino River on State Highway 14. This will require the approval of Waka Kotahi and possibly Regional Council Consents and is by no means confirmed. As such I do not have sufficient information at this time to conclude that PPC81 can be appropriately serviced in relation to wastewater disposal.
378. On the basis of the above technical assessment of the CEA it is confirmed that there is a seasonal constraint with regard to the supply of sufficient raw water, to service PPC81. I do not have sufficient information at this this time to determine if measures can be put in place to counteract potential raw water shortages. The Applicant has proposed “*conservative approaches to the management of rainwater runoff and harvesting. Effective rainwater harvesting can reduce the system demand substantially. Groundwater by way of community bore is another potable water source that can be explored. Bores and extraction of groundwater would be subject to resource consent from NRC. An enquiry to NRC was submitted to query the current groundwater model. Initial feedback from NRC indicated that there is an unrestricted supply on site however, drainage through the site to be considered. Water levels and quality is unknown at this stage.*” However, these approaches are not followed through into the provisions as provided by the Applicant in relation to PPC81. As such I cannot fundamentally conclude that there will be sufficient raw water to appropriately supply potable water to development proposed as part of PPC81.
379. At this time I do not have specific technical information available to address these submissions and the potential concerns raised therein.

Conclusion

380. I recommend that the Commissioners seek out further information from the Applicant and appropriate KDC staff through the hearing process to ascertain whether there is sufficient certainty that reticulated wastewater disposal and water supply infrastructure can be provided if the site is rezoned as per PPC81.

11.0 Conclusion

381. After carefully considering the submissions and further submissions received in relation to each topic, there are aspects of the proposed plan change that I can support, including:
- That the potential landscape, visual, amenity and character effects from the development can be appropriately mitigated over time to a minor effect;
 - The adverse social impacts of the proposal will be minimal and there will be some positive social impacts;
 - The long-term positive effects associated with new walking and cycling infrastructure, impacts on community, culture, health and wellbeing and amenity/quality of life outweigh the potential adverse effects;

- The Applicant has attempted to address cultural values and is continuing to participate in ongoing dialogue. Following clarification in relation to specific matters around the NPS-FM, I am of the opinion that cultural values have been addressed to an appropriate extent within PPC81.
- The urban design components of the proposal can be appropriately mitigated or managed;
- The economic benefits of PPC81 are positive and construction of residential housing will assist with relieving the current housing shortage and increase the population of Dargaville;
- Any potential noise effects will be appropriately managed and mitigated through the proposed provisions and will maintain an acceptable level of amenity at the surrounding dwellings;
- The site is geotechnically suitable for light industrial, commercial and residential development;
- Any adverse effects in relation to archaeology or heritage will be acceptable;
- The impacts from earthworks will be acceptable provided all excavation and fill is undertaken in accordance with industry best practice;
- Adequate provision for open/green spaces have been made within the development area and I accept that additional areas can be determined at the time of subdivision consent. However, it is appropriate that the Hillside Reserve and Neighbourhood Open Space are included within the TDA DAP;
- Reverse Sensitivity Effects can be managed within the proposed development through appropriate mitigation and management of potential effects;
- Effects in relation to transport and roading infrastructure can be appropriately managed, providing the inclusion of specific mitigation and planning controls are imposed. I accept that the final form of the SH14 and Awakino Point North Road can be resolved through the next stages of detailed site design.
- That PPC81 is serviceable in terms of stormwater treatment and control. However, this will be subject to further investigation and detailed engineering design at the Resource Consent stage for the development to meet Kaipara District Council's level of service and avoid adverse effects on the neighbouring properties, asset owners and receiving environment.

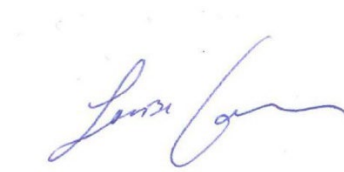
382. However, there are also several aspects of PPC81 that I cannot support due to lack of information in order to determine that the effects will be appropriate, including:

- There is the potential for adverse effects to occur in relation to wetland ecology and biodiversity when the site is developed;
- Land identified as LUC 2 and LUC 3 should not be rezoned to urban zoning unless the tests included in clause 3.6 of the NPS-HPL find that it is appropriate to do so;
- Sufficient certainty that raw water can be sourced to appropriately supply potable water to the development;
- sufficient certainty that reticulated wastewater disposal infrastructure can bridge the Awakino River to enable the site to be serviced if it is rezoned as proposed.

383. In terms of Part 2 of the RMA, in this instance I do not think that any of the three caveats i.e. invalidity, incomplete coverage or uncertainty of meaning in the planning documents, apply. However, should the Commissioners form a different view I have undertaken a brief Part 2 assessment to assist the Commissioners in their decision making.
384. I consider that the current drafting of PPC81 does not meet the sustainable management purpose of the RMA as it is not managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety, specifically in relation to safe guarding the life-supporting capacity of water, soil and ecosystems.
385. Section 6 of the RMA sets out a number of matters of national importance that must be recognised and provided for. I consider that PPC81 recognises and provides for these matters in the following ways:
- The archaeological assessment submitted with the application does not identify any specific archaeological or heritage sites requiring protection.
 - The relationship of Māori with their ancestral lands, water, sites, waahi tapu and other taonga has been recognised and provided for via consultation, the provision of CIA documents and the ongoing opportunities for participation in the process surrounding PPC81.
 - The risk from natural hazards has been addressed through technical reports prepared by Lands and Survey and AWA.
386. However, based on the information before me I consider that PPC81 as currently drafted does not recognise and provide for:
- The preservation of the natural character of wetlands and the protection of them from inappropriate subdivision, use and development.
387. Section 7 of the RMA identifies a number of other matters to be given particular regard. I consider that PPC81, has regard to a number of these matters because:
- The proposal has acknowledged the kaitiakitanga role of Te Roroa and Te Uri o Hau and consultation and ongoing engagement has been undertaken with respect to PPC81.
 - While there will be a change in amenity values of the site due to the progression of development, the ALE and UDA provided with the application suggest the provision of design guidelines to be implemented via the rules of the TDA that will ensure the maintenance and enhancement of amenity values associated with the site.
 - The Applicant is intending to maintain and enhance the quality of the environment via planting of the blue-green network.
388. Section 8 requires that the principles of the Treaty of Waitangi are taken into account. The application for PPC81 is supported by two CIA.
389. On balance of the entire proposal, I recommend that the Commissioners decline PPC81.
390. If some or all of the necessary information is received prior to the hearing I will prepare an addendum to this report to confirm whether the new information enables me to amend my recommendation.

391. At this time, I have not made specific recommendations to amend the PPC81 provisions as there are a significant number of matters outstanding. It is recommended that the Applicant provide an updated set of PPC81 provisions that address the key issues with the original drafting that have been outlined in this report, namely:

- Clear cascade of Objectives, Policies and consequential Rules;
- Civil engineering – issues with regard to raw water supply and alternative means of supply along with the feasibility of bridging Awakino River in relation to wastewater infrastructure.
- Transportation – Specifically in relation to the feasibility of a shared pedestrian/cycle link to Dargaville
- Matters in relation to the NPS-HPL.
- Matters in relation to the NPS-FM.



Reporting Planner

3/03/2023

Louise Cowan

*Principal Planning and Policy
Consultant – 4Sight Consulting (Part of
SLR)*

Date

Appendix A - Summary of Submissions Spreadsheet

Date Submission Received	Name of Submitter	Submission Number	Submission Point	Topic	Sub Topic	Support/Oppose/Neutral /Amend Plan Text	Decision Sought	Heard at Hearing	Joint Heard where similar submission	Notes and Document Links
2/09/2022	Nick Suckling	1	1.1	PPC81 as Proposed	Proceed as Proposed	S	The submitter requests that PPC81 proceed as proposed. The submitter notes this is a prime opportunity to support the growth of Dargaville, as there is a limited amount of land available for development. The submitter considered this will bring prosperity to Kaipara.	N	Y	
15/09/2022	Daniel Simpkin	2	2.1	PPC81 as Proposed	Proceed as Proposed	S	The submitter requests that Council retain proposed zoning. The submitter considers PPC81 will start the growth of Dargaville and create opportunities. However, the submitter also notes that PPC81 must have adequate Council services/infrastructure including sewerage and water. The submitter request Council not allow a split sewer system. All sewage must come back to town. The submitter considers there must be walking/bicycle/scooter path provided to town as well.	N	Y	
23/09/2022	Leanne Phillips	3	3.1	PPC81 as Proposed	Retain as Rural	O	The submitter request that site is retained as rural zone. The submitter notes PPC81 will result in loss of productive, grade 3 good quality food producing land. The submitter notes the high density development will affect their well being and hauroa due to increased traffic, parties, dogs barking, fireworks etc. The submitter identifies that the proposal will remove peace and quite they enjoy within the current environment along Awakino Point North Road.	N	Y	
		3	3.2	Roading	Safety	O	The submitter has concern that SH14 and Awakino Point North Road intersection is already busy enough without adding another possible 935 traffic movements at peak times. The submitter notes they have lived on Awakino North Point Road most of their life and although there haven't been a lot of accidents there have been lots of near misses. The submitter notes that there is already dangerous driving occurring and some locals stop on the side of the road until it is safe to continue as people drive in the middle of the road. Another concern of the submitter is the bus stop at the top of the road, with the proposed road alteration the submitter questions whether the children be safe catching the bus with the increased volume of traffic, specifically will the children be safe walking to and from the bus stop.	N	Y	
		3	3.3	Infrastructure	Stormwater	O	The submitter expresses concern that if the proposed development goes ahead and 450 homes are built at the Racecourse, there will be more storm water added to an already basic county drain. The drain in the middle of the racecourse links to the county drain that runs directly past the submitters house and down to the farms below with one main flood gate that links to the Northern Wairoa River. The submitter has seen this drain nearly overflow on several occasions and it has flooded the submitters front yard in the past. The submitter has concern this will occur more frequently with the additional development.	N	Y	
23/09/2022	Colin and Joanne Rowse	4	4.1	PPC81 as Proposed	Retain as Rural	O	The submitter considers the land is best suited for food production and should be retained as rural for this purpose. The submitter considers high density of development is impractical situated in a rural district and isolated by 4km of busy state highway.	Y	N	
		4	4.2	Roading	Safety	O	The submitter notes a significant family history associated with the site and surrounds. The submitter recalls an accident from June 2018, along with two accidents from the last few months identifying the dangers of this portion of road including the blind corner, deep roadside drains, and narrow shoulder.	Y	N	
		4	4.3	Roading	Safety	O	The submitter agrees with the Stantec report that Covid 19 has skewed traffic volumes, there has been a significant difference in volume in the last two years. The submitter additionally notes that the traffic counter used to obtain the figures is located at Te Wharau and does not account for Awakino Point traffic or the lost tourist traffic. The submitter has observed tourist traffic missing the SH12 turnoff and having to turn back, often resulting in dangerous near misses at North Road and Te Wharau Station Road intersections.	Y	N	
		4	4.4	Roading	Safety	O	The submitter notes the figures in section 6 of the Stantec report calculate traffic volumes of up to around 935 vehicle per hour, two way in the morning and afternoon peaks. The submitter notes this is comparable with the Thursday and Friday traffic numbers of the Northland Agricultural Field Days, which are required to employ traffic management (cones and pointsmen) to control volumes. That is undertaken where Awakino Point East Road intersects with SH14 on a straight and flat section of road, with good visibility at a 100km speed limit, but for a maximum of three days. The proposal will see this dramatically increased volume of traffic every day of the year.	Y	N	
		4	4.5	Roading	Design	O	The submitter notes that during the meeting held 27 May 2021 there was mention that the intersection will need a roundabout to control the high volumes of traffic. Since then, the submitter notes that there has been no further mention. The submitter states that there is plenty of public land available to build a roundabout. If the proposed development were to progress then the submitter feels that a roundabout is the only real option to both safely marshal the expected volume but to slow through traffic.	Y	N	
23/09/2022	Waka Kotahi New Zealand Transport Agency	5	5.1	Statutory	Crown Entity	N	Waka Kotahi note they are a Crown Entity that take an integrated approach to transport planning, investment and delivery. The statutory objectives of Waka Kotahi are to undertake its functions in a way that contribute to an effective, efficient and safe land transport system in the public interest. The vision is for a sustainable, multi-modal land transport system where public transport, active or shared modes are the first choice for most daily transport needs.	Y	Y	Please refer to notes under Submission 6 regarding statutory relationship between Waka Kotahi and the Northland Transportation Alliance
		5	5.2	Statutory	NPSUD	N	Waka Kotahi note that Policy 1 of the National Policy Statement on Urban Development 2020 (NPSUD) emphasises the need to coordinate land use planning with infrastructure provisions noting that planning decision contribute to a well functioning urban environment that as a minimum have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport.	Y	Y	https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-urban-development/

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		5	5.3	Statutory	Emissions Reduction Plan	N	Waka Kotahi note the Emissions Reduction Plan (ERP) was released in May 2022, but does not have legal weight under the RMA until November 2022. However, Waka Kotahi feel the ERP should be considered under the statutory assessment. Waka Kotahi note the following matters should be considered as part of PPC81 to support emissions reduction as well as achieving other RMA outcomes such as minimising effects on the transportation system and social impacts, including: a. delivery of secure and easy to access cycle parking within both the residential and light industrial development areas; b. delivery of electric vehicle charging spaces/infrastructure to support and encourage the use of electric vehicle use; and c. clear provisions to ensure safe and efficient walking and cycling networks are established within the development site and that they connect to the proposed pedestrian and cycle link.	Y	Y	https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/
		5	5.4	PPC81 as Proposed	Proceed as Proposed	S	Waka Kotahi are in general support of the proposed zoning composition in the structure plan, specifically the industrial zoning fronting the state highway corridor. This inherently avoids reverse sensitivity effects on noise sensitive receivers.	Y	Y	
		5	5.5	Plan Provisions	Signage	Amend Plan Text	Waka Kotahi consider the signage rules in the Trifecta Development Area should refer to the Kaipara District Plan, Rule 14.10.24 Signage (including signs on and adjacent to roads) rather than provide an additional rule for this area only.	Y	Y	
		5	5.6	Roading	Design	Amend Plan Text	Waka Kotahi note within Attachment 2 of their submission being the Technical Note prepared by Flow Transportation Specialists Ltd that: a. that the Trifecta Development Area Chapter be amended to identify that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection; b. proposed amendments to the Trifecta Development Area Chapter; and c. the current intersection should be upgraded prior to any construction works that will generate more than 10 heavy vehicle movements through the SH14/Awakino Point North Road intersection per day.	Y	Y	
		5	5.7	Roading	Design	N	Waka Kotahi note that a development of the scale proposed in PPC81 in a greenfield location has the potential to generate relatively high levels of private vehicle movements, which would impact the transport network and generate greenhouse gas emissions. PPC81 has identified that a pedestrian and cycle link between the plan change site and Dargaville township as a key active mode link to help mitigate private vehicle use and provide greater transport choice. Currently the rule framework in PPC81 requires the provision of a pedestrian and cycle connection from the intersection of State Highway 14 and Awakino Point North Road to Tuna Street. Greater certainty is needed to support this rule, specifically: a. the standard and location of the connection; b. that the applicant is responsible for the funding/delivery of the connection; c. that the connection must also safely and efficiently connect with walking and cycling routes within the plan change site; d. that the design takes into account natural hazard risk for access to the plan change site and in particular ensures the proposed pedestrian and cycle link is appropriately designed to be resilient to those risks; and e. that the design takes into account Crime Prevention Through Environmental Design (CPTED) .	Y	Y	https://www.justice.govt.nz/assets/Documents/Publications/cpted-part-1.pdf
		5	5.8	Roading	Design	N	Waka Kotahi note there are specific site constraints that need to be managed during detailed design specifically, but not limited to: 1. the SH14 bridge over Awakino River; 2. Awakino Point East Road, specifically Lot 22 DP 7811 (NA611/235); and 3. Ensuring grade separation or fencing from the SH corridor.	Y	Y	
		5	5.9	Plan Provisions	Precinct Plan	Amend Plan Text	Waka Kotahi state that a precinct plan should be appended to the Trifecta Development Area chapter that includes the location of the pedestrian and cycle link. This should also include a cross section of the pedestrian and cycle links design. This appendix should be linked to the provisions of the chapter to make implementation of the transport infrastructure clearer.	Y	Y	
		5	5.10	Landscaping	Landscaping	N	Waka Kotahi specify that any landscaping undertaken should be installed within private property boundaries and should not restrict vehicle or pedestrian sightlines.	Y	Y	
		5	5.11	Landscaping	Landscaping	N	Waka Kotahi considers that any landscaping and front boundary treatments along the SH corridor should mitigate any potential effects generated from headlight glare and driver distraction.	Y	Y	
		5	5.12	Light Spill	Light Spill	N	Waka Kotahi considers light spill from the industrial zone onto the SH corridor needs to be considered and appropriately mitigated.	Y	Y	
		5	5.13	Plan Provisions	New Provision	Amend Plan Text	Waka Kotahi seeks that notes be added to the front end of the Trifecta Development Area Chapter to reinforce any additional requirements under separate legislation from the Resource Management Act 1991, specifically Government Roadway Powers Act 1989.	Y	Y	
		5	5.14	Plan Provisions	Objectives and Policies	Amend Plan Text	Waka Kotahi generally supports the objectives and policies of PPC81 insofar as they provide for mixed use zoning, but seek an additional policy to be included to support integrated planning and the provision of necessary transport infrastructure, specifically related to multi-modal connections to the Dargaville town centre and the intersection of Awakino Point North Road and SH14	Y	Y	
		5	5.15	Plan Provisions	Transport	S	Waka Kotahi request that TDA-SUB-R9 Transport and TDA-SUB-S10 Transport (2) are retained as notified.	Y	Y	
		5	5.16	Plan Provisions	Transport	O	Waka Kotahi support an upgrade to the intersection of SH14 and Awakino Point North Road, however the type of intersection proposed is not supported. Waka Kotahi request that TDA-SUB-S10 Transport (3) is amended to provide for a roundabout, which is the best means to mitigate traffic effects.	Y	Y	

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		5	5.17	Plan Provisions	Transport	O	Waka Kotahi request that TDA-SUB-510 Transport (4) is amended to allow for the upgrade of the intersection of SH14 and Awakino Point North Road to a roundabout and that the pedestrian and cycle link to Tuna Street is completed. Waka Kotahi also request amendments to the matters of discretion under TDA-SUB-513 to allow for a safe, efficient and effective transport network and to consider the impact on the transport network and transport outcomes such as a mode shift and emissions reduction.	Y	Y	
		5	5.18	Plan Provisions	Transport	O	Waka Kotahi support an upgrade to the intersection of SH14 and Awakino Point North Road, however the type of intersection proposed is not supported. Waka Kotahi request that TDA-LU-S4 Transport (1) is amended to provide for a roundabout, which is the best means to mitigate traffic effects.	Y	Y	
		5	5.19	Plan Provisions	Transport	O	Waka Kotahi support an upgrade to the intersection of SH14 and Awakino Point North Road, however the type of intersection proposed is not supported. Waka Kotahi request that TDA-LU-S4 Transport (2) is amended to provide for a roundabout, which is the best means to mitigate traffic effects.	Y	Y	
		5	5.20	Plan Provisions	Lighting	Amend Plan Text	Waka Kotahi note that the requirement for artificial lighting to be provided for all streets, walkways and cycleways and roads created by the subdivision is supported. Given a portion of the lighting may be located alongside the SH14 corridor Waka Kotahi request TRA-LIGHT-SS-Subdivision be amended to include Waka Kotahi as a roading authority.	Y	Y	
		5	5.21	Plan Provisions	Signage	O	Waka Kotahi states that standards associated with signage should be consistent with the Kaipara District Plan and guidance provided in the NZTA Traffic Control Devices Manual. If standards as notified are retained, a matter of discretion requiring Waka Kotahi approval should be added.	Y	Y	https://www.nzta.govt.nz/resources/traffic-control-devices-manual/
		5	5.22	Plan Provisions	Signage	Amend Plan Text	Waka Kotahi request amendments to TDA-SIGN-51 to ensure Waka Kotahi approval is sought for any sign visible from the SH. This includes: here a sign is proposed to be located in a road reserve adjoining the SH network or is visible from the SH network the approval of the Waka Kotahi is also required. Matters of Discretion 8. Whether the sign is visible from the SH and, if so, Waka Kotahi approval has been obtained.	Y	Y	
		5	5.23	Plan Provisions	Signage	Amend Plan Text	Waka Kotahi seeks district plan provisions to ensure that all third-party signs are appropriately designed and located to provide for the safe operation of the land transport system. Waka Kotahi request an amendment to DA-SIGN-54 to require that approval is sought from Waka Kotahi for any sign visible from the SH.	Y	Y	
		5	5.24	Plan Provisions	Signage	Amend Plan Text	Waka Kotahi request that the activity status for an illuminated sign that is visible beyond the site boundary is more stringent. Waka Kotahi request a change from Discretionary to Non-Complying status for TDA-SIGN-59 Illuminated Sign (1).	Y	Y	
		5	5.25	Plan Provisions	Signage	Amend Plan Text	Waka Kotahi request that the activity status for an illuminated sign that is visible beyond the site boundary for sites within the Light Industrial Area is more stringent. Illuminated signs are not supported when visible from the SH corridor in high speed environments. Waka Kotahi request a change from Discretionary to Non-Complying status for TDA-SIGN-59 Illuminated Sign (2).	Y	Y	
		5	5.26	Plan Provisions	Definitions	S	Waka Kotahi note that all definitions should be consistent with the Kaipara District Plan.	Y	Y	
23/09/2022	Northland Transportation Alliance	6	6.1	Plan Provisions	Transport	Amend Plan Text	Northland Transportation Alliance (NTA) generally support PPC81 but seek to amend the zoning as proposed with suitable conditions for the road network to ensure they are safe system compliant. Proposal would support the growth of Dargaville and enable Dargaville to have an active mode connectivity.	Y	Y	Please note that Waka Kotahi are a Crown Entity that manage the SH system. Northland Transportation Alliance (NTA) are a roading department for the Northland Council's. They are separate organisations and manage differing parts of the road network, with Waka Kotahi predominantly managing the SH network and District council managing the local road network (with some exceptions in urban areas). With regard to the nature of the submissions from Waka Kotahi and NTA; NTA have requested that the proposed SUP terminates at Selwyn Park and Waka Kotahi have supported the applicants proposed termination at Tuna Street. Waka Kotahi are not opposed to the SUP extending further into the township, but also did not oppose termination at Tuna Street either. Therefore, the submissions do not contradict one another as Waka Kotahi and NTA are separate authorities (NTA are submitting under the capacity of assessing the urban roading environment within Dargaville whereas Waka Kotahi are focused on the function, efficiency and safety of the state highway network). Additionally, NTA have requested that the Awakino Point North Road/SH14 intersection be upgraded to a Safe System Compliant Primary Treatment Facility type. Waka Kotahi have requested that this intersection be upgraded to a roundabout. A Safe System Compliant Primary Treatment Facility type could be a roundabout, NTA did not undertake modelling at the time of submission and did not clarify a specific treatment type whereas Waka Kotahi engaged a traffic consultant who undertook modelling to determine the appropriate treatment type.
		6	6.2	Roading	Design	N	NTA request that Awakino Point North Road/SH14 intersection to be upgraded to a Give-Way controlled T intersection. NTA have specifically requested that; 1. the intersection is to be upgraded to be Safe System Compliant Primary Treatment facility type; 2. Detailed Design Road Safety Audit and a Post Construction Road Safety Audit as outlined in the Whangarei Road Safety Audit Standard September 2022 of the associated infrastructure upgrades is to be carried out, where all Serious and Significant Risks identified are mitigated to at least a residual risk of Moderate; and 3. The intersection upgrades and Awakino Point North Road upgrades are to be appropriately conditioned for staging.	Y	Y	Austroads - Safe System Assessment Framework.pdf

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		6	6.3	Roading	Design	N	NTA have noted that the termination point of the shared user path connecting Awakino Point North Road to the town centre has not been determined. NTA note that Waka Kotahi have a preference to terminate the link at a quiet street or appealing destination. NTA seek that the shared user path connect with Selwyn Park as a minimum including safe system compliant primary active transport crossing facility for all users. NTA also request that Detailed Design Road Safety Audit and a Post Construction Road Safety Audit as outlined in the Whangarei Road Safety Audit Standard September 2022 of crossing facilities and the associated infrastructure be carried out, where all Serious and Significant Risks identified are mitigated to at least a residual risk of Moderate.	Y	Y	WDC Road Safety Audit Standard - September 2022.pdf
		6	6.4	Roading	Design	N	NTA have requested that Awakino Point North Road/Primary access intersection and Awakino Point North Road/Industrial Access intersection into the proposed site are to be a Give-Way controlled T-intersection. NTA request: 1. Intersection is to be upgraded to be Safe System Compliant Primary Treatment facility type; 2. Detailed Design Road Safety Audit and a Post Construction Road Safety Audit as outlined in the Whangarei Road Safety Audit Standard September 2022 of the associated infrastructure upgrades is to be carried out, where all Serious and Significant Risks identified are mitigated to at least a residual risk of Moderate; 3. Connectivity (Pedestrian crossing) of the shared user path with the proposed residential zone to be Safe System Compliant Primary Treatment facility type; and 4. The upgrades are to be appropriately conditioned for staging and they are to comply with the revised Whangarei District Council Engineering standards.	Y	Y	
		6	6.5	Roading	Design	N	NTA have advised that the Applicant will have to undertake a safe system assessment of the intersections and the crossings where the safe system matrix will be utilised to score the existing conditions and proposed conditions by determining the high levels of risk and if it has been addressed. NTA notes that "Primary Treatments" refers to the consideration of solutions which will eliminate the occurrence of fatal and serious injury crashes. "Austroads – Safe System Assessment Framework" outlines the treatment hierarchy and selection and the "Standard Safety Intervention Toolkit" by Waka Kotahi is to be utilised as a supplement. With regard to the revised "Whangarei District Council Engineering Standards" NTA note that the Applicant had utilised WDC EES as part of their proposal and therefore NTA have referred to the latest standards.	Y	Y	Standard safety intervention toolkit (nzta.govt.nz)
23/09/2022	Ministry of Education	7	7.1	Statutory	Education	N	Ministry of Education (Ministry) is the Government's lead advisor on the New Zealand education system. The Ministry assesses population changes, school roll fluctuations and other trend and challenges impacting on education provision to identify changing needs. The Ministry is responsible for all education property owned by the Crown, including the need to purchase new property. The Ministry considers they are a stakeholder in terms of activities that may impact on existing and future educational facilities and assets in the Northland region.	Y		
		7	7.2	Other Matters	Density	N	The Ministry notes that PPC81 will provide substantial development capacity and, as the area is currently zoned Rural and has been identified in the Kaipara Spatial Plan as land appropriate for industrial development, this residential growth is not anticipated by the Ministry. As PPC81 would enable urban growth at densities that are greater than currently enabled, the demand on the local existing school network at Dargaville will likely increase. Additional capacity within the Ministry's network will likely be required to service the growth of this plan change and the wider growth of Dargaville. The Ministry is seeking enabling provisions for educational facilities be included within the Trifecta Development Area to accommodate future educational facilities to enable the Ministry to service the growth and urban expansion of Dargaville.	Y		
		7	7.3	Statutory	NPSUD	N	The Ministry acknowledges that the proposed plan change will contribute to providing additional housing within the wider Northland Region. This may require additional capacity in the local school network to cater for growth as the area develops and may potentially require a new school in the plan change area. The Ministry understands that the Council must meet the requirements under the National Policy Statement on Urban Development 2020 (NPS-UD). Policy 10 of the NPS-UD states that local authorities should engage with providers of development infrastructure and additional infrastructure (schools are considered additional infrastructure) to achieve integrated land use and infrastructure planning. Subpart 3.5 of the NPS-UD states that local authorities must be satisfied that the additional infrastructure to service the development capacity is likely to be available. The Ministry therefore has an interest in the inclusion of appropriate provisions for educational facilities within the development area. The Ministry requests clarification on how educational facilities will be provided for within the Trifecta Development Area and seeks relief of explicit inclusion of educational facilities in the provisions of the Trifecta Development Area consistent with the draft Kaipara District Plan.	Y		https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-urban-development/
		7	7.4	Plan Provisions	Objectives and Policies	Amend Plan Text	The Ministry seeks an amendment to TDA.1.1 Objective 3 to include educational facilities. The Ministry notes that the development area has provisions for community facilities (which includes educational facilities in the Development Area nesting table). However, the inclusion of educational facilities as part of community facilities is not explicit as the definition for community facilities in the Trifecta Development Area does not include educational facilities. Further, this is inconsistent with the approach taken in the draft Kaipara District Plan, which has separate provisions for community facilities and educational facilities. The Ministry wishes to highlight the gap in the Trifecta Development Area once the draft Kaipara District Plan becomes operative, and requests the inclusion of educational facilities within the objective to specifically enable the establishment of schools.	Y		
		7	7.5	Plan Provisions	Objectives and Policies	Amend Plan Text	The Ministry seeks an amendment to TDA.1.2 Policy 5 to include educational facilities. The policy should "Provide for community facilities and services and educational facilities that support the Hauora (wellbeing) of the neighbourhood."	Y		

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		7	7.6	Plan Provisions	New Provision	Amend Plan Text	The Ministry seeks a new provision to address the need for educational facilities within the Large Lot Residential Area. The Ministry has specified this provision as: TDA-LLRA-R20 Educational Facility (Large Lot Residential Area) Activity Status: Restricted Discretionary Matters of Discretion: a. Character and amenity b. Design and layout c. Transport safety and efficiency d. Scale of activity and hours of operation e. Infrastructure servicing	Y		
		7	7.7	Plan Provisions	New Provision	Amend Plan Text	The Ministry seeks a new provision to address the need for educational facilities within the General Residential Area. The Ministry has specified this provision as: TDA-GRA-R22 Educational Facility (General Residential Area) Activity Status: Restricted Discretionary Matters of Discretion: a. Character and amenity b. Design and layout c. Transport safety and efficiency d. Scale of activity and hours of operation e. Infrastructure servicing	Y		
		7	7.8	Plan Provisions	New Provision	Amend Plan Text	The Ministry seeks a new provision to address the need for educational facilities within the Neighbourhood Central area. The Ministry has specified this provision as: TDA-NCA-R19 Educational Facility (Neighbourhood Centre Area) Activity Status: Restricted Discretionary Matters of Discretion: a. Character and amenity b. Design and layout c. Transport safety and efficiency d. Scale of activity and hours of operation e. Infrastructure servicing	Y		
		7	7.9	Plan Provisions	Definitions	Amend Plan Text	The Ministry has requested the inclusion of Educational Facilities as an independent activity, within the Development Area Definitions Nesting Table.	Y		
23/09/2022	Fire and Emergency New Zealand	8	8.1	Statutory	Fire and Emergency	N	In achieving the sustainable management of natural and physical resources under the Resource Management Act 1991 (RMA), decision makers must have regard to the health and safety of people and communities. There is also a duty to avoid, remedy or mitigate actual and potential adverse effects on the environment. The risk of fire represents a potential adverse effect of low probability but high potential impact. Fire and Emergency has a responsibility under the Fire and Emergency New Zealand Act 2017 to provide for firefighting activities to prevent or limit damage to people, property and the environment. As such, Fire and Emergency has an interest in the land use provisions of the District Plan to ensure that, where necessary, appropriate consideration is given to fire safety and operational firefighting requirements. Fire and Emergency requires adequate water supply be available for firefighting activities; and adequate access for new developments and subdivisions to ensure that Fire and Emergency can respond to emergencies. The provision for adequate water supply is therefore critical. It is important to Fire and Emergency that any new subdivision or land use has access to adequate water supply (whether reticulated or non-reticulated). This essential emergency supply will provide for the health, safety and wellbeing of people and the wider community, and therefore contributes to achieving the purpose of	Y		https://www.legislation.govt.nz/act/public/2017/0017/latest/DLM6712701.html
		8	8.2	Infrastructure	Fire and Emergency	N	Fire and Emergency identify the proposal's civil engineering assessment notes the proposed connection to the reticulated Council water supply may not meet firefighting flows at adequate pressure to service the development and so further design/analysis will be required at development stage to ensure adequate provision of water for firefighting purposes.	Y		
		8	8.3	Infrastructure	Fire and Emergency	N	Fire and Emergency note that PPC81 provides for on-site water collection as a means of increasing resilience. In particular, the Large Lot Residential Area would not be connected to Council's reticulated system and instead would rely on on-site water collection and storage by way of rainwater harvesting and groundwater supply. Fire and Emergency support the enablement of on-site collection and storage as a way to mitigate the impacts of droughts but for these to be adequate for firefighting they must be designed in accordance with SNZ 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice .	Y		https://fireandemergency.nz/assets/Documents/Files/N5a-SNZPAS-4509-2008-NZFS-Firefighting-water-supplies-Code-of-practice.pdf
		8	8.4	Plan Provisions	Subdivision	O	To strengthen implementation of Policy 12 Fire and Emergency request explicit reference to emergency servicing needs. Fire and Emergency request the addition of a reference to TDA-SUB-R9 (transport and Three Waters) in TDA-SUB-S1 (1).	Y		
		8	8.5	Plan Provisions	Transport	S	Fire and Emergency request an addition to TDA-SUB-S10 to require that "Every allotment provides for emergency service response access".	Y		
		8	8.6	Plan Provisions	Subdivision	S	Fire and Emergency request an addition to TDA-SUB-S11 matters of discretion to allow for the "Provision of firefighting water supply in accordance with SNZ 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice."	Y		

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		8	8.7	Plan Provisions	Subdivision	S	Fire and Emergency request an addition to TDA-SUB-S13 matters of control and discretion to allow for the inclusion of emergency service responses to the provision of infrastructure.	Y		
		8	8.8	Plan Provisions	Transport	S	Fire and Emergency request an addition to TDA-LU-S4 - Transport matters of discretion to allow for the provision for emergency service response access.	Y		
		8	8.9	Plan Provisions	Three Waters	S	Fire and Emergency request an addition to TDA-LU-S5 - Three Waters an additional point 6. requiring that "Where reticulated water supply does not provide adequate water supply and pressure for firefighting, an alternative firefighting water supply is provided in accordance with SNZ 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice .	Y		https://fireandemergency.nz/assets/Documents/Files/N5a-SNZPAS-4509-2008-NZFS-Firefighting-water-supplies-Code-of-practice.pdf
25/09/2022	George McGowan	9	9.1	PPC81 as Proposed	Modify	Amend Plan Text	The submitter notes the proposal supports the growth of Dargaville, but seeks an amendment to provide less housing and more green space. The submitter notes there will be too many vehicles accessing onto SH14 and no practical linkage to Dargaville township.	N	N	
		9	9.2	Infrastructure	Three Waters	O	The submitter notes that Dargaville is struggling now with water and sewerage and wonders how existing infrastructure could cope with such a large increase. The submitter questions if the applicant intends to build their own facility where will this be located? The submitter notes that the sections are too small for individual treatment systems.	N	N	
26/09/2022	CJ Farms 2020 Limited	10	10.1	PPC81 as Proposed	Retain as Rural	O	The submitter notes that the proposed high density development is on productive food producing land in a rural area and is surrounded by working farms, and as such it is impractical. The submitter notes that while the applicant says it will work, the submitter thinks that reality will be vastly different.	N	Y	
		10	10.2	Reverse Sensitivity	Reverse Sensitivity	O	The submitter notes they are a fifth generation dairy farming family, having lived adjoining the site for 67 years. The submitter advises their mental health and well being will be significantly impacted with the change in landscape from the proposed 450 house development being built on our three boundaries. The submitter states that their cowshed is situated approximately 60-80 meters from this proposed development, and directly opposite our cowshed entrance is the proposed retirement village entrance. The submitter has concerns regarding roaming dogs and highly possible dog attacks on our stock. The submitter also has concerns that children with idle time and nothing to do could decide that a working farm, that has many potentially dangerous hazards, is a playground for them. The submitter also notes that the operation of the farm may be compromised by complaints from the new residents, for the noise associated with normal rural activity including tractors, motorbikes, trucks, firearms and harvesting machinery and also the smells that are associated with farming.	N	Y	
		10	10.3	Roading	Safety	O	The submitter is concerned with the potential increase in traffic movements from Awakino North Point Road (which is a No Exit Road) out onto an already busy SH14. The submitter notes that Awakino Point North Road is especially busy during the kumara season, some of the kumara workers travel on the metal road at speeds of up to 100km/hr. The submitter notes their grandchildren frequently use the road (many times a day) to walk or bike across from their home to their grandparents and their safety is already in danger.	N	Y	
26/09/2022	Graeme Lawrence	11	11.1	PPC81 as Proposed	Modify	O	The submitter notes that they oppose the zoning of the site for residential use, but support the use of the site for a retirement village with hospital, healthcare centre, green space and activity area to support the elderly community. The submitter also supports light industrial to help grow business and employment. The submitter notes that residential development should be retained within the Dargaville boundaries with improvement to existing infrastructure.	N	Y	
26/09/2022	Awakino Point Rate Payers Inc	12	12.1	Statutory	Planning Documents	O	Awakino Point Rate Payers Inc (APRP) supports the growth and development of Dargaville, and in particular residential development, that is consolidated around existing settlements, and is consistent with the patterns of growth planned for in the Kaipara District Plan, the Northland Regional Policy Statement (RPS) and the Dargaville Spatial Plan. However, APRP considers that PPC81 will encourage ad hoc development, that is contrary to provisions in Chapter 3 of the Operative Kaipara District Plan. APRP considers that PPC81 fails to give effect to the provisions of the RPS which seek inter alia, to manage the regional form of growth and development, to avoid sterilising productive and industrial land, and to maximise the benefits and efficient use of existing infrastructure .	Y	Y	https://www.nrc.govt.nz/resource-library-summary/plans-and-policies/regional-policy-statement/regional-policy-statement/
		12	12.2	Statutory	Planning Documents	O	APRP note that Kaipara District Council (KDC) have recently invested significant resources into consulting on and preparing the Dargaville Spatial Plan . This document underpins the preparation of the upcoming review of the District Plan. APRP considers that by providing for residential development in this area, rather than the area to the northwest and southern areas of Dargaville (as agreed on by the community) the proposal will not give effect to, and effectively undermines the Spatial Plan.	Y	Y	https://www.kaipara.govt.nz/spatial
		12	12.3	Statutory	Planning Documents	O	APRP consider that PPC81 will effectively sterilise the area of proposed heavy industrial land before it has been zoned by the upcoming district plan review. The assessment of costs and benefits fails to address the costs involved with developing land for heavy industry for other uses, and the lack of capacity for industrial land this will create. APRP acknowledge the draft District Plan is still in its early stages of development, however it is considered that the proposal is contrary to the desired direction of urban form and development in the exposure draft of the District Plan, which KDC have recently been consulting on.	Y	Y	

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		12	12.4	Reverse Sensitivity	Reverse Sensitivity	O	APRP note that they support growth in the Dargaville area that avoids more intensive development in unsuitable areas, such as hazard zones or areas used for horticultural and agricultural production. APRP note they are particularly concerned about the loss of agricultural land and the potential for PPC81 to increase reverse sensitivity effects by introducing incompatible activities like residential development into productive rural areas. APRP consider that the provision of residential development and aged care facilities on the racecourse land will adversely affect existing farming operations by creating new reverse sensitivity effects. Rural production activities in the Awakino Point area involve various seasonal activities that may create conflicts with sensitive residential activities. New residents in the area are likely to be sensitive to livestock noises, heavy vehicle movements, spraying of horticultural crops, aircraft noise, bird scaring devices, shooting, and activities creating dust.	Y	Y	
		12	12.5	Reverse Sensitivity	Set Backs	O	APRP note that to address this issue the applicant has proposed screen plantings and 'generous' setbacks between buildings in the General Residential Area of 20m from the Rural Zone, and 10m from Awakino Point North Road. APRP consider that these setbacks are inadequate and will be ineffective in mitigating reverse sensitivity effects associated with rural activities, eventually leading to restrictions on existing rural production activities on the surrounding land. In comparison the Operative District Plan's rural zone provisions require a separation distance between noise sensitive activities and noise generating activities such as a dairying shed or feed storage area of 300m.	Y	Y	
		12	12.6	Reverse Sensitivity	Economic Effect	O	APRP consider that introducing incompatible activities under PPC81 will restrict opportunities for rural activities, create ongoing costs to the rural economy, and will force food production activities further out of town to less suitable areas, requiring higher inputs, higher transport costs and increased emissions. The economic analysis supporting PPC81 considers the loss of income from grazing the racecourse land, however it fails to consider the costs and lost opportunities that will be created by reverse sensitivity impacts on the existing farming operations of surrounding landowners. The assessment of alternative options for the site also fails to consider these costs.	Y	Y	
		12	12.7	Roading	Design	O	APRP note that PPC81 is expected to significantly increase congestion on SH14 between the PPC81 site and Dargaville. The applicants traffic modelling suggests that the development will create a significant increase in traffic movements at the intersection of SH14 and Awakino Point North Road. APRP note that the mitigation measures recommended in the integrated transport assessment include upgrading the intersection, sealing Awakino Point North Road, and creating a Pedestrian/Cycle Link into Dargaville. APRP has significant concerns with the assumption that a 4 km walking/cycling track into Dargaville will be utilised by new residents enough to mitigate any adverse effects on the transport network between the PPC81 site and Dargaville, particularly when a significant proportion of the residents are likely to be elderly and will need to drive to town to access groceries, health and social services.	Y	Y	
		12	12.8	Roading	Design	O	APRP is concerned if PPC81 is approved, the provisions as proposed do not provide any certainty that traffic and transport effects will be mitigated through the physical works recommended by Stantec. It is noted that Waka Kotahi have only provided their agreement in principle to provide for the walking/cycling link into town from the site.	Y	Y	
		12	12.9	Roading	Timing	O	APRP note that the PPC81 subdivision provisions require upgrades to intersections and the provision of pedestrian connections into Dargaville where subdivision is of any allotment in the proposed General Residential Area. However APRP consider it is unclear how the requirement for these mitigation measures would be triggered if the applicant applied for land use consent to establish multiple residential units without subdividing. APRP consider that the PPC81 provisions that trigger infrastructure upgrades must be strengthened to ensure that the costs of infrastructure upgrades are borne by the developer, and not ratepayers and occur in a sequenced manner before any residential development takes place.	Y	Y	
		12	12.10	Infrastructure	Stormwater	O	APRP notes a significant concern regarding the increase in impervious surfaces and the ability to manage increased stormwater flows on the PPC81 site. APRP note that there are already significant flooding concerns in the areas surrounding the site, particularly at high tide, and these may be exacerbated due to predicted sea level rise in the future. APRP consider that the proposed stormwater controls are inadequate and that any development on the site should ensure that post development stormwater flows from the property are managed so that they do not exceed predevelopment flows.	Y	Y	
		12	12.11	Other Matters	Pony Club	O	APRP note concerns with the potential loss of the Silver Pine Pony Club which leases part of the racecourse land. APRP note this is a valued sporting facility which will have to relocate and could potentially be lost if the PPC81 is approved. APRP consider that accommodations should be made for the pony club to continue operations on an area of the site, recognising the history of equestrian and racing activities that have taken place on the site over a long period of time.	Y	Y	
		12	12.12	Other Matters	Council Decision	O	APRP seeks that the KDC make the following decisions in relation to PPC81: 1. Reject the plan change; 2. Retain the Rural Zone zoning at Awakino Point; and 3. Consider the costs to the economy associated with introducing sensitive activities into a productive rural environment. If the Council is of a mind to approve PPC81 APRP seeks that plan provisions are included that: 1. Restrict the amount of residential development on the site and include effective provisions to avoid the creation of reverse sensitivity effects; 2. Include appropriate provisions that require upgrades to transport and other infrastructure prior to the establishment of residential activities; and 3. Ensure that provisions are included to manage the impacts of stormwater runoff on surrounding properties.	Y	Y	

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Date Submission Received	Name of Submitter	Submission Number	Submission Point	Topic	Sub Topic	Support/Oppose/Neutral /Amend Plan Text	Decision Sought	Heard at Hearing	Joint Heard where similar submission	Notes and Document Links
26/09/2022	Donald and Adrienne McLeod	13	13.1	Other Matters	Community Facilities	O	The submitter notes that with the high intensity of housing they are concerned about the lack of amenities for Tamariki and Rangatahi housed within the site if PPC81 were successful. While the submitter acknowledges PPC81 proposes some green space areas (mainly on hilly areas) there is nothing proposed in the way of sports facilities that would keep Tamariki and Rangatahi active. The submitter considers it is vitally important that Kaipara District Council ensure that there is adequate and suitable facility to allow Tamariki and Rangatahi to engage in an active lifestyle.	Y	N	
		13	13.2	Other Matters	Community Facilities	O	The submitter notes that during various meetings that tripartite group did not want to take away from Dargaville township and mirror the facilities that are already in place. The submitter notes that Tripartite group constantly stressed that the residents of PPC81 would use sporting facilities in Dargaville. Although the submitter fully understands the applicants thought process the submitter believes it is flawed. With no public transport between Dargaville township and the PPC81 site the submitters question how these 400 odd Tamariki and Rangatahi will be able to use these Dargaville facilities. The submitter notes the proposal for a footpath between Dargaville township and the racecourse, however, the submitter considers this would need some extremely good planning as not many parents would encourage children to walk or ride on a footpath close to a 100kmph SH. The submitter notes that Mum and Dad taxi could cater to these transportation woes but note that the Tripartite group indicated on more than one occasion that many of the 600 adults would probably be employed in the Whangarei District, as such the Mum and Dad taxi's will not be available to ferry Tamariki and Rangatahi to their sporting activities. The submitter notes that herein comes the issue in that Tamariki and Rangatahi who are unoccupied and bored	Y	N	
26/09/2022	Shane and Megan Phillips	14	14.1	PPC81 as Proposed	Retain as Rural	O	The submitter opposes rezoning as proposed by PPC81 to residential and light commercial. The submitter considers this land is best suited to food production and recommends it be kept as such. the submitter believes the proposed high-density development is impractical, being situated in a rural district isolated 4km from Dargaville township by at times a very busy SH.	N	Y	
		14	14.2	Roading	Safety	O	The submitter notes specific concerns with PPC81 in relation to the school bus service pick up and drop off area (Bus stop), the submitter notes their children use the service with the stop currently sited at the intersection of SH14 and Awakino Point North Road. The submitter notes there is currently sufficient turning space while still maintaining high safety standards, with plenty of space for family vehicles that drop off and pick up their children. With PPC81 this area would require significant redevelopment and subsequently use considerably more land along with the significant increase in traffic movements (935 traffic movements per hour in peak times, morning, afternoon). The submitter feels that the safety of the children using this service will be severely compromised. The submitter notes that if PPC81 were to go ahead the safety concerns raised may result in children being fearful of the pick up and drop off area and result in a reduced attendance rate at school.	N	Y	
27/09/2022	Leo Glamuzina and Kim Harrison	15	15.1	PPC81 as Proposed	Retain as Rural	O	The submitter notes they are in opposition to PPC81 as a high density development situated in a rural farming area is illogical given it is 4km distance from the central hub of Dargaville township on a busy SH, which is used by heavy vehicles transporting goods between Dargaville and the rest of Northland. The submitter believes that land has been used for food production in the past and should remain as such.	N	Y	
		15	15.2	Roading	Safety	O	The submitter has grave concerns with regard to the impact of increased traffic from PPC81 on SH14 and Awakino Point North Road. The submitter notes since moving to the area they have seen a staggering increase in traffic volumes especially logging trucks, tankers and general heavy traffic. The submitter notes the amount of people commuting to Whangarei for employment, medical and other services that are no longer in Dargaville has increased exponentially. The submitter has witnessed accidents and increased speed incidents. The submitter has increased apprehension at a calculated increase of 935 vehicles per hour at peak as shown in the Stantec report and the impact this will have on an already busy and dangerous SH. The submitter believes poor road conditions do not support this level of increase.	N	Y	
		15	15.3	Infrastructure	Three Waters	O	The submitter has noted significant concern with struggling infrastructure. The submitter notes supply issues in relation to water with three to five interruptions to home water supply per year. The submitter notes that use at Silverfern can affect water pressure, but acknowledges improvement since the new water line was laid. The submitter also notes that summer water restrictions have been ongoing for years and this will be further impacted by intensive build of 450 homes. The submitter has concerns for future management of infrastructure by KDC and notes that given the size of the sections that it is doubtful the installation of water tanks would be viable.	N	Y	
		15	15.4	Infrastructure	Three Waters	O	The submitter also has concerns with sewage disposal given the size of the sections is too small to accommodate tanks. The submitter notes issues in relation to on site treatment of sewage vs use of existing infrastructure will require careful consideration.	N	Y	
		15	15.5	Other Matters	Community Facilities	O	The submitter has concerns in relation to the additional burden PPC81 will create on existing medical, school, fire brigade, ambulance and police services. The submitter considers that these services are struggling to support Dargaville and the wider community as it stands today. The submitter notes that there is already a struggle to secure qualified staff for these facilities. Growth needs strong and resilient services in place.	N	Y	
		15	15.6	Roading	Safety	O	The submitter believes that the development of PPC81 for housing, 4km from town is not viable due to its isolation from services. The submitter notes that access to town by walking, cycling or car is problematic given the busy SH, wide roadside drains, and barrier of Awakino River. The submitter also notes not everyone is able to afford cars. The submitter considers that infrastructure costs to provide access to town from PPC81 will be an enormous and fall as a burden on ratepayers.			

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27/09/2022	Janice and Michael Brenstrum	16	16.1	PPC81 as Proposed	Retain as Rural	O	The submitter supports growth for Dargaville but opposes rezoning of high food producing land for housing and commercial activities.	N	N	
		16	16.2	Roading	Safety	O	The submitter considers that the corner at Awakino Point North road/SH14 has a high accident rate and PPC81 will make this worse.	N	N	
27/09/2022	Dargaville Community C/- Roger Rowse	17	17.1	PPC81 as Proposed	Retain as Rural	O	The submitter has concerns regarding the loss of food producing land. The submitter believes the proposed high-density development as a satellite suburb separate from Dargaville is impractical.	N	Y	This submission is represented by Roger Rowse on behalf of the "Dargaville Community". Although this submission contains 304 signatories it is being treated as a single submission for the purpose of this process.
		17	17.2	Infrastructure	Three Waters	O	The submitter has concerns regarding additional pressures on existing and aged infrastructure, water and sewage from PPC81.	N	Y	
		17	17.3	Reverse Sensitivity	Reverse Sensitivity	O	The submitter has concerns with the high density of housing adjacent to working farms and general farming activities, given the noise from livestock, harvesting machinery, heavy trucks, firearms, tractors, motorbikes and aircraft, along with the smells from silage, dairy effluent, agri-chemicals and dust.	N	Y	
		17	17.4	Roading	Design	O	The submitter has concerns with the lack of connectivity to Dargaville township, including the distance, lack of footpath, narrow width of the road, open council drains, lack of pedestrian access on Awakino River Bridge and the 100kmph speed limit.	N	Y	
		17	17.5	Roading	Safety	O	The submitter notes major changes will be required to the intersection of SH14 and Awakino Point North Road to accommodate significant increase in traffic. Submitter notes poor quality of current roads prior to the addition of an extra 450 households.	N	Y	
		17	17.6	Other Matters	Economic Effect	O	The submitter has concerns in relation to the potential increase in rates to accommodate required infrastructure upgrades.	N	Y	
		17	17.7	Other Matters	Community Facilities	O	The submitter has concerns with regard to the lack of green space for playgrounds and recreational activity for children within the PPC81 area and the loss of the equestrian facility.	N	Y	
		17	17.8	Other Matters	Community Facilities	O	The submitter has concerns with regard to the additional pressure placed on existing facilities such as supermarket and medical centres, which already struggle to meet existing community needs.	N	Y	
27/09/2022	Jarrold McKelvie and Stephanie Rockell	18	18.1	PPC81 as Proposed	Retain as Rural	O	The submitter opposes rezoning as proposed by PPC81 to residential and light commercial. The submitter considers this land is best suited to food production and recommends it be kept as such. The submitter believes the proposed high-density development is impractical, being situated in a rural district isolated 4km from Dargaville township by a very busy SH.	Y	Y	
		18	18.2	Other Matters	Economic Effect	O	The submitter notes they had intended to develop their site for small scale food crops and complimentary products, to reduce food miles and assist in a reduction of imports. However, the submitter notes they have put this development on hold, as PC81 provides significant uncertainty.	Y	Y	
		18	18.3	Other Matters	Density	O	The submitter notes that the density of a satellite settlement to Dargaville with suggested dwellings over 20% the amount of dwellings in nearby Dargaville is absurd without the serious addressing of schooling, medical facilities, or grocery stores. The submitter considers that PPC81 is a development concept better suited to a city fringe than that of a charming rural hub.	Y	Y	
		18	18.4	Roading	Safety	O	The submitter notes they already we struggle to cross the road to set out our rubbish for collection on the side of the road requested by the refuse collectors, and having been one of the first on the scene to the Tangiteroria pedestrian casualty earlier this year, every time we do so we are reminded of this horrific event.	Y	Y	
		18	18.5	Other Matters	Economic Effect	O	The submitter notes that the size of the commercial proponent of the proposed redevelopment does not appear to support the workforce the PPC81 area would contain, likely resulting in further increases to traffic on SH14 as people travel to Whāngarei for work. The submitter notes that those having to commute to Whāngarei for work are likely to spend their money in Whāngarei, not within the local community, given the competition for grocery prices and so on.	Y	Y	

Appendix B - Summary of Further Submissions Spreadsheet

Further Submissions in relation to PPC81 - Dargaville Racecourse.										
Date Further Submission Received	Name of Further Submitter	Original Submission Number and Name	Original Submission Point	Topic	Sub Topic	Support / Oppose / Neutral	Reasons for Further Submission	Heard at Hearing	Joint Heard where similar submission	Additional Comments
3/11/2022	Awakino Point Rate Payers Inc. (APRP)	3. Leanne Phillips	3.1	PPC81 as Proposed	Retain as Rural	S	APRP shares the submitters concerns with respect to reverse sensitivity, traffic effects, and stormwater.	Y	Y	
		3. Leanne Phillips	3.2	Roading	Safety	S	APRP shares the submitters concerns with respect to reverse sensitivity, traffic effects, and stormwater.	Y	Y	
		3. Leanne Phillips	3.3	Infrastructure	Stormwater	S	APRP shares the submitters concerns with respect to reverse sensitivity, traffic effects, and stormwater.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.7	Roading	Design	S	APRP agrees that greater certainty is required around the delivery and funding of the proposed walking and cycling connection.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.8	Roading	Design	S	APRP has similar concerns over the practical aspects of constructing the shared path.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.12	Light Spill	Light Spill	S	APRP agree light spill could be an issue for neighboring residents and should be managed.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.14	Plan Provisions	Objectives and Policies	S	Support including additional policy supporting integrated planning and the provision of connections to Dargaville.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.16 - 5.19	Plan Provisions	Transport	S	APRA supports a roundabout at Awakino Point Road to manage traffic effects.	Y	Y	
		6. Northland Transportation Alliance	6.2	Roading	Design	O	APRA supports a roundabout at Awakino Point Road to manage traffic effects.	Y	Y	
		6. Northland Transportation Alliance	6.3	Roading	Design	S	Support terminating the the shared Selwyn Park.	Y	Y	
		10. CJ Farms 2020 Limited	10.1	PPC81 as Proposed	Retain as Rural	S	APRP shares the submitters concerns with respect to loss of productive rural land, reverse sensitivity effects, and traffic effects.	Y	Y	
		10. CJ Farms 2020 Limited	10.2	Reverse Sensitivity	Reverse Sensitivity	S	APRP shares the submitters concerns with respect to loss of productive rural land, reverse sensitivity effects, and traffic effects.	Y	Y	
		10. CJ Farms 2020 Limited	10.3	Roading	Safety	S	APRP shares the submitters concerns with respect to loss of productive rural land, reverse sensitivity effects, and traffic effects.	Y	Y	
		11. Graeme Lawrence	11.1	PPC81 as Proposed	Modify	S	APRP supports the submitters point in relation to consolidating residential development within Dargaville.	Y	Y	
		14. Shane and Megan Phillips	14.1	PPC81 as Proposed	Retain as Rural	S	APRP supports the submission with respect to retaining productive rural land traffic safety effects.	Y	Y	
		14. Shane and Megan Phillips	14.2	Roading	Safety	S	APRP supports the submission with respect to retaining productive rural land traffic safety effects.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.1	PPC81 as Proposed	Retain as Rural	S	APRP supports this submission with respect to traffic effects, infrastructure, impacts on community facilities.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.2	Roading	Safety	S	APRP supports this submission with respect to traffic effects, infrastructure, impacts on community facilities.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.3	Infrastructure	Three Waters	S	APRP supports this submission with respect to traffic effects, infrastructure, impacts on community facilities.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.4	Infrastructure	Three Waters	S	APRP supports this submission with respect to traffic effects, infrastructure, impacts on community facilities.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.5	Other Matters	Community Facilities	S	APRP supports this submission with respect to traffic effects, infrastructure, impacts on community facilities.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.6	Roading	Safety	S	APRP supports this submission with respect to traffic effects, infrastructure, impacts on community facilities.	Y	Y	

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		16. Janice and Michael Brenstrum	16.1	PPC81 as Proposed	Retain as Rural	S	APRP shares the submitters concerns with respect to the loss of food producing land and traffic effects.	Y	Y	
		16. Janice and Michael Brenstrum	16.2	Roading	Safety	S	APRP shares the submitters concerns with respect to the loss of food producing land and traffic effects.	Y	Y	
		17. Dargaville Community	17.1	PPC81 as Proposed	Retain as Rural	S	APRP supports the whole submission.	Y	Y	
		17. Dargaville Community	17.2	Infrastructure	Three Waters	S	APRP supports the whole submission.	Y	Y	
		17. Dargaville Community	17.3	Reverse Sensitivity	Reverse Sensitivity	S	APRP supports the whole submission.	Y	Y	
		17. Dargaville Community	17.4	Roading	Design	S	APRP supports the whole submission.	Y	Y	
		17. Dargaville Community	17.5	Roading	Safety	S	APRP supports the whole submission.	Y	Y	
		17. Dargaville Community	17.6	Other Matters	Economic Effect	S	APRP supports the whole submission.	Y	Y	
		17. Dargaville Community	17.7	Other Matters	Community Facilities	S	APRP supports the whole submission.	Y	Y	
		17. Dargaville Community	17.8	Other Matters	Community Facilities	S	APRP supports the whole submission.	Y	Y	
		18. Jarrod McKelviw and Stephanie Rockell	18.1	PPC81 as Proposed	Retain as Rural	S	APRP supports the submission in relation to retaining rural production land, and traffic safety effects.	Y	Y	
		18. Jarrod McKelviw and Stephanie Rockell	18.4	Roading	Safety	S	APRP supports the submission in relation to retaining rural production land, and traffic safety effects.	Y	Y	
7/11/2022	Nathaniel Everett	5. Waka Kotahi NZ Transport Agency	5.16	Plan Provisions	Transport	S	Mr Everett lives on Awakino Point North Road and owns a house there. He notes that getting into the road from left hand lane is very dangerous as it's a blind corner and a busy main road. Crossing the oncoming traffic lane of cars doing 100km per hour is difficult now. Some major change to road layout is important to ensure the safety of Awakino Point North Road residents and motorists.	Y	Y	
11/11/2022	Waka Kotahi New Zealand transport Agency	3. Leanne Phillips	3.2	Roading	Safety	S	Accept submission point insofar as it addresses concern that the SH14 and Awakino Point North Road intersection is not fit for purpose. The submitter did not comment on the proposed form of the intersection, although Waka Kotahi firmly assert that it should be upgraded to a roundabout rather than a priority-controlled T intersection.	Y	Y	
		4. Colin and Joanne Rowse	4.5	Roading	Design	S	Accept submission point insofar as it addresses concern that the proposed upgrades to the SH14 and Awakino Point North Road intersection are not appropriate and that the intersection form should be a roundabout.	Y	Y	
		6. Northland Transportation Alliance	6.1	Plan Provisions	Transport	S	Accept submission point insofar as it seeks improved transport infrastructure and active modes provision to the Dargaville town centre.	Y	Y	
		6. Northland Transportation Alliance	6.2	Roading	Design	S - subject to clarification	Accept submission point provided Council address that a Safe System Compliant Primary Treatment Facility type could be a roundabout, as requested per the original Waka Kotahi submission. Accept submission point insofar as it seeks improved transport infrastructure.	Y	Y	
		6. Northland Transportation Alliance	6.3	Roading	Design	S	Accept submission point insofar as it seeks improved transport infrastructure and active modes provision to the Dargaville town centre.	Y	Y	
		6. Northland Transportation Alliance	6.4	Roading	Design	S	Accept submission point provided Council address that a Safe System Compliant Primary Treatment Facility type could be a roundabout, as requested per the original Waka Kotahi submission. Accept submission point insofar as it seeks improved transport infrastructure and active modes provision to the Dargaville town centre.	Y	Y	
		6. Northland Transportation Alliance	6.5	Roading	Design	S	Accept submission point.	Y	Y	
		7. Ministry of Education	7.3	Statutory	NPSUD	N	Waka Kotahi do not oppose educational facilities being provided for within the Trifecta Development Area as a standalone activity, provided that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection. If the intersection treatment is not a roundabout, Waka Kotahi request that Kaipara District Council reject this submission point.	Y	Y	

Appendix B - Summary of Further Submissions Spreadsheet

Date Further Submission Received	Name of Further Submitter	Original Submission Number and Name	Original Submission Point	Topic	Sub Topic	Support / Oppose / Neutral	Reasons for Further Submission	Heard at Hearing	Joint Heard where similar submission	Additional Comments
		7. Ministry of Education	7.4	Plan Provisions	Objectives and Policies	N	Waka Kotahi do not oppose educational facilities being provided for within the Trifecta Development Area as a standalone activity, provided that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection. If the intersection treatment is not a roundabout, Waka Kotahi request that Kaipara District Council reject this submission point.	Y	Y	
		7. Ministry of Education	7.5	Plan Provisions	Objectives and Policies	N	Waka Kotahi do not oppose educational facilities being provided for within the Trifecta Development Area as a standalone activity, provided that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection. If the intersection treatment is not a roundabout, Waka Kotahi request that Kaipara District Council reject this submission point.	Y	Y	
		7. Ministry of Education	7.6	Plan Provisions	New Provision	N	Waka Kotahi do not oppose educational facilities being provided for within the Trifecta Development Area as a standalone activity, provided that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection. If the intersection treatment is not a roundabout, Waka Kotahi request that Kaipara District Council reject this submission point.	Y	Y	
		7. Ministry of Education	7.7	Plan Provisions	New Provision	N	Waka Kotahi do not oppose educational facilities being provided for within the Trifecta Development Area as a standalone activity, provided that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection. If the intersection treatment is not a roundabout, Waka Kotahi request that Kaipara District Council reject this submission point.	Y	Y	
		7. Ministry of Education	7.8	Plan Provisions	New Provision	N	Waka Kotahi do not oppose educational facilities being provided for within the Trifecta Development Area as a standalone activity, provided that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection. If the intersection treatment is not a roundabout, Waka Kotahi request that Kaipara District Council reject this submission point.	Y	Y	
		7. Ministry of Education	7.9	Plan Provisions	Definitions	N	Waka Kotahi do not oppose educational facilities being provided for within the Trifecta Development Area as a standalone activity, provided that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection. If the intersection treatment is not a roundabout, Waka Kotahi request that Kaipara District Council reject this submission point.	Y	Y	
		12. Awakino Point Rate Payers Inc	12.8	Roading	Design	S	Accept submission point, insofar that it seeks further certainty that the relevant transport infrastructure will be constructed prior to any development.	Y	Y	
		12. Awakino Point Rate Payers Inc	12.9	Roading	Timing	S	Accept submission point, insofar that it seeks further certainty that the relevant transport infrastructure will be constructed prior to any development.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.2	Roading	Safety	S	Accept submission insofar as it addresses concern that SH14 and Awakino Point North Road intersection is not fit for purpose.	Y	Y	
		17. Dargaville Community	17.5	Roading	Safety	S	Accept submission point insofar as it addressed concern that the proposed upgrades to the SH14 and Awakino Point North Road intersection will need to be significant. The submitter did not comment on the proposed form of the intersection, although Waka Kotahi firmly assert that it should be upgraded to a roundabout rather than a priority-controlled T intersection.	Y	Y	
15/11/2022	Northland Transportation Alliance	2. Daniel Simpkin	2.1	PPC81 as Proposed	Proceed as Proposed	S	NTA agrees that this is an opportunity for Dargaville to grow, but adequate infrastructure is to be provided to provide connectivity from the development to the Town Centre.	Y	Y	
		3. Leanne Phillips	3.2	Roading	Safety	S	NTA agrees that the existing intersection of Awakino Point North Road and SH14 is unsafe and the proposed Give way control will not address the additional traffic generated by this development and the development is to be take into consideration the existing bus pick up and drop locations closer to the development and provide adequate mitigations.	Y	Y	
		3. Leanne Phillips	3.3	Infrastructure	Stormwater	S	NTA agrees that adequate stormwater facility is to be provided within the development.	Y	Y	
		4. Colin and Joanne Rowse	4.5	Roading	Design	S	NTA agrees that a roundabout at SH14/Awakino Point North Road is the appropriate safe system primary treatment.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.2	Statutory	NPSUD	S	NTA agrees that an accessible active or public transport network for all people between different locations in the community is to be provided.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.3	Statutory	Emissions Reduction Plan	S	NTA agrees that the development should consider Emissions Reduction Plan and undertake any possible measure to mitigate the effects as suggested by Waka Kotahi. For example: Provision of EV charging stations, bi-cycle parkign provisions, etc.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.5	Plan Provisions	Signage	S	NTA agree that the signage rule in Kaipara District Plan is to be utilised in the Trifecta Development Area Chpater to mainatain consistency throughout the network.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.6	Roading	Design	S	NTA agrees that the proposed Give way control for the intersection is not adequate or safe system compliant to address the additional traffic generated, therefore a roundabout is supported and also support that intersection improvements be carried out prior to to any construction works that will generate more than 10 heavy vehicle movements through the SH14/Awakino Point North Road intersection per day.	Y	Y	

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		5. Waka Kotahi NZ Transport Agency	5.7	Roading	Design	S	NTA agrees that the development should provide the required pedestrian and cycle link from the development, but we deem it necessary to terminate the path at Selwyn Park and not Tuna Street.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.9	Plan Provisions	Precinct Plan	S	NTA agrees that a cross-section of the pedestrian and cycle link proposed should be included in the Appendix.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.10	Landscaping	Landscaping	S	NTA agrees that any landscaping undertaken should not compromise the sightlines of vehicles or pedestrians.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.14	Plan Provisions	Objectives and Policies	S	NTA agrees that a new policy is to be included outlining the infrastructure requirement and integrated planning. In addition, safe and efficient infrastructure is to be included.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.16	Plan Provisions	Transport	S	NTA agrees that the proposed intersection improvement is not adequate and is not safe system compliant for the additional movements generated.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.17	Plan Provisions	Transport	S	NTA generally supports with Waka Kotahi, but suggest the applicant terminate the pedestrian and cycle link at Selwyn Park and this is to be reflected in the DP.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.18	Plan Provisions	Transport	S	NTA agrees that roundabout is the appropriate treatment to mitigate the traffic effects.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.19	Plan Provisions	Transport	S	NTA agrees that roundabout is the appropriate treatment to mitigate the traffic effects.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.21	Plan Provisions	Signage	S	NTA agrees that the signage requirements is to align with the Kaipara District Plan and NZTA Traffic manual devices to be consistent throughout the network.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.24	Plan Provisions	Signage	S	NTA agrees that the illuminated signage chapter activity status is to be changed to Non-complying (if the Trifecta development chapter is to have separate signage requirements). Point 2(f) - based on legal definition the extension of intersection is to be provided and the minimum setback is to be changed to 50m.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.25	Plan Provisions	Signage	S	NTA agrees that the illuminated signage chapter activity status is to be changed to Non-complying (if the Trifecta development chapter is to have separate signage requirements). Point 2(f) - based on legal definition the extension of intersection is to be provided and the minimum setback is to be changed to 50m.	Y	Y	
		5. Waka Kotahi NZ Transport Agency	5.26	Plan Provisions	Definitions	S	NTA agrees that the definitions should be consistent with the Kaipara District Plan.	Y	Y	
		7. Ministry of Education	7.2	Other Matters	Density	S	NTA agrees that the development should consist of educational facilities with adequate speed limits along school zones in line with Speed Limit Rule 2022 and infrastructure support to be provided to support the speed limit, due to the likely reduction in vehicle trips.	Y	Y	
		7. Ministry of Education	7.4	Plan Provisions	Objectives and Policies	S	NTA agrees that the development should consist of educational facilities, therefore suitable changes to the policies is to be made.	Y	Y	
		10. CJ Farms 2020 Limited	10.3	Roading	Safety	S	NTA agrees that the existing intersection of SH12 and Awakino Point North road is non-safe system compliant and therefore a roundabout is to be constructed to accommodate for the additional traffic and safe system compliant. In addition adequate traffic calming within Awakino point north road is to be provided with adequate pedestrian and cycle link within the development.	Y	Y	
		12. Awakino Point Rate Payers Inc	12.7	Roading	Design	S	NTA agrees that there would be a significant increase in traffic at the intersection of SH14/Awakino Point North Road.	Y	Y	
		12. Awakino Point Rate Payers Inc	12.8	Roading	Design	S	NTA agrees that further certainty is required that the transport infrastructure upgrades will be constructed.	Y	Y	
		12. Awakino Point Rate Payers Inc	12.9	Roading	Timing	S	NTA agrees that the infrastructure upgrades should occur in a sequential manner based on the yield.	Y	Y	
		12. Awakino Point Rate Payers Inc	12.12	Other Matters	Council Decision	S	NTA agrees that the necessary transport infrastructure upgrade is to be carried out prior to the residential / industrial development.	Y	Y	
		13. Donald and Adrienne McLeod	13.2	Other Matters	Community Facilities	S	NTA agrees that the suitable amenities (sports facilities, etc) should be provided within development purely based on the reduction in trips from the development to Dargaville town centre.	Y	Y	
		14. Shane and Megan Phillips	14.2	Roading	Safety	S	NTA agrees that the development is to take the existing bus pick up and drop locations closer to the development into consideration and provide adequate mitigations.	Y	Y	
		15. Leo Glamuzina and Kim Harrison	15.2	Roading	Safety	S	NTA agrees that the existing road network would not be able to accommodate the additional traffic generated, therefore suitable mitigations like intersection improvements, pedestrian and cycle link, suitable traffic calming etc is to be provided.	Y	Y	

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		15. Leo Glamuzina and Kim Harrison	15.6	Roading	Safety	S	NTA agrees that the existing infrastructure cannot cater for the additional traffic generated from the development and the proposed walking and cycling link should be well thought into due to the nature of the network and existing open drains.	Y	Y	
		16. Janice and Michael Brenstrum	16.2	Roading	Safety	S	NTA agrees that the existing intersection of SH14 and Awakino Point North Road is non-safe system compliant	Y	Y	
		17. Dargaville Community	17.4	Roading	Design	S	NTA agrees that the existing infrastructure cannot cater for the additional traffic generated from the development and the proposed walking and cycling link should be well thought into due to the nature of the network and existing open drains.	Y	Y	
		17. Dargaville Community	17.5	Roading	Safety	S	NTA agrees that the existing intersection and the proposed improvement of SH14 and Awakino Point North Road is non-safe system compliant, therefore a roundabout is to be provided and adequate improvements to the existing road network is to be carried out to cater for the additional traffic.	Y	Y	
15/11/2022	Te Houhanga a Rongo Marae	13. Donald and Adrienne McLeod	13.1	Other Matters	Community Facilities	S	Lack of amenities for tamariki and rangatahi and insufficient green space areas within site (to allow their engagement in active lifestyles).	Y	N	Te Houhanga a Rongo Marae was built in 1914 and one of the first carved meeting houses in Te Taitokerau. Marae whanau have whakapapa links to Ngati Whatua, Te Roroa and Ngapuhi with mana whenua status through Te Kuihi. We have legal status as a Marae Reservation under Te Ture Whenua Act. We have longevity in our community and are kaitiaki of our whenua and awa. Te Houhanga has an interest in ensuring the health and wellness of our whanau whanau, especially in the areas of housing and kai sovereignty, hauora, matauranga and sustainable ways of living. Maintaining our cultural identity, customs and practices are paramount for us.
		13. Donald and Adrienne McLeod	13.2	Other Matters	Community Facilities	S	Tripartite group stressed that PPC81 site residents would use sporting facilities but there is no public transport so access would be limited.	Y	N	
		17. Dargaville Community	17.2	Infrastructure	Three Waters	S in part	Concerns with additional pressure on existing and aged infrastructure, water and sewage.	Y	N	Our Parore whanau have an unprecedented interest in this whenua highlighted by the PPC81 and the activity which takes place here. Our whanau has a pending WAI 188 claim in with the Waitangi Tribunal as this was originally whanau land that was gifted by our tupuna for the purpose of a racecourse. It is our understanding that once the whenua was no longer used for that specific purpose then it would revert back to the Parore whanau to honour that original agreement. There is still ongoing discussion about land status with the Tripartite group and whanau. If this proposal is to go ahead then we would require that the interests of the whanau and the wider community, particularly Maori are served. We have been inadequately consulted with at the beginning of the submission process, hence this application. For the purpose of this submission this means adequate and appropriate provision for whanau, rangatahi and tamariki needs as stated earlier and further work on infrastructure and connectivity to the township. Additionally, if an area is tagged for educational purposes our hapu (Te Kuihi) have an interest in having early engagement with relevant parties. We require ongoing involvement with this project. Mauri Ora.
		17. Dargaville Community	17.4	Roading	Design	S in part	Lack of connectivity to Dargaville township.	Y	N	
		17. Dargaville Community	17.5	Roading	Safety	S in part	Needs to be changes to intersection to accommodate increase in traffic.	Y	N	
		17. Dargaville Community	17.7	Other Matters	Community Facilities	S in part	Lack of green space for playgrounds and recreational activity.	Y	N	
15/11/2022	Te Kuihi	13. Donald and Adrienne McLeod	13.1	Other Matters	Community Facilities	S	Te Kuihi support the submitter in their concerns for Tamariki and Rangatahi housed within the site if PPC81 were successful. Tamariki and Rangatahi need enough whenua and room to grow and be active to uphold basic dignities and sustain active and healthy lifestyles. Without these spaces for our Tamariki and Rangatahi, we would be heading in the direction of bygone eras; seeing poverty, crime, and worsening mental health statistics, often resulting in suicide – inducing a decrease in opportunity, and inability to reach their full potential. Without these spaces, we would be heading and continuing to create unsustainable pathways for the next generation. They are the future, and our future as a wider community, and with a lack of care for their growth and development as humans we will continue to see the same statistics that are not only worsening but, incredibly heartbreaking. Without active lifestyles and enough space to thrive in, we will see the underdevelopment and continued halt in key Tamariki and Rangatahi development – an active lifestyle is crucial and key for mental health and wellbeing. It is most important as a community and an older generation that we encourage healthy mindsets and our Tamariki to engage in maintaining active lifestyles. Without a prioritised plan for their development, we will continue to see shocking mental health statistics and poor wellbeing across the Kaipara. The next generation should be considered first and foremost, and should be nurtured and provided with enough capabilities and opportunities to fully enhance and maintain pristine mental and physical health and overall hauora. But, most importantly they must be supported in healthy lifestyle choices to further make change and break intergenerational patterns.	Y	Y	Te Kuihi has a strong interest in ensuring the whenua is protected and upheld with the mana it already holds. Our tūpuna have walked here for generations, since the first arrival from Hawaiki. As a whānau we have strong visions and beliefs about the betterment of the land, for the betterment of our Hapu, wider Māoridom, the Kaipara District, the wider community – but, most importantly the sustenance of this whenua for future generations – our Tamariki and Rangatahi. Our hapu have an unprecedented interest in this whenua highlighted by the PPC81 and the activity which takes place there. Our whānau has a pending WAI 188 claim with the Waitangi Tribunal as this was originally land that was gifted for the purpose of a racecourse. It is our understanding that once the whenua was no longer used for that purpose then it would revert back to the Parore whānau. There is still ongoing discussion about land status. If this proposal is to go ahead then we would require that the interests of the whanau and the wider community, particularly Māori are served with utmost respect, and offered strong opportunities for development and the sustenance of our culture, mauri, mana and wairua as not only a whānau, but also Kaitiakitanga of the wider whenua. We have been inadequately consulted with since the beginning of this PPC81 submission process, hence this application. Therefore, this means adequate and appropriate provision for rangatahi and tamariki needs as stated earlier, and further work on infrastructure and connectivity to the township. Additionally, if an area is tagged for educational purposes our hapu (Te Kuihi) have an interest in this. As a hapu, we have our own visions of community development strategies. These ideas are some that we plan to achieve over the next ten years and beyond to actively support the wairua and wellbeing of our people and wider community. We see the sustenance of our tradition, stories and culture as a vital element of what we hope to activate and nurture on the ground. We see a genuine kōrero, and open adult communication as an urgent action with all parties before any proceedings take place. It is our absolute right as direct descendants of this whenua, and the original people of this land to have our say and our voice heard. Ignorance is no longer an excuse. It is now essential we return back to our roots, with community-minded approaches, weaved with beliefs strongly held in whānau, and connection to the whenua, not individuality and ego. Our people, namely, Te Whanau Parore have long suffered the effects of our land being taken from us here in Kaipara. This land, this whenua, the mana it omits, and the wairua that is held here, holds much more significance to us than we believe, you could ever begin to imagine or comprehend. We have tirelessly fought for our sustenance as people, our dignity as mana whenua, and our rights as tangata wheuna. We have fought for respect as people first and foremost. However, we have continuously seen a lack of consideration for our whanau, our stories, our people and the future of our mokopuna. We wholeheartedly deserve this respect to be heard, and we offer our heart as food for thee, to come to an agreement of sorts to
		13. Donald and Adrienne McLeod	13.2	Other Matters	Community Facilities	S	Te Kuihi support the submitter on their discussion around how Tripartite Group have stressed that PPC81 site residents would use sporting facilities, but with no public transport facilities, we deem this as problematic. Relying on the idea of 'Mum and Dad taxi's' is unreliable, and unrealistic. In today's climate and modern world, parents of all households, but specifically lower socio-economic households are expected to work and may be unable to drop off, and pick up their tamariki. This causes added stress on parents and whānau, and further creates unsustainable pathways for the development of the people in the region and wider communities. There should be safe transport options, and a proposed plan for this commute that supports parents and their children for the betterment of the community, and wider wellbeing of all involved. For Rangatahi and Tamariki to be left to their own accord by a state highway where a set speed limit is 100km/h is unsafe and thoughtless. This is only one problem that sits within a multitude of safety factors in this area. Above anything else, Tamariki and Rangatahi should be top of mind, and their safety a top priority.	Y	Y	
		17. Dargaville Community	17.2	Infrastructure	Three Waters	S in part	No further specific comment.	Y	Y	

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		17. Dargaville Community	17.4	Roading	Design	S in part	No further specific comment.	Y	Y	<p>immediately have the best impact, for the greater good. We will provide an evidence you may need, and have strong research to support any korero and bring to the table. Our whakapapa is strong, and it is backed with the mauri of our whanau, whenua and beyond. We look forward to meeting with you and communicating our alliance to our whenua, and hope to come to a decision that sits well with all stakeholders.</p>
		17. Dargaville Community	17.5	Roading	Safety	S in part	No further specific comment.	Y	Y	
		17. Dargaville Community	17.7	Other Matters	Community Facilities	S in part	No further specific comment.	Y	Y	
15/11/2022	Te Whanau Parore	13. Donald and Adrienne McLeod	13.1	Other Matters	Community Facilities	S	Lack of amenities for tamariki and rangatahi and insufficient green space areas within site (to allow their engagement in active lifestyles).	Y	N	<p>Our Parore whanau are descended from Parore Te Awaha who was a paramount chief in the Northern Wairoa area. As one of the long standing and respected whanau in the Dargaville/Northern Wairoa and Kaipara Districts we have an unprecedented interest in this whenua highlighted by the PPC81 and the activity which takes place here. Our whanau has a pending WAI 188 claim in with the Waitangi Tribunal as this was originally whanau land that was gifted by our tupuna for the purpose of a racecourse. It is our understanding that once the whenua was no longer used for that specific purpose then it would revert back to the Parore whanau to honour that original agreement. There is still ongoing discussion about land status with the Tripartite group and whanau. Our tupuna and his children, (particularly Pouaka and Te Pouritanga in terms of gifted whenua to the racecourse) were generous in assisting the community to fulfill its aspirations by gifting land for the hospital, pools, town water reservoir and racecourse to name a few. Te Houhanga a Rongo Marae is the predominant marae for the Parore whanau and was built in 1914 and one of the first carved meeting houses in Te Taitokerau. Marae whanau have whakapapa links to Ngati Whatua, Te Roroa and Ngapuhi with mana whenua status through Te Kuihi. We have legal status as a Marae Reservation under Te Ture Whenua Act. We have longevity in our community and are kaitiaki of our whenua and awa. Te Houhanga has an interest in ensuring the health and wellness of our whanau whanau, especially in the areas of housing and kai sovereignty, hauora, matauranga and sustainable ways of living. Maintaining our cultural identity, customs and practices are paramount for us.</p> <p>If this proposal is to go ahead then we would require that the interests of the whanau and the wider community, particularly Maori are served. We have been inadequately consulted with at the beginning of the submission process, hence this application. For the purpose of this submission this means adequate and appropriate provision for whanau, rangatahi and tamariki needs as stated earlier and further work on infrastructure and connectivity to the township. Additionally, if an area is tagged for educational purposes our hapu (Te Kuihi) have an interest in having early engagement with relevant parties. We require ongoing involvement with this project. Mauri Ora.</p>
		13. Donald and Adrienne McLeod	13.2	Other Matters	Community Facilities	S	Tripartite group stressed that PPC81 site residents would use sporting facilities but there is no public transport so access would be limited.	Y	N	
		17. Dargaville Community	17.2	Infrastructure	Three Waters	S in part	Concerns with additional pressure on existing and aged infrastructure, water and sewage.	Y	N	
		17. Dargaville Community	17.4	Roading	Design	S in part	Lack of connectivity to Dargaville township.	Y	N	
		17. Dargaville Community	17.5	Roading	Safety	S in part	Needs to be changes to intersection to accommodate increase in traffic.	Y	N	
		17. Dargaville Community	17.7	Other Matters	Community Facilities	S in part	Lack of green space for playgrounds and recreational activity.	Y	N	

Memo

To: Katherine Overwater, Senior Resource Management Planner, Kaipara District Council
From: Derek Foy, Director
Date: 1 March 2022
Re: NPSUD Definition of Urban Environment

Purpose

The purpose of this memo is to provide an economic opinion of the “urban environment”, as it is defined in the National Policy Statement on Urban Development (“NPSUD”), and discuss its applicability to Kaipara District. I understand that a key question arising is which, if any, of Kaipara’s settlements should be classified as urban environments.

Urban environment in the NPSUD

The spatial definition of the “urban environment” in the NPSUD is as follows:¹

***urban environment** means any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:*

(a) is, or is intended to be, predominantly urban in character; and

(b) is, or is intended to be, part of a housing and labour market of at least 10,000 people

The use of the concepts of the housing and labour market suggests that the definition of the urban environment does not need to be defined in terms of a single contiguous land area. This means that the urban environment can include the main urban area and the surrounding minor urban areas, which operate as a labour or housing market, for example Auckland and its satellite towns. However, the requirement to be “predominantly urban in character” implies that different sized urban areas have different abilities to have satellite minor urban areas.

¹ National Policy Statement on Urban Development 2020 – Part 1 Preliminary Provisions 1.4 Interpretation.

Key issues

As I see it the definition of urban environment means there are two main issues that need to be considered to establish which, if any, of Kaipara's settlements should be included within an "urban environment", as defined in the NPSUD. Those issues are:

- ❖ What is the spatial extent of each potential urban area;
- ❖ What is the population and workforce within that geographic extent, and is it, or will it be, more than 10,000 people.

Application of urban environment by councils

As a first step to understanding the geographic extent of Kaipara's urban areas we have reviewed the urban environment definitions used by councils that have Tier 1 urban environments. This review showed that all Tier 1 councils have selected an urban environment that includes the main urban area and associated minor urban areas within a wider hinterland. However, those main urban areas are all many times larger than Kaipara's largest urban area, and the issue for those councils is whether the minor urban areas should be classified as being part of an urban environment by virtue of their association with the larger area, when they do not meet the requirements (part of a housing and labour market of at least 10,000 people) by themselves.

The rationale appears to be that the smaller towns and settlements in the hinterland around the main urban area are a functional part of the urban area. These towns and settlements operate in the same labour market, with residents regularly commuting for work, education, retail, services, and other community services. Those towns and settlements also act as dormitory towns, providing housing for workers that commute into the main urban area, which indicates that they are in the same housing market.

In summary, the review of research conducted by Tier 1 councils shows that the extent of the hinterland around the main urban area tends to be larger for cities with bigger population. The review showed the following for each Tier 1 urban environment:

- ❖ **Auckland:** the urban environment has been set to include small rural settlements that are approximately 50-60km from the urban edge of Auckland City.² This includes small towns, settlements and seaside holiday areas in the north (Leigh, Omaha, Te Hana and Wellsford), settlements on Manukau Heads to the west, and southeast to Orere Point. The population of many of these towns and settlements are much less than the 10,000 people threshold, with some as low as 100-200 people.

² Mario A. Fernandez, Chad Hu Jennifer L. R. Joynt, Shane L. Martin, Isobel Jennings (2021) Housing Assessment for the Auckland Region.

- ❖ **Hamilton:** the urban environment has been set to include small rural settlements that are 30 kilometres or more from the urban edge of Hamilton City.³ This includes coastal towns to the west (Raglan) and towns to the north (Meremere, Te Kauwhata, Pokeno), all of which have populations of much less than the 10,000 people threshold. However, it is important to note that the towns to the north are also influenced by the proximity of Auckland, which is closer to many of the towns than Hamilton.
- ❖ **Tauranga:** while there has been a recent media release which suggests that the 2021 assessment for the NPSUD has been completed⁴, there are no publicly available reports that outline the method adopted for Tauranga. Based on the previous assessment conducted under NPSUDC⁵, it may be that the extent of the urban environment is confined to 10km or less around Tauranga urban edge. However, the NPSUD has included Western Bay of Plenty District as part of the Tier 1 urban environment, which suggests that other towns (Katikati, Paengaroa, etc.) and seaside settlements (Waihi Beach, Maketu, Pukehina, etc.) may be included in the urban environment. These smaller urban areas are upwards of 20 kilometres from the urban edge of Tauranga and have populations much less than the 10,000 people threshold.
- ❖ **Wellington:** there has been a recent media report which suggests that the 2021 assessment for the NPSUD has not been completed⁶. However, given the spatial geography of the territorial areas in this Tier 1 urban environment and the population of each of main urban areas (Porirua, Upper Hutt, Lower Hutt and Paraparaumu, which all exceed the 10,000 people threshold), it may be that the extent of the urban environment hinterland could be more confined than the other three Tier 1 urban environments. Based on the previous assessment conducted under NPSUDC⁷, it may be that the extent of the urban environment is confined to 20km or less around the urban edge. We consider that it is likely that there will be some small rural towns or seaside settlements included in the definition of urban environment.
- ❖ **Christchurch:** has adopted a definition that includes towns and settlements up to 30 kilometres from the urban edge. The urban environment that has been adopted has excluded smaller settlements, such as Darfield, Leeston, Southbridge, Dunsandel, Oxford, etc.

The definitions of “urban environment” for Tier 1 councils all include (or are expected to include) small towns and seaside settlements in the hinterland around the main urban area. These small urban areas are separated from the main urban area by many kilometres of rural land.

³ Market Economics (2021) NPS-UD Housing Development Capacity Assessment Future Proof Partners.

⁴ Tauranga City Council (2021) Assessment confirms likely housing shortfall – media release 13th September.

⁵ Market Economics (2020) Residential Growth – Assessment of Options and Capacity Analysis.

⁶ Stuff (2021) Wellington misses first deadline of Government effort to increase housing density, 2nd August.

⁷ Wellington City, Upper Hutt City, Hutt City, Porirua City, and Kapiti Coast District Councils (2019) Wellington Housing and Business Development Capacity Assessment.

The review of Tier 1 urban environments suggests that more populous main urban areas have larger hinterlands than less populous urban areas. That reflects the fact that larger main urban areas have a broader geographic and economic influence than smaller urban areas. The Tier 1 urban environments with smaller populations (Hamilton, Tauranga, Wellington and Christchurch) tend to include towns and settlements up to 20 or 30km from the urban edge, within their definition of urban environment. While the largest Tier 1 urban environment (Auckland) includes areas up to 60km from the urban edge within the definition of urban environment.

Based on the assessment above for the spatial extent of urban environments in Tier 1 councils, I expect that Tier 3 urban environments would have hinterlands with an extent that is correlated with the population size of the main urban area. With much smaller populations in their urban areas, Tier 3 councils would have much smaller hinterlands, and urban environments. In the case of Kaipara, the distances between settlements⁸ are relatively large, and the settlements themselves are relatively small, even the largest settlements in the District, which suggests that they may not be considered as a single urban environment.

Urban areas vs urban environments

To interpret a potential application of urban environments in Kaipara, it is useful to consider the official statistical applications of urban-rural geography in NZ. Statistics NZ defines “urban areas” in the “Statistical Standard for Geographic Areas 2018”.⁹ That standard defines three main types of urban rural areas: urban areas, rural settlements, and rural areas.

Urban areas (per Statistics NZ) are different to urban environments (NPSUD), with urban areas defined as¹⁰:

statistically defined areas with no administrative or legal basis. They are characterised by high population density with many built environment features where people and buildings are located close together for residential, cultural, productive, trade, and social purposes.

Urban areas are delineated using the following criteria. They:

- *form a contiguous cluster of one or more SA2s*

⁸ For example, the following distances between Mangawhai and other settlements: Kaiwaka 13km, Waipu 20km, Wellsford 27km, and Dargaville 90km.

⁹ <https://www.stats.govt.nz/assets/Uploads/Retirement-of-archive-website-project-files/Methods/Statistical-standard-for-geographic-areas-2018/statistical-standard-for-geographic-areas-2018.pdf>

¹⁰ Page 14 of the Statistical Standard for Geographic Areas 2018

- *contain an estimated resident population of more than 1,000 people and usually have a population density of more than 400 residents or 200 address points per square kilometre*
- *have a high coverage of built physical structures and artificial landscapes... [a range of examples a provided, such as dwellings, commercial structures, transport facilities, recreation spaces, etc]*
- *have strong economic ties where people gather together to work, and for social, cultural, and recreational interaction*
- *have planned development within the next 5–8 years.*

The second type of urban rural areas are “rural settlements”, which are delineated using the following criteria, they:

- *form a contiguous cluster of one or more SA1s*
- *contain an estimated resident population of 200–1,000, or at least 40 residential dwellings*
- *represent a reasonably compact area, or have a visible centre of population with a population*
- *density of at least 200 residents per square kilometre or 100 address points per square kilometre*
- *contain at least one community or public building, such as a church, school, or shop.*

The third and final type of urban rural area are “other rural” areas include land used for agriculture and forestry, conservation areas, and regional and national parks.

Applicability to Kaipara District

Given the population of Kaipara is much less than those Tier 1 councils, the learnings from those other councils need to be interpreted with a Kaipara lens. Kaipara’s largest settlements are much smaller than the largest settlements in Tier 1 councils. I have summarised below the population of Kaipara’s urban areas (Figure 1). The largest urban area as of the 2018 census was Dargaville, with a population of 4,940 people, using high population growth scenario assumptions. Statistics NZ project that will increase to around 5,920 by 2038.

Mangawhai and Mangawhai Heads, which can be considered as single contiguous urban area, has a 2018 population of 3,110. Statistics NZ project that will increase to around 5,400 by 2038 (high growth scenario). The next most populous urban areas have populations of around 1,000 people, and are not projected to increase to more than 1,300 by 2038. The rural population of nearly 12,000 people is spread across a number of rural settlements and rural areas.

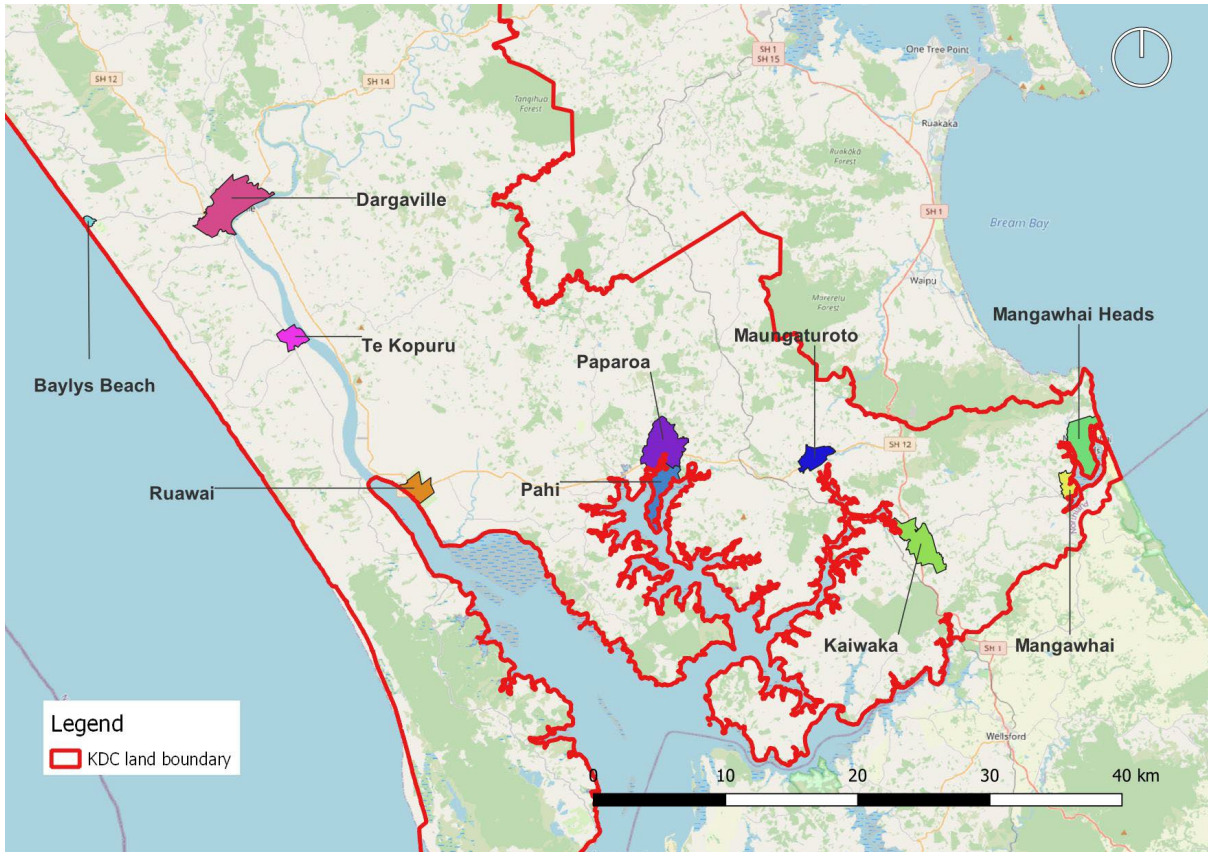
I note that while in this section I have used Statistics NZ's population projections because they directly correspond to the urban rural geography being discussed, Kaipara District Council has adopted different population projections which were derived by Infometrics. Those Infometrics projections are very similar to the Statistics NZ (high) projections, so either are equally useful to apply to interpret the urban environments issue.

Figure 1: Kaipara District Statistics NZ urban area population projections (high growth scenario)

Urban area	2018	2023	2028	2033	2038
Mangawhai	1,010	1,230	1,430	1,610	1,770
Mangawhai Heads	2,100	2,540	2,940	3,290	3,630
Dargaville	4,940	5,340	5,590	5,780	5,920
Kaiwaka	800	890	960	1,020	1,090
Maungaturoto	1,010	1,100	1,150	1,200	1,230
Paparoa	390	440	480	520	540
Pahi	250	290	310	330	350
Te Kopuru	530	570	590	610	630
Ruawai	460	480	500	510	530
Baylys Beach	410	440	460	480	480
Rest of District	11,800	13,180	14,190	15,050	15,730
Total KDC	23,700	26,500	28,600	30,400	31,900
Infometrics KDC	23,565	25,619	27,518	29,157	30,450

The location of the urban areas defined by Statistics NZ is shown in Figure 2.

Figure 2: KDC urban areas as defined by Statistics NZ



From those spatial definitions and population estimates and projections, the only two areas in Kaipara that come anywhere close to being considered as urban environments during the life of the District Plan under the NPSUD definition would be Dargaville and Mangawhai. I discuss those two areas below.

Dargaville

The Dargaville urban area (also the Dargaville statistical area 2 or “SA2”) has a population of just over 5,000 now. If a hinterland is also included, that population increases. To show how it increases, I have presented two alternate scenarios, representing progressively broader spatial extents, of an additional 5km beyond the Dargaville urban area (about half way to Te Kopuru, Baylys Beach and Tangowahine), and alternatively 10km beyond the Dargaville urban area (as far as Te Kopuru, Baylys Beach and Tangowahine). Those projections show that the base population of nearly 5,000 increases to 6,500 when adding 5km, and close to 8,000 when adding 10km.

Figure 3: Dargaville population by spatial extent (Statistics NZ high growth population)

Spatial extent	2018	2023	2028	2033	2038
Dargaville SA2	4,940	5,340	5,590	5,780	5,920
Dargaville SA2 + 5km	6,540	7,080	7,430	7,690	7,870
Dargaville SA2 + 10km	7,830	8,480	8,900	9,210	9,440

Assessment of which is the more appropriate zone to apply to quantify population within the urban environment is provided later in this memo.

Another aspect of the urban environment definition is the role the workforce plays. The implication is that the urban environment is relatively self-contained with respect to employment, so that there is not a large net in- or outflow of employment from an urban environment. To assist with understanding that for Dargaville, I have used Census 2018 data from Statistics NZ's Commuter Waka app.¹¹ That app shows that:

- ❖ only 7% of people (340 people) living in the three SA2s¹² taking in Dargaville and surrounds (a catchment of around Dargaville +30km) leave the area to go to work.
- ❖ Only 5% of people (228 people) working in the three SA2s taking in Dargaville and surrounds do not live in the area.

These are low shares of in- and outflow, and I interpret those low shares to indicate that the areas I have defined (Dargaville +5km, +10km and +20km) represent geographic areas that are relatively self-sufficient in employment terms, and therefore consistent with the NPSUD's urban environment definition. It also indicates that the housing market is likely to be confined to this area, with households that work in the area mostly choosing a dwelling within this urban area.

If a Dargaville +20km urban environment definition were to be applied, the Dargaville urban environment would have a population of more than 10,000 people now or in the next year or so. A more constrained environment (Dargaville +10km) would not have a population of 10,000 until well after 2038.

Mangawhai

I have applied the same process to Mangawhai. Statistics NZ population estimates for Mangawhai and Mangawhai Heads together are a population of around 3,500 people. A broader area taking in a hinterland of 5km around the Statistics NZ urban area has a population of around 5,300 in 2021, while +10km has a population of around 6,500 in 2021 (extending as far west as Hakaru, and north to take in Langs Beach). The nearest other settlements (Kaiwaka, Waipu and Wellsford) are well beyond 10km from Mangawhai. It is important to consider whether to include those areas outside the KDC boundary, as the NPSUD does not take those boundaries into account, although the furthest of them (Wellsford) is around 30km from Mangawhai, far beyond what would be considered overall as an environment that is predominantly urban in character.

¹¹ <https://commuter.waka.app/>

¹² Dargaville, Kaipara Coastal, And Maungaru

Figure 4: Mangawhai population by spatial extent (Statistics NZ high growth population)

Spatial extent	2018	2023	2028	2033	2038
M and M Heads	3,110	3,770	4,370	4,900	5,400
M and M Heads +5km	5,290	6,338	7,244	8,075	8,830
M and M Heads +10km	6,026	7,193	8,179	9,083	9,902

These current populations are all expected to experience quite high growth out to 2038, anchored by growth in and on the fringes of Mangawhai. The Statistics NZ high growth projections are for the 2038 population to be 5,400 for the Mangawhai and Mangawhai Heads urban areas (Figure 5), 8,800 for Mangawhai +5km, and nearly 10,000 for Mangawhai +10km.

Figure 5: Location and extent of Mangawhai urban area



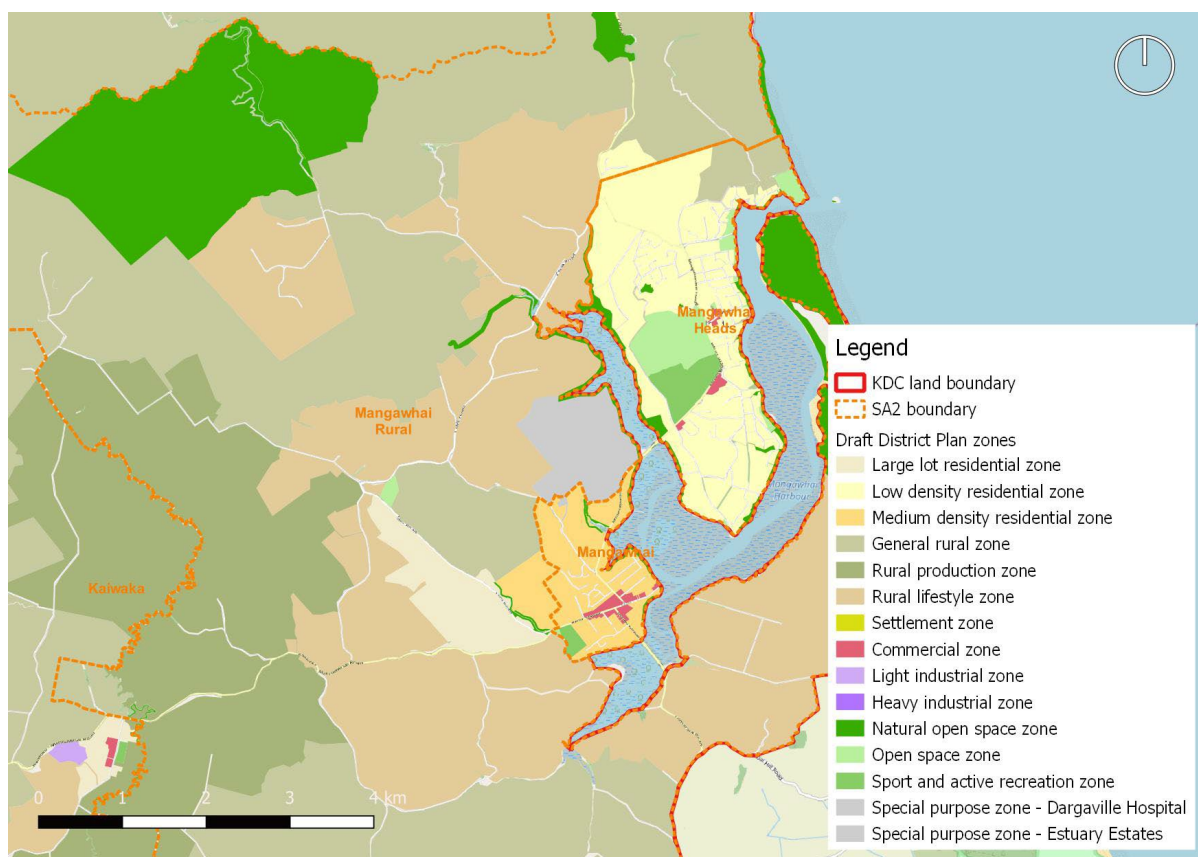
The concept in the NPSUD definition of urban environment indicates that more than just Mangawhai and Mangawhai Heads would make up a potential “Mangawhai” urban environment. Also included would need to be:

- ❖ the area north of the Mangawhai SA2 where Estuary Estates (also called Mangawhai Central) is expected to ultimately develop¹³ 500-1,000 dwellings (a population of say 1,100-2,200 people).

¹³ Pending the ongoing environment Court appeals

- ❖ Other future residential areas around Mangawhai, taking in the zones proposed in the Draft District Plan (Figure 6). There are quite large areas of land that are proposed to be zoned Rural Lifestyle Zone, or Large Lot Residential Zone that are outside Statistics NZ's definition of urban Mangawhai (represented by the orange SA2 boundaries in Figure 6), but that are contiguous to urban Mangawhai, and probably would be considered to be part of the Mangawhai urban area in NPSUD terms.

Figure 6: Draft District Plan zones around Mangawhai



We have undertaken some work for KDC's infrastructure team to do with the number of dwellings serviced by wastewater in Mangawhai. That did not assess population, although I have converted the projections I previously provided to approximate population counts for consideration here. Those projections indicate that a relatively large proportion (34% in 2021, decreasing to 23% in 2038) of the population of the three Mangawhai SA2s (Mangawhai, Mangawhai Heads, and Mangawhai Rural, from Figure 6) live in areas not serviced by wastewater infrastructure (Figure 7). That "serviced area" could be taken as an indication of urban vs rural Mangawhai, however the NPSUD does not make any mention of servicing it the definition of urban environments, and in our opinion the geographic extent of the Mangawhai urban environment should not be constrained by wastewater connectedness.

Figure 7: Mangawhai population projections

Wastewater area	2021	2023	2028	2033	2038
Serviced	4,084	4,710	6,043	7,422	8,561
Not serviced	2,165	2,255	2,367	2,483	2,592
Total	6,249	6,965	8,410	9,906	11,153

To assist with understanding the role of the workforce in Mangawhai, I have used Census 2018 data from Statistics NZ's Commuter Waka app. That app shows that:

- ❖ 21% of people (594 people) living in the four SA2s¹⁴ taking in Mangawhai and surrounds (a catchment of around Mangawhai +15km) leave the area to go to work. Wellsford is the top destination for these workers (7%).
- ❖ Only 7% of people (168 people) working in the three SA2s taking in Mangawhai and surrounds do not live in the area.

These are relatively low shares of in- and outflow, and I interpret those low shares to indicate that the areas I have defined (Mangawhai +10km and Mangawhai +20km) represent geographic areas that are relatively self-sufficient in employment terms, and therefore consistent with the NPSUD's urban environment definition. This data also indicates that the housing market is likely to be confined to this area, with households that work in the area mostly choosing a dwelling within this urban area.

I disagree with the PC78 decision's interpretation of the "anecdotal evidence from submitters" (paragraph 78) that Mangawhai is part of a housing and labour market that includes Warkworth, Wellsford and Whangārei". Although there is some in- and outflow of employment from Mangawhai to those areas, those flows are small, and do not seem to be significant enough to indicate a similarity of labour or housing market.

One possibility to be considered is that it could be argued that Mangawhai is part of a Wellsford "urban environment", given the role of Wellsford within the Mangawhai hinterland, although only 7% of Mangawhai catchment (the 4SA2s) travel there for work, a relatively low share which I believe indicates Mangawhai should not be considered as part of the Wellsford urban environment. Also, it is approximately 27 kilometres between Mangawhai and Wellsford which is a considerable distance when compared to other urban environments. As discussed above some large urban areas (e.g. Tauranga) have used urban environments that are smaller than this distance.

¹⁴ Mangawhai, Mangawhai Heads, Mangawhai Rural and Kaiwaka

Predominantly urban in character

Another consideration relevant here is that the NPSUD states that the area should be “predominantly urban in character”. This to me means two things. First, the small size of the largest settlements (Dargaville and Mangawhai) means that only a much smaller rural hinterland could be included so as to maintain an overall environment that is predominantly urban in character, relative to larger cities. Auckland, for example, has nearly continuous urban activities over a distance of more than 60km from Orewa in the north, to Drury in the south (with small rural areas through Dairy Flat that are soon to be developed as part of the Future Urban Zone). The inclusion of Warkworth, 15-20km straight-line distance north of that extent, then represents a relatively small addition to the length of that zone, meaning overall the extent from Warkworth to Drury maintains a predominantly urban character.

Mangawhai, on the other hand, is only around 5-6km (straight-line) from one side to the other, and Dargaville is around 4km. That then provides much less urban mass to act as an anchor for an area that is predominantly urban in character. I would suggest that to be predominantly urban in character the broader urban environment anchored by a core urban area that is less than 6km in extent should be much less than 10km, and probably closer to 5km.

Based on those parameters, the Dargaville urban area can be considered to be broadly a circle with radius 3km, and a surrounding ring that extends another 5km, giving an overall “urban environment” equivalent to, in general terms, an 8km radius circle. The 3km radius urban area would represent 14% of the land area of that 8km radius circle (28km²), with the surrounding rural hinterland being 86% (172km²) of the area. In my opinion it would be a stretch to say that any more than a 5km hinterland would be preserve an environment predominantly urban in character.

For Mangawhai the picture is slightly different, because Mangawhai is not surrounded by a hinterland, with half being ocean. Even with a smaller terrestrial hinterland (say roughly 86km²) the urban part of that hinterland would be only around 25% of the total “urban environment”. As for Dargaville, in my opinion it would be a stretch to say that any more than a 5km of hinterland could be predominantly urban in character.

Timeframe

Another consideration is the time horizon of by when a 10,000 population threshold must be reached to be considered as an urban environment. This may be linked to the intended lifetime of the Draft District Plan, which would be say 10-15 years from about 2023, i.e. lasting until 2038. Alternatively, a 30 year horizon to match the “long term” defined in the NPSUD. I can see merit in both arguments, however note the following:

- ❖ Although the horizon of the Draft District Plan may be around 2038, decision made in relation to that Plan would have enduring effects on urban form that last much beyond 2038, counting in favour of a longer horizon for population numbers.
- ❖ It would seem sensible to have a single classification of each geographic area for all policy interpretation and applications. There would likely be difficulties classifying Mangawhai as not an urban environment for District Plan development, but then an urban environment for matters being considered under the NPSUD.

Conclusions

An urban environment that extended no more than about 5km from the edge of the current towns' urban areas could be considered to be predominantly urban in character, whereas an area of much greater spatial extent than that would cease to be predominantly urban in character, and would be instead a small urban core (less than 6km across) with a large surrounding rural area.

In the case of Dargaville an urban environment that extended 5km beyond the town would not include surrounding towns (Tangowahine, Baylys Beach and Te Kopuru) which are all 8-10km (straight line) from Dargaville. For Mangawhai that would equate to an urban area that extended half way to Kaiwaka, and excluded Langs Beach.

The population of urban environments that extend 5km beyond the current urban edge of Dargaville and Mangawhai would be around:

- ❖ Dargaville: 6,540 people in 2018, increasing to 7,870 in 2038
- ❖ Mangawhai and Mangawhai Heads: 5,290 in 2018, increasing to 8,830 in 2038. Mangawhai is projected to reach a population of 9,990 within that geographic extent by 2048, i.e. within a 30 year NPSUD 'long-term' horizon.

One consideration with this conclusion is that there are a large number of dwellings in Mangawhai that do not accommodate permanent population, rather are holiday homes that are unoccupied for much of the year. This factor was referenced in the PC78 decision (paragraph 53). The decision favoured including "in the threshold number", because they are not available for occupation. As I note above in the Mangawhai section, dwellings that are not permanently occupied account for 34% of all dwellings in 2021, decreasing to 23% in 2038, so inclusion (or not) of those dwellings as effectively 'proxy population' would make a significant difference to the interpretation of the locally resident population, and classification of the area as an urban environment or not.

Another consideration is that there are other aspects of the NPSUD that we understand would apply to any Kaipara settlements that were classified as urban environments. For example, Policy 5 in the NPSUD (which relates to heights and density of urban form), and Policy 8 (being responsive to plan

changes that would add significantly to development capacity and contribute to well-functioning urban environments).

Three factors then possibly indicate that on balance Mangawhai might be considered to be an urban environment:

- ❖ A population that will be about the NPSUD 10,000 threshold by just before the NPSUD long-term horizon
- ❖ The influence on urban form of a large base of holiday homes, which together contribute a large but temporary population at specific times of the year.
- ❖ The workforce in Mangawhai would increase the number of people in the area, albeit only by a small amount given the small in- and outflow of workers to and from Mangawhai.

In conclusion that from an economic and demographic perspective I would not consider Dargaville to be classified as an urban environment under the NPSUD definition, and consider that it is arguable whether or not Mangawhai should be so classified or not. In the coming two decades (to 2038) that Mangawhai is not likely to reach the urban environment threshold, however it could do so in the long term beyond 2038.

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Appendix D – National Policy Statement for Freshwater Management 2020

Objective

(1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:

- (a) first, the health and well-being of water bodies and freshwater ecosystems
- (b) second, the health needs of people (such as drinking water)
- (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

Policies

Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai.

Policy 2: Tangata whenua are actively involved in freshwater management (including decision making processes), and Māori freshwater values are identified and provided for.

Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.

Policy 4: Freshwater is managed as part of New Zealand's integrated response to climate change.

Policy 5: Freshwater is managed (including through a National Objectives Framework) to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.

Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.

Policy 7: The loss of river extent and values is avoided to the extent practicable.

Policy 8: The significant values of outstanding water bodies are protected.

Policy 9: The habitats of indigenous freshwater species are protected.

Policy 10: The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.

Policy 11: Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.

Policy 12: The national target (as set out in Appendix 3) for water quality improvement is achieved.

Policy 13: The condition of water bodies and freshwater ecosystems is systematically monitored over time, and action is taken where freshwater is degraded, and to reverse deteriorating trends. National Policy Statement for Freshwater Management 2020 11

Policy 14: Information (including monitoring data) about the state of water bodies and freshwater ecosystems, and the challenges to their health and well-being, is regularly reported on and published.

Policy 15: Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.

Appendix E – Assessment of the Objectives and Policies of the Northland Regional Policy Statement

Objective/Policy	Commentary
Part 3 - Objectives	
<p><u>3.1 Integrated catchment management</u></p> <p>Integrate the management of freshwater and the subdivision, use and development of land in catchments to enable catchment-specific objectives for fresh and associated coastal water to be met.</p>	<p>The technical assessment provided in Appendix L has confirmed that based on the provided information the assessment appears reasonable and any effect on upstream catchments can be managed subject to further investigation and detail design at the Resource Consent stage.</p>
<p><u>3.2 Region-wide water quality</u></p> <p>Improve the overall quality of Northland’s fresh and coastal water with a particular focus on:</p> <ul style="list-style-type: none"> a. Reducing the overall Trophic Level Index status of the region’s lakes; b. Increasing the overall Macroinvertebrate Community Index status of the region’s rivers and streams; c. Reducing sedimentation rates in the region’s estuaries and harbours; d. Improving microbiological water quality at popular contact recreation sites, recreational and cultural shellfish gathering sites, and commercial shellfish growing areas to minimise risk to human health; and e. Protecting the quality of registered drinking water supplies and the potable quality of other drinking water sources. 	<p>The Applicant has noted that earthworks have not been specifically assessed for the PPC81 because this activity will be assessed at time of subdivision or comprehensive development. It is anticipated that all excavation and fill will be undertaken in accordance with industry best practice. Provided appropriate mitigation measures are adopted, it is considered that the potential adverse effects from earthworks in relation to water quality will be acceptable.</p>
<p><u>3.3 Ecological flows and water levels</u></p>	<p>Additional information is required in relation to the NPS-FM. Receipt of this information will clarify the</p>

<p>Maintain flows, flow variability and water levels necessary to safeguard the life supporting capacity, ecosystem processes, indigenous species and the associated ecosystems of freshwater.</p>	<p>methodology with regard to the protection of the associated ecosystems of freshwater.</p>
<p><u>3.4 Indigenous ecosystems and biodiversity</u></p> <p>Safeguard Northland’s ecological integrity by:</p> <ul style="list-style-type: none"> a. Protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna; b. Maintaining the extent and diversity of indigenous ecosystems and habitats in the region; and c. Where practicable, enhancing indigenous ecosystems and habitats, particularly where this contributes to the reduction in the overall threat status of regionally and nationally threatened species. 	<p>The Applicant is proposing enhancement of waterways throughout the site as part of the blue-green network. As noted above on receipt of additional information in relation to the NPS-FM will confirm the ability of the proposal to maintain the extent and diversity of indigenous ecosystems and habitats.</p>
<p><u>3.5 Enabling economic wellbeing</u></p> <p>Northland’s natural and physical resources are sustainably managed in a way that is attractive for business and investment that will improve the economic wellbeing of Northland and its communities.</p>	<p>The EIA provided as part of the application confirms that the proposal will have positive effects in relation to the economic wellbeing of Dargaville.</p>
<p><u>3.6 Economic activities – reverse sensitivity and sterilisation</u></p> <p>The viability of land and activities important for Northland’s economy is protected from the negative impacts of new subdivision, use and development, with particular emphasis on either:</p> <ul style="list-style-type: none"> a. Reverse sensitivity for existing: <ul style="list-style-type: none"> i. Primary production activities; ii. Industrial and commercial activities; iii. Mining*; or iv. Existing and planned regionally significant infrastructure; or b. Sterilisation of: 	<p>The Applicant has addressed the potential for reverse sensitivity through proposed PPC81 provisions including screening, landscaping, setbacks and noise requirements.</p>

<ul style="list-style-type: none"> i. Land with regionally significant mineral resources; or ii. Land which is likely to be used for regionally significant infrastructure. <p>*Includes aggregates and other minerals</p>	
<p><u>3.8 Efficient and effective infrastructure</u></p> <p>Manage resource use to:</p> <ul style="list-style-type: none"> a. Optimise the use of existing infrastructure; b. Ensure new infrastructure is flexible, adaptable, and resilient, and meets the reasonably foreseeable needs of the community; and c. Strategically enable infrastructure to lead or support regional economic development and community wellbeing. 	<p>Confirmation still to be provided regarding the feasibility of the bridging of the Awakino River for wastewater servicing in a manner that will give effect to objective 3.8.</p>
<p><u>3.10 Use and allocation of common resources</u></p> <p>Efficiently use and allocate common natural resources, with a particular focus on:</p> <ul style="list-style-type: none"> a. Situations where demand is greater than supply; b. The use of freshwater and coastal water space; and c. Maximising the security and reliability of supply of common natural resources for users. 	<p>Matters in relation to the availability of raw water supply or appropriate alternatives for potable water to be addressed by the Applicant to show how they can give effect to objective 3.10.</p>
<p><u>3.11 Regional Form</u></p> <p>Northland has sustainable built environments that effectively integrate infrastructure with subdivision, use and development, and have a sense of place, identity and a range of lifestyle, employment and transport choices.</p>	<p>Confirmation regarding the feasibility of a pedestrian/cycle link with Dargaville yet to be supplied.</p>
<p><u>3.12 Tangata whenua role in decision making</u></p> <p>Tangata whenua kaitiaki role is recognised and provided for in decision-making over natural and physical resources.</p>	<p>The Applicant is continuing to address cultural values and the inclusion of Tangata Whenua in the decision making process surrounding PPC81.</p>

<p><u>3.13 Natural hazard risk</u></p> <p>The risks and impacts of natural hazard events (including the influence of climate change) on people, communities, property, natural systems, infrastructure and our regional economy are minimised by:</p> <ul style="list-style-type: none"> a. Increasing our understanding of natural hazards, including the potential influence of climate change on natural hazard events; b. Becoming better prepared for the consequences of natural hazard events; c. Avoiding inappropriate new development in 10 and 100 year flood hazard areas and coastal hazard areas; d. Not compromising the effectiveness of existing defences (natural and man-made); e. Enabling appropriate hazard mitigation measures to be created to protect existing vulnerable development; and f. Promoting long-term strategies that reduce the risk of natural hazards impacting on people and communities. g. Recognising that in justified circumstances, critical infrastructure may have to be located in natural hazard-prone areas. 	<p>The proposed site is the least floodable of other similar sites within the vicinity. Assessment provided within the technical memo notes any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage.</p>
<p><u>3.15 Active management</u></p> <p>Maintain and / or improve;</p> <ul style="list-style-type: none"> a. The natural character of the coastal environment and fresh water bodies and their margins; b. Outstanding natural features and outstanding natural landscapes; c. Historic heritage; d. Areas of significant indigenous vegetation and significant habitats of indigenous fauna (including those within estuaries and harbours); e. Public access to the coast; and f. Fresh and coastal water quality 	<p>The Applicant is proposing planting and active management of waterbodies through the provisions associated with the blue-green network.</p>

<p>by supporting, enabling and positively recognising active management arising from the efforts of landowners, individuals, iwi, hapū and community groups.</p>	
<p>Parts 4-8: Policies and Methods</p>	
<p><u>4 – Policies and Methods – Water, land and common resources</u></p> <p>4.1.1 Policy – Catchment-specific objectives and limits</p> <p>Collaboratively:</p> <ul style="list-style-type: none"> a. Identify the values of water in catchments and receiving estuaries and harbours; b. Provide for these values by establishing catchment-specific objectives and set water quality limits and environmental flows and / or levels, and where necessary targets; and c. Establish methods to avoid, and where necessary phase out, overallocation. <p>4.2.1 Policy – Improving overall water quality</p> <p>Improve the overall quality of Northlands water resources by:</p> <ul style="list-style-type: none"> a. Establishing freshwater objectives and setting region-wide water quality limits in regional plans that give effect to Objective 3.2 of this regional policy statement. b. Reducing loads of sediment, nutrients, and faecal matter to water from the use and development of land and from poorly treated and untreated discharges of wastewater; and c. Promoting and supporting the active management, enhancement and creation of vegetated riparian margins and wetlands. <p>4.3.4 Policy – Water harvesting, storage and conservation</p> <p>Recognise and promote the benefits of water harvesting, storage, and conservation measures.</p>	<p>The Applicant is proposing stormwater detention via the blue-green network. This will give effect to 4.2.1. The applicant is also proposing water storage, although the methods of achieving this are not currently specified through the provisions of PPC81. Water harvesting and storage to meet additional raw water demands will give effect to 4.3.4.</p>

5 – Policies and methods – Regional form and infrastructure

5.1.1 Policy – Planned and coordinated development

Subdivision, use and development should be located, designed and built in a planned and co-ordinated manner which:

- a. Is guided by the 'Regional Form and Development Guidelines' in Appendix 2;
- b. Is guided by the 'Regional Urban Design Guidelines' in Appendix 2 when it is urban in nature;
- c. Recognises and addresses potential cumulative effects of subdivision, use, and development, and is based on sufficient information to allow assessment of the potential long-term effects;
- d. Is integrated with the development, funding, implementation, and operation of transport, energy, water, waste, and other infrastructure;
- e. Should not result in incompatible land uses in close proximity and avoids the potential for reverse sensitivity;
- f. Ensures that plan changes and subdivision to / in a primary production zone, do not materially reduce the potential for soil-based primary production on land with highly versatile soils, or if they do, the net public benefit exceeds the reduced potential for soil-based primary production activities; and
- g. Maintains or enhances the sense of place and character of the surrounding environment except where changes are anticipated by approved regional or district council growth strategies and / or district or regional plan provisions.
- h. Is or will be serviced by necessary infrastructure.

Note: in determining the appropriateness of subdivision, use and development (including development in the coastal environment – see next policy), all policies and methods in the Regional Policy Statement must be considered, particularly policies relating to natural character, features and landscapes, heritage, natural hazards, indigenous ecosystems and fresh and coastal water quality.

5.1.3 Policy – Avoiding the adverse effects of new use(s) and development

5.1.1 a and 5.1.1 b are assessed below.

Matters in relation to the availability of raw water supply or appropriate alternatives for potable water along with feasibility of bridging the Awakino River by piping for wastewater infrastructure to be addressed by the Applicant to show how they can give effect to policy 5.1.1 d.

Sufficient information has been provided to address matters in relation to reverse sensitivity.

Along with confirmation of matters in relation to the NPS-HPL the Applicant should clarify, given the identification of LUC 2 and LUC 3 within the site further consideration needs to be given to whether the net public benefit exceeds the reduced potential for soil-based primary production activities to give effect to policy 5.1.1 f.

<p>Avoid the adverse effects, including reverse sensitivity effects of new subdivision, use and development, particularly residential development on the following:</p> <ul style="list-style-type: none"> a. Primary production activities in primary production zones (including within the coastal marine area); b. Commercial and industrial activities in commercial and industrial zones; c. The operation, maintenance or upgrading of existing or planned* regionally significant infrastructure; and d. The use and development of regionally significant mineral resources. <p>* In this instance, planned means the infrastructure has been identified and provided for in a; notice of requirement designation, resource consent, a regional or district plan, the Northland Regional Land Transport Strategy or a document prepared using the special consultative process under the Local Government Act 2002.</p> <p>5.2.1 Policy – Managing the use of resources</p> <p>Encourage development and activities to efficiently use resources, particularly network resources, water and energy, and promote the reduction and reuse of waste.</p> <p>5.2.2 Policy – Future-proofing infrastructure</p> <p>Encourage the development of infrastructure that is flexible, resilient, and adaptable to the reasonably foreseeable needs of the community.</p> <p>5.2.3 – Policy – Infrastructure, growth and economic development</p> <p>Promote the provision of infrastructure as a means to shape, stimulate and direct opportunities for growth and economic development.</p>	
<p><u>7 Policies and methods – Natural hazards</u></p> <p>7.1.1 Policy – General risk management approach</p> <p>Subdivision, use and development of land will be managed to minimise the risks from natural hazards by:</p>	<p>The proposed site is the least floodable of other similar sites within the vicinity. Assessment provided within the technical memo notes any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and</p>

<ul style="list-style-type: none"> a. Seeking to use the best available information, including formal risk management techniques in areas potentially affected by natural hazards; b. Minimising any increase in vulnerability due to residual risk; c. Aligning with emergency management approaches (especially risk reduction); d. Ensuring that natural hazard risk to vehicular access routes and building platforms for proposed new lots is considered when assessing subdivision proposals; and e. Exercising a degree of caution that reflects the level of uncertainty as to the likelihood or consequences of a natural hazard event. <p>7.1.2 Policy – New subdivision and land use within 10-year and 100-year flood hazard areas</p> <p>New subdivision, built development (including wastewater treatment and disposal systems), and land use change may be appropriate within 10-year and 100-year¹⁹ flood hazard areas provided all of the following are met:</p> <ul style="list-style-type: none"> a. Hazardous substances will not be inundated during a 100-year flood event. b. Earthworks (other than earthworks associated with flood control works) do not divert flood flow onto neighbouring properties, and within 10-year flood hazard areas do not deplete flood plain storage capacity; c. A minimum freeboard above a 100-year flood event of at least 500mm is provided for residential buildings. d. Commercial and industrial buildings are constructed so as to not be subject to material damage in a 100 year flood event. e. New subdivision plans are able to identify that building platforms will not be subject to inundation and / or material damage (including erosion) in a 100-year flood event; f. Within 10-year flood hazard areas, land use or built development is of a type that will not be subject to material damage in a 100-year flood event; and g. Flood hazard risk to vehicular access routes for proposed new lots is assessed. 	<p>volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage.</p> <p>With regard to other natural hazards a geotechnical assessment has been provided with the application that confirms the site is suitable for light industrial, commercial and residential development.</p>
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<p>7.1.6 – Climate change and development</p> <p>When managing subdivision, use and development in Northland, climate change effects will be included in all estimates of natural hazard risk, taking into account the scale and type of the proposed development and using the latest national Regional Policy Statement for Northland guidance and best available information on the likely effects of climate change on the region or district.</p> <p>7.2.1 Policy – Role of natural features</p> <p>Recognise and protect, restore or enhance natural systems and features that contribute to reducing the impacts of natural hazard events on the built environment.</p>	
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Appendix 2 – Regional development and design guidelines	
Part A) Regional Form and Development Guidelines	
<p>New subdivision, use and development should:</p> <p>(a) Demonstrate access to a secure supply of water; and</p> <p>(b) Demonstrate presence or capacity or feasibility for effective wastewater treatment; and</p> <p>(c) If of an urban or residential nature connect well with existing development and make use of opportunities for urban intensification and redevelopment to minimise the need for urban development in greenfield (undeveloped) areas; and</p> <p>(d) If of an urban or residential nature provide, where possible, opportunities to access a range of transport modes; and</p> <p>(e) If of a community-scale, encourage flexible, affordable and adaptable social infrastructure that is well located and accessible in relation to residential development, public transport services and other development; and</p>	<p>Although the technical assessment of PPC81 indicates that technical solutions to supplying sufficient potable water to the site are possible (and a design solution could be proposed at the resource consent stage), the provisions of PPC81 do not reflect the potential water supply constraints. As such I cannot fundamentally conclude that there will be sufficient raw water to appropriately supply potable water to development proposed as part of PPC81.</p> <p>Confirmation is yet to be provided regarding the feasibility of the bridging of the Awakino River for wastewater servicing.</p> <p>The feasibility of the shared pedestrian/cycleway is yet to be confirmed. This is a key component in relation to providing an opportunity to access a range of transportation modes.</p>

(f) Recognise the importance of and provide for parks, in regards to medium and large-scale residential and residential / mixed use development.

(g) If of a residential nature be, wherever possible, located close to or sited in a manner that is accessible to a broad range of social infrastructure; and

(h) Be directed away from regionally significant mineral resources and setback from their access routes to avoid reverse sensitivity effects; and

(i) Be designed, located and sited to avoid adverse effects on energy transmission corridors and consented or designated renewable energy generation sites (refer to 'Regional form and infrastructure' for more details and guidance); and

(j) Be designed, located and cited to avoid significant adverse effects on transportation corridors and consented or designated transport corridors; and

(k) Be directed away from 10-year and 100-year flood areas and high risk coastal hazard areas (refer to 'Natural hazards' for more details and guidance); and

(l) Seek to maintain or improve outstanding landscape and natural character values and provide for the protection of significant historic and cultural heritage from inappropriate subdivision, use and development (refer to 'Land, Water and Common Resources' for more details and guidance); and

(m) Protect significant ecological areas and species, and where possible enhance indigenous biological diversity (refer to 'Maintaining and enhancing indigenous ecosystems and species' for more details and guidance); and

(n) Maintain and improve public access to and along the coastal marine area,

<p>lakes and rivers; and</p> <p>(o) Avoid or mitigate adverse effects on natural hydrological characteristics and processes (including aquifer recharge), soil stability, water quality and aquatic ecosystems, including through low impact design methods where appropriate; and</p> <p>(p) Adopt, where appropriate, sustainable design technologies such as the incorporation of energy-efficient (including passive solar) design, low-energy street lighting, rain gardens, renewable energy technologies, rainwater storage and grey water recycling techniques; and</p> <p>(q) Be designed to allow adaptation to the projected effects of climate change (refer to 'Natural Hazards' for more details and guidance); and</p> <p>(r) Consider effects on the unique tangata whenua relationships, values, aspirations, roles and responsibilities with respect to the site of development; and</p> <p>(s) Encourage waste minimisation and efficient use of resources (such as through resource-efficient design and construction methods); and</p> <p>(t) Take into account adopted regional / sub-regional growth strategies; and</p> <p>(u) Where appropriate, encourage housing choice and business opportunities, particularly within urban areas.</p>	
<p>Part B) Regional urban design guidelines</p>	
<p>Context</p>	<p>These matters are addressed within the UDA supplied with the application.</p>

Quality urban design sees buildings, places and spaces not as isolated elements but as part of the whole town or city. In this regard, quality urban design:

- (a) Takes a long-term view; and
- (b) Recognises and builds on landscape context and character; and
- (c) Results in buildings and places that are adapted to local climatic conditions; and
- (d) Celebrates cultural identity and recognises the heritage values of a place.

Character

Quality urban design reflects and enhances the distinctive character and culture of our urban environments, and recognises that character is dynamic and evolving, not static. In this regard, quality urban design:

- (a) Reflects the unique identity of each town, city and neighbourhood and strengthens the positive characteristics that make each place distinctive; and
- (b) Protects and manages our heritage, including buildings, places and landscapes; and
- (c) Protects and enhances distinctive landforms, water bodies and indigenous plants and animals.

Choice

Quality urban design fosters diversity and offers people choice in the urban form of our towns and cities, and choice in densities, building types, transport options, and activities. Flexible and adaptable design provides for unforeseen uses, and creates resilient and robust towns and cities. In this regard, quality urban design:

- (a) Ensures urban environments (including open spaces) provide opportunities for all, including people with disabilities; and
- (b) Encourages a diversity of activities within mixed use developments and neighbourhoods; and

(c) Supports designs which are flexible, adaptable and which will remain useful over the long-term.

Connections

Good connections enhance choice, support social cohesion, make places lively and safe, and facilitate contact among people. Quality urban design recognises how all networks – streets, railways, walking and cycling routes, services, infrastructure, and communication networks – connect and support healthy neighbourhoods, towns and cities. Places with good connections between activities and with careful placement of facilities benefit from reduced travel times and lower environmental impacts. In this regard, quality urban design:

- (a) Creates safe, attractive and secure pathways and links between neighbourhoods and centres; and
- (b) Facilitates green networks that link public and private open space; and
- (c) Places a high priority on walking, cycling and where relevant, public transport; and
- (d) Improves accessibility to public services and facilities.

Creativity

Quality urban design encourages creative and innovative approaches. Creativity adds richness and diversity and turns a functional place into a memorable place. Creative urban design supports a dynamic urban cultural life and fosters strong urban identities. In this regard, quality urban design:

- (a) Builds a strong and distinctive local identity; and
- (b) Uses new technology; and
- (c) Emphasises innovative and imaginative solutions.

Custodianship

Quality urban design reduces the environmental impacts of our towns and cities through environmentally sustainable and responsive design solutions. Custodianship recognises the lifetime costs of buildings and infrastructure, and aims to hand on places to the next generation in as good or better condition. In this regard, quality urban design:

- (a) Maintains landscape values, ecological services and cultural values; and
- (b) Considers the ongoing care and maintenance of buildings, spaces, places and networks; and
- (c) Manages the use of resources carefully, through environmentally responsive and sustainable design solutions; and
- (d) Incorporates renewable energy sources and passive solar gain; and
- (e) Incorporates the enhancement of the health and safety of communities.

Collaboration

Towns and cities are designed incrementally as we make decisions on individual projects. Quality urban design requires good communication and co-ordinated actions from all decision-makers: central government, local government, professionals, transport operators, developers and users. In this regard, quality urban design:

- (a) Supports a common vision that can be achieved over time; and
- (b) Uses a collaborative approach to design that acknowledges the contributions of many different disciplines and perspectives; and
- (c) Depends on leadership at many levels.

Appendix F – Assessment of the Policies of the Northland Regional Plan

Objective/Policy	Commentary
F.1 Objectives	
<p><u>F1.2 Water Quality</u></p> <p>Manage the use of land and discharges of contaminants to land and water so that:</p> <ol style="list-style-type: none"> 1. existing water quality is at least maintained, and improved where it has been degraded below the river, lake or coastal water quality standards set out in H.3 Water quality standards and guidelines, and 2. the sedimentation of continually or intermittently flowing rivers, lakes and coastal water is minimised, and 3. the life-supporting capacity, ecosystem processes and indigenous species, including their associated ecosystems, of fresh and coastal water are safeguarded, and the health of freshwater ecosystems is maintained, and 4. the health of people and communities, as affected by contact with fresh and coastal water, is safeguarded, and 5. the health and safety of people and communities, as affected by discharges of sewage from vessels, is safeguarded, and 6. the quality of potable drinking water sources, including aquifers used for potable supplies, is protected, and 7. the significant values of outstanding freshwater bodies and natural wetlands are protected, and 8. kai is safe to harvest and eat, and recreational, amenity and other social and cultural values are provided for. <p><u>F.1.5 Enabling economic well-being</u></p>	<p>The Applicant has noted that earthworks have not been specifically assessed for the PPC81 because this activity will be assessed at time of subdivision or comprehensive development. It is anticipated that all excavation and fill will be undertaken in accordance with industry best practice. Provided appropriate mitigation measures are adopted, it is considered that the potential adverse effects from earthworks in relation to water quality will be acceptable.</p> <p>The Applicant is proposing enhancement of waterways throughout the site as part of the blue-green network. As noted above on receipt of additional information in relation to the NPS-FM will confirm the ability of the proposal to manage land use and discharges so that the life supporting capacity, ecosystem processes and indigenous species are safeguarded and the health of freshwater ecosystems is maintained.</p> <p>The EIA provided with the application has identified that PPC81 will improve the economic wellbeing of Northland.</p> <p>The Applicant is continuing to address cultural values and the inclusion of Tangata Whenua in the decision making process around PPC81.</p>

<p>Northland’s natural and physical resources are managed in a way that is attractive for business and investment that will improve the economic well-being of Northland and its communities.</p> <p><i>Note: This provision is subject to an appeal.</i></p> <p><u>F.1.9 Tāngata whenua role in decision-making</u></p> <p>Tāngata whenua’s kaitiaki role is recognised and provided for in decision-making over natural and physical resources.</p> <p><u>F.1.10 Natural hazard risk</u></p> <p>The risks and impacts of natural hazard events (including the influence of climate change) on people, communities, property, natural systems, infrastructure and the regional economy are minimised by:</p> <ol style="list-style-type: none"> 1. increasing the understanding of natural hazards, including the potential influence of climate change on natural hazard events and the potential impacts on coastal biodiversity values, and 2. becoming better prepared for the consequences of natural hazard events, and 3. avoiding inappropriate new development in 100-year flood hazard areas and coastal hazard areas, and 4. not compromising the effectiveness of existing natural and man-made defences against natural hazards, and 5. enabling appropriate hazard mitigation measures to be implemented to protect existing vulnerable development, and 6. promoting long-term strategies that reduce the risk of natural hazards impacting on people, communities and natural systems, and 7. recognising that in justified circumstances, critical infrastructure may have to be located in natural hazard-prone areas, and 8. anticipating and providing for, where practicable, landward migration of coastal biodiversity values affected by sea-level rise and natural hazard events. 	<p>The site of PPC81 is the least floodable of other similar sites within the vicinity. Assessment provided within the technical memo in Appendix I notes any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage</p> <p>A geotechnical assessment has been provided in relation to other natural hazards, which notes the site is suitable for light industrial, commercial and residential development.</p>
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<p><u>F.1.11 Improving Northland's natural and physical resources</u></p> <p>Enable and positively recognise activities that contribute to improving Northland's natural and physical resources.</p>	
<p>D Policies</p>	
<p><u>D.2 General</u></p> <p>D.2.2 Social, cultural and economic benefits of activities</p> <p>Regard must be had to the social, cultural and economic benefits of a proposed activity, recognising significant benefits to local communities, Māori and the region including local employment and enhancing Māori development, particularly in areas of Northland where alternative opportunities are limited.</p>	<p>The SIA provided with the application has addressed the potential social impacts associated with the development. It is agreed that adverse social impacts of the proposal will be minimal and there will be some positive social impacts.</p>
<p><u>D6 Natural Hazards</u></p> <p>D.6.5 Flood hazard management – development within floodplains</p> <p>Development in flood hazard areas and continually or intermittently flowing rivers (including high-risk flood hazard areas) must not increase the risk of adverse effects from flood hazards on other property or another person's use of land or property.</p>	<p>As noted above assessment provided within the technical memo notes any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage.</p> <p>Geotechnical evidence has been accepted.</p>

Appendix G - Assessment of the Objectives and Policies of the Kaipara District Plan

Objective/Policy	Commentary
Chapter 2 – District Wide Resource Management Issues	
<p><u>2.4 District Wide Objectives</u></p> <ol style="list-style-type: none"> 1. To maintain and enhance opportunities for sustainable resource use, to enable economic development and growth. 2. To involve Tangata Whenua as partners in policy development and implementation and decision making under the District Plan. 3. To recognise the importance of providing for the relationship of Maori, including their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga. 4. To recognise and protect from inappropriate use and development those environments of the District which are the most sensitive to land use and development and which significantly contribute to the District's, Region's and/or Nation's identity. 5. To recognise and enhance the amenity and character of the District, while providing for sustainable resource use. 6. To protect and enhance those buildings, sites, objects and natural features and areas that contribute to the District's heritage, ecological and landscape values. 7. To provide certainty to the community by identifying those areas of the District where the effects of particular land uses are considered sustainable. 8. To provide guidance on areas for long term growth and land use change while recognising the limited resources of Council. 9. To enable the development and operation of utilities, utility networks and the transport network (including the state highway network) throughout the District, particularly where this is undertaken in conjunction with land use development and change. 10. To take a precautionary approach to managing hazards and their potential effects on communities and the natural environment. 11. To provide for the establishment, operation, development and maintenance of land for reserves and recreation activities. 	<p>As discussed throughout this report there are a number of outstanding matters to address in relation to use of productive land, effects on ecosystems and the feasibility of servicing in relation to raw water supply, bridging of the Awakino River for wastewater infrastructure and the provision of a pedestrian link to Dargaville.</p>

<ol style="list-style-type: none"> 12. To recognise the importance of aggregate and mineral resources to the District while avoiding, remedying and mitigating potential adverse effects associated with their extraction and processing. 13. To recognise and provide for the sustainable, secure and efficient transmission of electricity within and throughout the District. 14. To encourage and promote the efficient use of energy and enable the greater use, development, operation and maintenance of renewable energy resources whilst managing potential adverse effects. 15. To encourage and promote fire safety measures to minimise risk to life, property and the environment from fire. 	
<p><u>2.5 District Wide Policies</u></p> <ol style="list-style-type: none"> 1. By developing District Plan provisions that seek to manage the effects of activities which pose risks to sustainable environmental management, while maintaining flexibility for new activities and changes in technology. 2. By providing incentives for land use and subdivision where these include environmental benefits over and above those required to avoid, remedy or mitigate adverse effects. 3. By developing a strategy to address those elements of economic development that are relevant under the District Plan (particularly land use). 4. By establishing a strategy for resource management with Tangata Whenua. 5. By recognising the natural environments of the District to maintain and enhance their values. 6. By identifying sites, landscapes, areas and features for specific management and protection of resources and values. 7. By developing a Land Use Strategy for the management of land uses in a geographic context. 8. By providing direction and opportunities for changes to land use to enable residential and business growth in appropriate locations. 9. By providing for the development and operation of network utilities and the transport network in all areas of the District where the potential adverse effects can be appropriately avoided, remedied or mitigated. 	<p>As discussed throughout this report there are a number of outstanding matters to address in relation to use of productive land, effects on ecosystems and the feasibility of servicing in relation to raw water supply, bridging of the Awakino River for wastewater infrastructure and the provision of a pedestrian link to Dargaville.</p>

<p>10. By providing for and promoting the efficient use of energy and the greater use and development of renewable energy resources in all areas of the District, where the potential adverse effects can be appropriately avoided, remedied or mitigated.</p> <p>11. By requiring land use, development and subdivision to provide adequate reserves, utilities and transport connections, at the outset of development.</p> <p>12. By recognising that the nature, location and extent of hazards have the potential to change; and working with other agencies to improve understanding of hazards and risks to the community and the environment, and managing activities to minimise the potential impact of such change.</p> <p>13. By identifying transmission corridors that minimise reverse sensitivity effects generated by subdivision and land development; avoid, remedy or mitigate adverse effects on the transmission network; and protect the safety and amenity values of the community.</p> <p>14. By encouraging greater investigation of potential hazards during the development and subdivision process.</p> <p>15. To enable the efficient extraction and processing of minerals and aggregates where benefits to the wider community are demonstrated and adverse effects on the environment will be avoided, remedied or mitigated.</p> <p>16. By establishing a strategy to provide and maintain reserve and public open space areas and for providing for the specific management needs of these areas.</p> <p>17. To assess fire risks and encourage investigation of potential fire safety measures during the development and subdivision process.</p>	
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Chapter 3 – Land Use and Development Strategy

<p><u>3.4 Objectives</u></p> <p>1. To encourage and establish an effective and sustainable supply of residential and business land to meet the current and future demands of the Kaipara District and enable the community to provide for their social and economic well-being.</p>	<p>In the main I accept the assessment of the objectives and policies provided within the Applicant’s further information response dated 20 April 2022, apart from those matters that have been previously raised, including provisions in relation to raw water supply, bridging of the Awakino River in relation to wastewater servicing, feasibility of pedestrian/cycle link to</p>
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<ol style="list-style-type: none"> 2. To minimise the ad hoc expansion of residential and business activities in the rural heartland, where such activities have the potential to give rise to adverse environmental effects and issues of reverse sensitivity. 3. To restrict growth of residential and business activities in inappropriate locations where such activities have the potential to give rise to adverse effects on sensitive receiving environments. 4. To ensure emissions, discharges and effects of residential and business development are managed so that adverse effects on the surrounding environment, including existing settlement areas, are comprehensively addressed. 5. To provide appropriate infrastructure and servicing in advance of or alongside future residential and business development. 6. To provide clear direction on the information, planning and management requirements considered to be required to enable future changes in land use within the identified development areas. 7. To minimise potential conflicts between natural and physical limitations, including hazards and future residential and business areas. 8. To provide adequate areas to accommodate future residential development which maximise the use of existing infrastructure. 	<p>Dargaville, and specific points in relation to the NPS-HPL and NPS-FM.</p>
<p><u>3.5 Policies</u></p> <ol style="list-style-type: none"> 1. By providing for clear direction and certainty for a range of residential and business land use activities throughout the Kaipara District. 2. By establishing standards for minimum site sizes, for each Zone in the District. 3. By providing for a diverse range of residential and business opportunities in appropriate locations that enable their effects to be effectively managed. 4. By establishing a Land Use and Development Strategy, including nominated future Growth Areas, which ensures protection of natural character and ecological, amenity and landscape values and enables adequate opportunity for residential and business land to meet future demand. 5. By ensuring infrastructure and servicing (e.g. transport, stormwater and sewerage reticulation and treatment systems and networks) for new development areas are designed and provided for at the outset of development, so that any adverse effects on the environment or existing systems are adequately avoided, remedied or mitigated. 	<p>Matters in relation to raw water and wastewater servicing, as well as the pedestrian/cycle link to Dargaville are yet to be feasibly determined which is inconsistent with policy 3.5.5.</p> <p>Matters in relation to natural hazards have been addressed within the technical memo's. A geotechnical assessment has been supplied in relation to the suitability of the site for light industrial, commercial and residential development, this is consistent with policy 6. e.</p>

<p>6. By requiring new residential and business development to comprehensively consider (on a catchment wide basis) potential:</p> <ul style="list-style-type: none"> a. Adverse effects on the natural character of the coastal environment, lakes, rivers, wetlands or their margins; b. Adverse effects on areas of significant indigenous vegetation or significant habitats of indigenous fauna; c. Adverse effects on outstanding natural features, landscapes and heritage resources; d. Adverse effects on the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga; e. Conflicts with areas where natural hazards could adversely affect the physical resources of residential and business development or pose risks to people’s health and safety; f. Conflicts with finite resources which can reasonably be expected to be valuable for future generations (including highly productive and versatile soils and aggregate resources). (For example, where residential and business development could adversely affect the availability of finite resources); and g. to identify mechanisms to avoid, remedy or mitigate such impacts. 	
<p>Chapter 5 – Tangata Whenua Strategy</p>	
<p><u>5.5 Tangata Whenua Objectives</u></p> <ul style="list-style-type: none"> 1. To involve Tangata Whenua as partners in policy development and implementation and decision making under the District Plan. 2. To recognise the importance of providing for the relationship of Maori, including their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga. 3. To recognise the different types of Maori Purpose Land that exist within the Kaipara District. 	<p>The Applicant is continuing to address cultural values and the inclusion of Tangata Whenua in the decision making process surrounding PPC81.</p>

<p><u>5.6 Tangata Whenua Policies</u></p> <ol style="list-style-type: none"> 1. Recognising the partnership with Tangata Whenua by:- <ol style="list-style-type: none"> a. Consultation is undertaken with Te Uri o Hau and Te Roroa on those matters that may affect their taonga, or their use, development and protection of the natural and physical environment (recognising Kaitiaki); and b. Ensuring that active consideration is given to the impacts of development on taonga. This includes Tangata Whenua involvement in consent processing / hearings. 2. By recognising and protecting the values of Areas of Significance to Maori. 3. Recognising Iwi Management Plans in consents and decision making. 4. By recognising the unique constraints and special characteristics of Maori Land. 	<p>The Applicant is continuing to address cultural values and the inclusion of Tangata Whenua in the decision making process surrounding PPC81.</p>
Chapter 7 – Natural Hazards	
<p><u>7.5 – Natural Hazards Objectives</u></p> <ol style="list-style-type: none"> 1. To control subdivision and development so that it does not induce natural hazards or exacerbate the effects of natural hazards. 2. To ensure, that the role in hazard mitigation played by natural features is recognised and protected. 3. To improve public awareness of natural hazards as a means of helping the community to avoid such hazards. 4. To consider natural hazards at the time of any subdivision, land use or development or when there is a significant change in land use proposed (for example a new Growth Area). 	<p>Assessment provided within the technical memo notes any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage.</p> <p>A geotechnical assessment has been provided to confirm that the site is suitable for light industrial, commercial and residential development.</p>
<p><u>7.6 – Natural Hazards Policies</u></p> <ol style="list-style-type: none"> 1. By considering the potential for development, subdivision and land use activities including: 	<p>The Applicant is proposing planting and active management of waterbodies through the provisions associated with the blue-green network. . As noted</p>

<ul style="list-style-type: none"> a. Vegetation clearance; b. Draining of wetlands; c. Changes in overland flow paths and storm water; d. Changes to riparian margins; e. Earth works; f. Buildings and building setbacks; and g. Land reclamation; <p>To exacerbate any natural hazard on-site or off-site, and avoiding such activities, unless it can be demonstrated that the adverse effects can be mitigated, remedied or avoided.</p> <ul style="list-style-type: none"> 2. By considering the potential adverse impacts of development on flood flow paths of rivers and the efficient functioning of natural drainage systems in subdivision, land use and development. 3. By taking into account climate change and sea level rise, as predicted by the Intergovernmental Panel of Climate Change or Royal Society of NZ, when assessing development in areas potentially affected. 4. By making information on known natural hazards available to the public to assist them with making informed resource management decisions. 	<p>above on receipt of additional information in relation to the NPS-FM will confirm the ability of the proposal to maintain the extent and diversity of indigenous ecosystems and habitats.</p>
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Memorandum

To: The District Planning Team

From: David Usmar (Infrastructure Planner)

Date: 2nd March 2023

Subject The Dargaville Water supply and Wastewater

Abbreviations	
WWTP	Wastewater Treatment Plant
WTP	Water Treatment Plant
SFF	Silver Fern Farms
EP	Equivalent Population
m ³ /d (kL/d)	Cubic Meters per Day (1000 Litres per day)
BOD	Biochemical Oxygen Demand
Kg/d	Kilograms per day
kgBOD/d	Kilograms Biochemical Oxygen Demand per day

INTRODUCTION

I have been asked by the District Planning Team to provide advice on:

- The capacity of the Dargaville Wastewater Treatment Plant (**Dargaville WWTP**); and
- The ability of the Dargaville WWTP to service land proposed to be re-zoned under Private Plan Change 81: Dargaville Racecourse (**PPC81**).
- The ability of the Dargaville WTP to service land proposed to be re-zoned under PPC81

The statements made are current at the date of preparing this memorandum, and are intended to be used as part of the section 42A report for PPC81.

SUMMARY

With respect to wastewater:

- All of Dargaville is currently serviced by the Dargaville WWTP, located around 3km from the plan change site.
- KDC has recently obtained a new discharge consent authorizing the Dargaville WWTP to operate until 2043. There is likely to be sufficient capacity in the Dargaville WWTP to service excepted demand from PPC81 (under scenarios 2 and 3, discussed in this memorandum).
- The applicant is proposing that wastewater from the plan change area would be conveyed to the Dargaville WWTP over a crossing on State Highway 14 over the Awakino River would be subject to Waka Kotahi approval. I understand that this approval is yet to be given. I am unaware whether any design work has been undertaken to assess the feasibility of the proposed bridge crossing, and am unable to comment further on the feasibility of this.

With respect to reticulated water supply:

- There is currently sufficient capacity in the Dargaville WTP to service predicted demand for reticulated water from the plan change. However, as the applicant has noted, there

are shortages of raw water to the Dargaville WTP typically over summer months, meaning that restrictions are routinely imposed.

- While the Council is committed to investigating options to augment the supply of raw water to the Dargaville WTP no option has yet been confirmed, and funding has not yet been committed in the LTP.

PART 1: THE CAPACITY OF THE DARGAVILLE WASTEWATER TREATMENT PLANT

Part 1 of this memorandum comments on the capacity of the Dargaville WWTP, including:

- A general description of the Dargaville WWTP;
- The current capacity restraints in the Dargaville WWTP and planning for future upgrades; and
- The capacity currently available in the Dargaville WWTP to service growth from PPC81, under different scenarios.

Description of the Dargaville Wastewater Treatment Plant

Dargaville is served by a single WWTP located on a site adjacent to the Northern Wairoa and Awakino Rivers. The WWTP is owned and operated by the Kaipara District Council (**KDC**) and collects wastewater from all the Dargaville urban area¹ (current population 4,950 people), as well as receiving partially treated effluent from the neighbouring Silver Fern Farm meat works.

The Dargaville WWTP is a conventional wastewater treatment plant, based around very large oxidation and maturation ponds followed by a wetland area prior to discharge of treated effluent to the environment, the Wairoa River (which flows down to the Kaipara Harbour).

Current Capacity of the Dargaville WWTP and planned future upgrades

Based on existing population data, and metered data, the average dry weather flow currently being treated by the Dargaville WWTP has been conservatively estimated at 1,800-2,000m³/d. This includes a current inflow of 600-800 m³/d from Silver Fern Farms (SFF) treatment plant.

KDC has recently obtained a new discharge consent for the Dargaville WWTP, from the Northland Regional Council with a term of 20 years, expiring in June 2043. The new discharge consent significantly increases the maximum allowable discharge to the Wairoa River from the previous monthly average daily limit of 3200 m³/d to a maximum monthly average daily limit of 6200 m³/d. This is significantly above the current daily average dry weather flow of 1,800-2,000 m³/d, discussed above. Overall, hydraulic capacity is not considered a limiting factor for population growth.

The KDC's current planning for Dargaville (without Private Plan Change 81: Dargaville Racecourse and Private Plan Change 82: Moonlight heights) assumes population growth of 1092 people in Dargaville between 2019 and 2052, with all this additional growth being serviced by the Dargaville WWTP.

Connections to the Dargaville WWTP are provided to development on a "first come first served" basis. KDC cannot control when development occurs. However, it monitors growth in the number of connections to the Dargaville WWTP each year. It seeks to time upgrades

¹ Apart from a section of the Beach Road industrial area that has onsite wastewater treatment.

to the capacity of the Dargaville WWTP to ensure that there is always capacity available, without over investing in the system.

In terms of the capacity of the Dargaville WWTP, the oxidation pond is currently the limiting constraint. This pond is 4.7 ha which is rated to a design capacity to treat a load of 858 kgBOD /d.

Dargaville WWTP upgrade options have been investigated as part of the Capacity Assessment work carried out by KDC in 2022. Major projects identified to bring the aging plant up to its design capacity include pond baffles, pond refurbishment, further aeration, inlet screens and further desludging. These upgrade projects will be key to realising the design capacity.

Associated investment for upgrades to the Dargaville WWTP has been committed in the current Long-Term Plan 2021/2031. This is primarily funded through development contribution which are collected at the time of development with a targeted development contribution for wastewater in Dargaville. Although the Dargaville WWTP upgrade program is not fully scoped, it is expected to include the projects identified in the Capacity Assessment work, above. The time of this investment is currently 2027/28 but can be brought forward if needed.

Increasing the Dargaville WWTP capacity beyond its current design capacity would require a larger project to change from the current conventional treatment process to a modern treatment process. Costs and scoping of such an upgrade have not been carried out and no investment has been signalled in the current Long-Term Plan 2021/2031. However, this investigation work will be started if population growth projections and rate of new connections signal it is required.

The capacity currently available in the Dargaville WWTP to service growth from PPC81, under different scenarios

As explained above, the Dargaville WWTP currently receives a significant flow of partially treated effluent (approximately 600-800 m³/day) from SFF. SFF is currently in the process of establishing its own pre-treatment WWTP. This WWTP has been installed but is not yet up to its full processing capability. Accordingly, the capacity available at the Dargaville WWTP in the near future depends, in large part, on the amount and quality of partially treated effluent the Dargaville WWTP continues to receive from SFF.

In relation to this, I have considered three different scenarios.

- Scenario 1 is the current situation with the new SFF wastewater treatment plant not fully operational.
- Scenario 2 is the expected future situation (within 2023) with the SFF wastewater treatment plant fully operational and current effluent flow from SFF discharging to the Dargaville WWTP.
- Scenario 3 is the expected future situation with the SFF wastewater treatment plant fully operational with the maximum discharge allowable under the draft Trade Waste Agreement with SFF being discharged by SFF to the Dargaville WWTP (i.e. SFF is operating at full capacity in terms of what is allowed under the draft Trade Waste Agreement)

These scenarios are explained in more detail below.

Flow limits below assume average dry weather conditions. Hydraulic capacity of the Dargaville WWTP is not considered to be a limiting factor although inflow and infiltration in the network contributes significantly to the discharge flow rates in wet weather.

Scenario 1: Current SFF loads and domestic loads

This is the current situation with the new SFF wastewater treatment plant not fully operational.

Under this scenario:

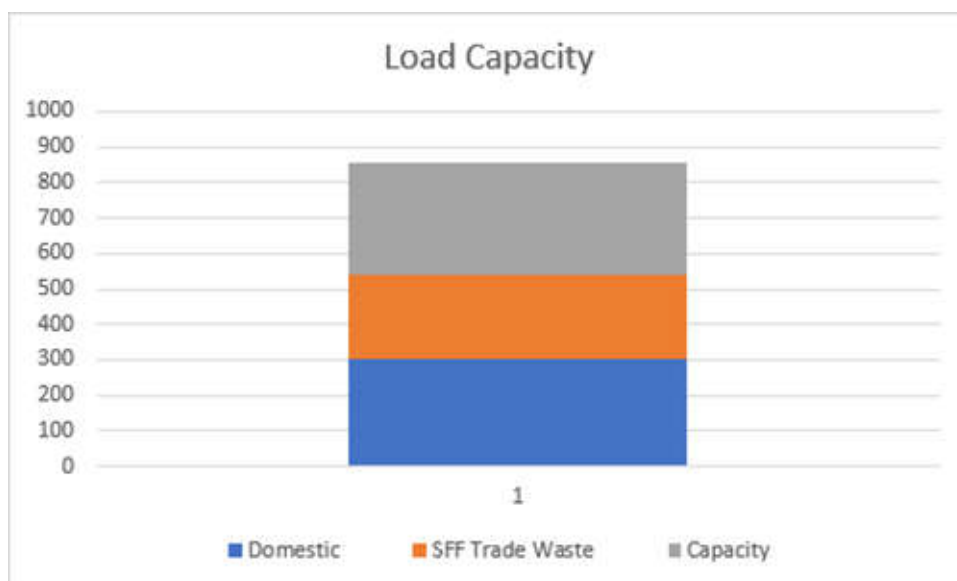
- BOD load inflow to Dargaville WWTP is 1080 kg/d.
- This is over the capacity of the treatment plant.
- SFF have recently upgraded their wastewater treatment plant. The target limits for the new SFF wastewater treatment plant are taken from the KDC Wastewater Bylaw.

Scenario 2: Current SFF flows at Wastewater Bylaw limits plus current domestic loads

This is the expected future situation (within 2023) with the SFF wastewater treatment plant fully operational (reducing load from SFF to the Dargaville WWTP) and current average effluent discharging to the Dargaville WWTP.

Under this scenario:

- BOD load inflow to Dargaville WWTP is 540 kg/d.
- As the Dargaville WWTP can treat up to 858 kg/d BOD, there is an additional capacity of 318 kg/d. This is equivalent to 1060 m³/d or 4417 EP.



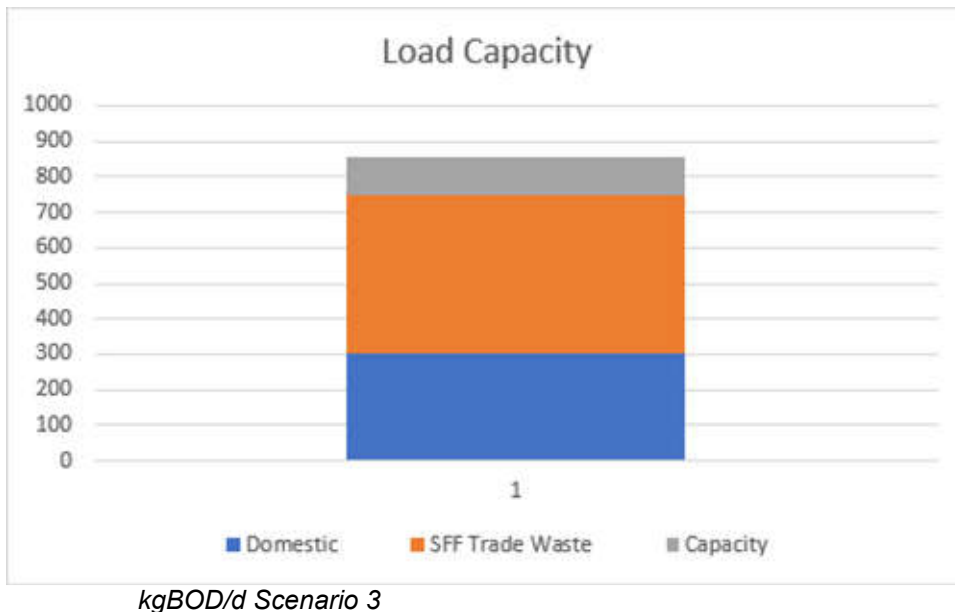
kgBOD/d Scenario 2

Scenario 3: Maximum SFF flows at Wastewater Bylaw limits plus current domestic loads

Under this scenario

BOD load inflow to Dargaville WWTP is 750 kg/d.

As the plant can treat up to 860 kg/d BOD, there is an additional capacity of 108 kg/d. This is equivalent to 432 m³/d or 1800 EP.



1. Discharge flow

Summary of capacity under the 3 Scenarios

For Scenario 1, the Dargaville WWTP is currently over capacity. For Scenario 2 there is capacity equivalent to an extra 4417 people (EP). For Scenario 3 there is capacity equivalent to an extra 1800 people. Key to ensuring that Scenarios 1 and 2 can be realised are upgrade projects detailed in the Capacity Assessment, a fully operational SFF wastewater treatment plant and a finalised Trade Waste Agreement with SFF.

PART 2: THE ABILITY OF THE DARGAVILLE WWTP TO SERVICE LAND PROPOSED TO BE RE-ZONED UNDER PPC81

In this part of the memorandum, I consider the ability of the Dargaville WWTP to service land proposed to be re-zoned under PPC 81

From an engineering perspective, the Dargaville WWTP is in proximity (3km) to the PPC81 area. As raised by the Civil Engineering Assessment lodged in support of PPC81 (at page 16), the proposed bridge crossing on State Highway 14 over the Awakino River would be subject to Waka Kotahi approval. I understand that this approval is yet to be given. I am unaware whether any design work has been undertaken to assess the feasibility of the proposed bridge crossing, and am unable to comment further on the feasibility of this.

The Civil Engineering Assessment lodged in support of PPC81 states (at page 15) the expected wastewater generated by PPC81, when fully developed, will be 376 m³/d from a total expected population of 1613. This population is within the calculated capacity of the Dargaville WWTP for Scenarios 2 and 3 but not the current Scenario 1.

In terms of the ability of the Dargaville WWTP to service the land proposed to be re-zoned under PPC81 at present, this is dependent on the upgrade program and finalisation of the Trade Waste Agreement with SFF. Currently under Scenario 1 the Dargaville WWTP has no capacity for growth. However, KDC is committed to monitoring expected growth so that upgrade projects can be timed to provide capacity for growth without over investment. KDC anticipates that capacity will be provided for PPC81, if approved, through Scenarios 2 or 3. Key to this timing will be understanding the staging of development for PPC81.


PART 3: THE ABILITY OF THE DARGAVILLE WTP TO SERVICE LAND PROPOSED TO BE RE-ZONED UNDER PPC81

In this part of the memorandum, I consider the ability of the Dargaville WTP and water supply network to service land proposed to be re-zoned under PPC 81

As stated in Civil Engineering Assessment lodged in support of PPC81, both water network and WTP capacity have been confirmed as sufficient. The only current restriction to potable water supply is availability of raw water, which can change seasonally. Water restrictions are routinely in place in the Dargaville area over the summer months.

There is currently no investment signalled in the current Long-Term Plan 2021/2031 to upgrade raw water supply. However, there is a ongoing options project to resolve seasonal raw water supply issues and KDC is committed to finalising options and signalling investment.

In terms of the ability of the Dargaville WTP and water supply network to service the land proposed to be re-zoned under PPC81 at present, the only restraint is seasonal raw water supply. Projects to increase the supply to the Dargaville WTP over the summer months are currently in the planning phase and KDC expects to progress through the options assessment this year (2023).

	2 nd March 2023
David Usmar, Infrastructure Planner	Date



**Dargaville Racecourse
Private Plan Change 81
Transportation Hearing Report**

2 March 2023





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Project: Dargaville Racecourse
Report title: Transportation Hearing Report
Document reference: J002601 Private Plan Change, Dargaville Transport Hearing Report
Date: 2 March 2023

Report Status	Prepared By	Reviewed By	Approved By
Final report	Ana Lee	Leo Hills	Leo Hills
			

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1 INTRODUCTION

Commute has been commissioned by Kaipara District Council (KDC) to review the transportation matters associated with the Dargaville Racecourse Proposed Private Plan Change 81 (PPC81). Dargaville Racing Club Inc. has lodged an application seeking a Plan Change for 47 hectares of land located on the corner of State Highway 14 (SH14) and Awakino Point North Road in Dargaville. PPC81 seeks that the land be rezoned from the current rural zone to a mixture of residential, light industrial, neighbourhood centre and open space.

This report includes a summary of PPC81 transportation matters, a review of the application material, a summary of the submissions, and concluding recommendations based on this review.

A review of the following documents has been undertaken:

- Integrated Transportation Assessment Report as lodged, prepared by Stantec, dated February 2022;
- 12 Submissions which raised traffic and or transportation matters;
- 7 Further submissions which raised traffic and or transportation matters; and
- Additional information provided by the applicants traffic engineer relating to the SH14 / Awakino Point North Road intersection.

2 THE PROPOSAL

Dargaville Racing Club Inc. (the applicant) has applied for a Private Plan Change (PPC) to rezone 47 hectares of rural zone to a mixture of residential, light industrial, neighbourhood centre and open space. The area of the PPC is situated at the corner of State Highway 14 and Awakino Point North Road, Dargaville and comprising of Part Lot 37 DP 7811 (NA 692/361) (46.6729ha) and Part Lot 37 DP27168 (NA689/300) (4,047m²).

The development proposal provides for the establishment of a total lot yield of approximately 24 light industrial lots, 435 residential lots, and one Neighbourhood Centre Area.

Figure 2-1 shows the PPC area as well as the indicative roading network.

The PPC includes the following road network elements:

- A new Industrial Road accessed from Awakino Point North Road via the new give-way controlled T-intersection (serving the Light Industrial activity of the development);
- A new Primary Access Road accessed from Awakino Point North Road via the new give-way controlled T-intersection (serving the residential area of the development);
- A new Low Volume Access Road serving more residential lots by means of secondary access from the Primary Access Road; and
- A new shared pedestrian / cyclist shared path between the PPC site and Dargaville Town Centre via SH14.

Figure 2-1: PPC81 Precinct Plan



Figure 4-1: Draft Concept Plan (Source: The Urban Advisory)

3 REVIEW OF THE INTEGRATED TRANSPORT ASSESSMENT REPORT

A peer review of the Integrated Transportation Assessment Report (prepared by Stantec, dated February 2022) has been undertaken. The following sections summarise the comments / requests per each section of the ITA.

3.1 INTRODUCTION

No comments.

3.2 EXISTING TRANSPORT CONTEXT

No comments.

3.3 TRAVEL PATTERNS

No comments.

3.4 REQUESTED REZONING

3.4.1 PROPOSED INTERNAL ROADS

Section 4.1 of the report discussed the proposed internal roads. As per the report “*The proposed cross sections of the roads have been assessed against the Whangarei Engineering Standards 2018 – Issue 0.3 (May 2019), based on the trip generation or number of residential dwellings served by each of the development activities*”.

Dargaville is located within Kaipara District Council, therefore the proposed internal road cross sections and private ways should also be assessed against the Kaipara District

Council, Engineering Standards, 2011 (latest version). We do however consider that this would not change the outcome of the PPC.

3.4.2 PROPOSED CONNECTIONS TO EXTERNAL ROAD NETWORK

Section 4.2.1.2 states that the SH14 / Awakino Point North Road intersection will be upgraded as part of the PPC. It also states that the details of the intersection layout will be addressed at the time of future subdivision and subsequent resource consent applications.

Section 5 of the ITA outlines that the available sight distance at the existing SH14 / Awakino Point North Road intersection does not currently comply with the relevant Austroads requirement. As such, an indicative intersection layout would be useful to determine the future SISD provisions (along both horizontal and vertical alignment) to confirm compliance with the Austroads requirement. If speed mitigation measures are considered near the intersection, these measures should be incorporated into the indicative layout.

This intersection form has been subject of a number of submissions and subsequent discussions between traffic engineering experts. This issue is the primarily issue of contention between experts and is discussed separately in Section 6 of this assessment.

3.4.3 PEDESTRIANS AND CYCLISTS

A pedestrian / cyclist link between the PPC site and Dargaville Town Centre will be introduced as part of the PPC. The ITA states that a separate bridge connection is considered to accommodate the shared path over the Awakino River. We consider the new pedestrian / cyclist facility connecting the proposed site and Dargaville to be a vital component of the PPC being acceptable from a Transport point of view.

No details have been provided with regards to an indicative design / layout of the proposed shared path along SH14 and proposed bridge connection. It is thus considered that as part of the applicant's evidence, concept designs / discussion should be provided demonstrating the proposed shared path is feasible within existing road reserve.

3.5 TRAFFIC EFFECTS

The ITA includes intersection analysis results using "SIDRA" of the SH14 / Awakino Point North Road intersection. The modelling appears to be based on the latest surveyed volumes, dated 29 July 2021.

The surveyed traffic volumes (especially the through volumes on SH14) may not be representative of typical traffic flows due to the COVID restrictions in place at the time (July 2021). As such, this suggests that the SIDRA modelling results of the 2026 scenario may not be accurate, and there may be potential for unaccounted traffic impacts on the surrounding network.

In this regard, Commute have obtained peak hourly data on SH14 from Waka Kotahi's TMS database for 2018 – 2019 (data may be skewed from 2020 due to COVID restrictions), which was taken from a count site approximately 2.5km north of the intersection with Awakino Point North Road. Of the peak hour data available during 2018-2019 (over 250 days of data), the minimum peak hourly flow recorded on SH14 was 166 vehicles per hour (vph), the maximum was 564 vph, and critically the average was 256 vph.

Figure 3-1 of the ITA shows the surveyed peak hourly flows (survey undertaken on 29 July 2021) on SH14 at the intersection with Awakino Point North Road. The AM peak hour and PM peak hour volumes were found to be 285 vph and 274 vph (respectively).

Based on the above, the modelling assessment provided in the ITA is considered to reflect “realistic” traffic flows at the intersection (i.e. not impacted by COVID restrictions). The assumptions of 20% heavy vehicle proportion and 2.5% pa average annual increase are also considered acceptable.

The trip generation and distribution assumptions contained within the ITA are considered reasonable.

We have reviewed and attempted to replicate the SIDRA analysis undertaken in Section 6.3.1 of the ITA. While our SIDRA assessment has yielded some slightly different results these differences are very minor and we agree with the statement in the ITA (assuming an upgraded priority T intersection that *“Overall, it is considered that the PPC will have a negligible impact on the capacity and operational performance of the surrounding road network in the vicinity of the site”*).

The safety aspects of any upgrade are discussed in Section 6 of this report.

3.6 MITIGATION MEASURES

Typically, an ITA will include an implementation plan including what upgrades are required, when they are required, who is responsible for them and if they are funded in the Regional Land Transport Programme (RLTP).

There was no diagram provided of the potential upgrade to the SH14 / Awakino Point North Road intersection in the original ITA. We agree with the ITA in the upgrade of the intersection to a Give Way-controlled T-intersection form will be subject to subsequent detailed design and engineering design approval by Waka Kotahi through future resource consent phases.

Subsequent to the ITA there have been meetings between the applicant, Commute and Waka Kohahi representatives. In this process a concept layout has been produced showing a potential priority controlled upgrade.

For the pedestrian / cyclist link, the ITA states that it is recommended that contribution towards delivery of this facility will be shared with other stakeholders including the District Council and Waka Kotahi, however it is unclear if this is confirmed.

This is further discussed in Section 6.

3.7 TRANSPORT PLANNING AND POLICY

No comments.

3.8 SUMMARY AND CONCLUSIONS

No comments.

4 REVIEW OF SUBMISSIONS

4.1 PRIMARY SUBMISSIONS

A total of 12 submissions related to transport matters were received:

- Submitter 1 – Leanne Phillips
- Submitter 2 – Colin and Joanne Rowse
- Submitter 3 – Waka Kotahi
- Submitter 4 – Northland Transportation Alliance
- Submitter 5 – Fire and Emergency New Zealand
- Submitter 6 – CJ Farms 202 Limited
- Submitter 7 – Awakino Point Rate Payers Inc
- Submitter 8 – Shane and Megan Philips
- Submitter 9 – Leo Glamuzina and Kim Harrison
- Submitter 10 – Janice and Michael Brenstrum
- Submitter 11 – Dargaville Community C/- Roger Rowse
- Submitter 12 – Jarrod McKelvie and Stephanie Rockell

Details of the submissions and our comments are provided in Appendix A.

Key themes from submissions regarding transport matters include:

- The level of trip generation from the PPC site and the resulting traffic effects (safety and efficiency) from the additional traffic generated;
- Ability to provide safe and accessible connections / intersections for all road users given the existing unsafe / poor quality road conditions (particularly for school children accessing the bus stop near the SH14 / Awakino Point North Road intersection);
- The proposed intersection control for the intended SH14 / Awakino Point North Road intersection upgrade;
- The viability of the PPC site location, given the isolation from services (4.0km from town); and
- Identification, timing, and responsibility for funding and delivery of enabling / supporting transport infrastructure, including the SH14 / Awakino Point North Road intersection upgrade, Awakino Point North Road upgrade and pedestrian / cycle connection between the PPC site and Dargaville Town centre.

Commute have reviewed the submissions and comment on the following general matters:

- A number of submitters mention the high accident rate on SH14 and Awakino Point North Road near the PPC site and at the intersection, and that the PPC will exacerbate the poor safety provisions in the area. Based on the 10-year CAS search, there has only been four crashes within a 100m radius around the intersection, thus the crash history is not considered significant. The PPC proposes a number of infrastructure improvements (as per below) which is likely to mitigate the identified safety concerns:
 - Awakino Point North Road to be upgraded / sealed;
 - Intersection to be upgraded to improve visibility and layout; and
 - Provision of separate active mode facilities.

- A number of submitters mention the potential traffic impacts, in particular the increase in congestion along SH14 and at the intersection. The ITA does suggest a significant increase in traffic movements at the intersection, however SIDRA modelling indicates that the intersection will operate acceptably with the proposed upgraded layout. The intersection is anticipated to perform considerably under capacity, with delay and queuing levels within acceptable levels. SH14 currently accommodates in the order of 2,000-3,000 vpd, which is relatively low for an Arterial State Highway. Both Awakino Point North Road and SH14 (near the PPC site) has capacity to accommodate higher levels of traffic, especially given the upgrades to the intersection and sealing proposed.
- A number of Waka Kotahi's submission points refer to the proposed intersection control for the intended SH14 / Awakino Point North Road intersection upgrade, whereby a roundabout is considered necessary as opposed to the initially proposed priority-controlled intersection. This is discussed in Section 6.
- Northland Transport Alliance submission point 6.2 requests that the intersection be upgraded to a give-way controlled T-intersection. Again, this is discussed in Section 6.
- Awakino Point Rate Payers Inc. submission point 12.7 and Leo Glamuzina and Kim Harrison submission point 15.6 mention that the location of the PPC site is 4.0km from town, therefore the walking / cycling connection may not be utilised enough to mitigate adverse effects on the surrounding network and may not be viable due to isolation from services. In our opinion, whilst the PPC site may be isolated at present, the PPC site is within the Dargaville Spatial Plan, along with surrounding development areas between the PPC site and Dargaville Town. The timing of development is difficult to control, however the PPC site is anticipated to be well-integrated in the future as per the Spatial Plan. The proposed shared path connection to the town is considered to be an acceptable solution to mitigate effects as a result of the PPC development and in the future when surrounding development occurs.

Details of the primary submissions and our comments are provided in **Appendix A**.

4.2 FURTHER SUBMISSIONS

Seven further submissions related to transport matters were received:

- Submitter 1 – Awakino Point Rate Payers Inc. (APRP)
- Submitter 2 – Nathaniel Everett
- Submitter 3 – Waka Kotahi
- Submitter 4 – Northland Transportation Alliance (NTA)
- Submitter 5 – Te Houhanga a Rongo Marae
- Submitter 6 – Te Kuihi
- Submitter 7 – Te Whanau Parore

Generally, all further submissions are in support of all transport and traffic related requests / concerns made by various submitters, with no indication of any opposition excluding APRP further submission opposing NTA's request for the SH14 / Awakino Point North Road to be upgraded to a give-way priority controlled T intersection. APRP supports a roundabout at this intersection to manage traffic effects. Furthermore, Waka Kotahi generally supports NTA's submission however seeks clarification on the proposed intersection control.

NTA's further submission point supports the intersection upgrade to a roundabout, and agrees with other submitters that the proposed give-way control is not adequate or safe system compliant to address the additional traffic generated.

NTA's secondary submission is in support of Waka Kotahi's submission and vice versa.

Details of the further submissions and our comments are provided in **Appendix B**.

5 DISCUSSION

Following a review of the ITA and submissions for the PPC, the key themes / issues and our recommendations regarding the transport matters are further discussed below.

Based on our review of the information summarised above, the key components of our review are as follows:

- There are limited, if any, reasonable walking, cycling, and public transport opportunities currently available;
- The proposal to include a shared walking / cycling path from the site to Dargaville is considered an acceptable solution (subject to actual design);
- Operationally, the intersection and roads near the PPC site (with proposed upgrades within the ITA) operate efficiently from a vehicle capacity perspective; and
- The existing SH14 / Awakino Point North Road intersection can be described as a "complex" T-intersection, and currently operates poorly from a safety perspective. The safety of this upgrade is the key matter of contention remaining between traffic experts.

6 KEY REMAINING ISSUE

6.1 GENERAL

Based on our review of the information summarised above, the key issue of contention (especially between experts) is the safety of the upgraded SH14 / Awakino Point North Road intersection.

As a result there have been two meetings between the applicants traffic engineer (Stantec), Commute and Flow Transportation (representing Waka Kotahi) as well as Waka Kotahi staff attending the second meeting. At the time of writing this report these discussions are ongoing.

6.2 SH14 / AWAKINO POINT NORTH ROAD INTERSECTION

There is agreement from all parties that the SH14 / Awakino Point North Road intersection needs to be upgraded as part of the PPC development. The point of potential disagreement appears to relate to the form of upgrade and in particular the safety of a priority upgrade as proposed within the ITA. Of note, the performance / capacity of the priority upgrade does not appear a point of disagreement.

Waka Kotahi (through the review undertaken by Flow) have provided in their submission a Safe Systems Assessment (SSA), comparing the safety between the proposed priority-controlled T-intersection with an alternative roundabout arrangement. Their conclusion states "*We consider a roundabout would be a safer layout for the intersection*".

We also note the comment that *“Roundabouts are the safest form of intersection control for motor vehicle occupants. Numerous studies have shown that, in general, fewer casualty crashes involving only motor vehicles occur at roundabouts than at intersections controlled by traffic signals, stop, or give-way signs. Because roundabouts generally involve slow crash speeds, the forces exerted on people inside motor vehicles involved in crashes at roundabouts are generally below the thresholds at which serious injury is likely to happen, as per the safe systems approach”*.

We do not dispute the analysis provided by Flow in the SSA assessment but do note that the comparison appears to be of a standard priority intersection treatment with no significant speed reduction. This has been confirmed through further discussions. Subsequently, SSA analysis undertaken by Stantec for a priority-controlled intersection with speed calming on SH14 and a posted speed reduction, shows that the safety difference between a roundabout and a lower speed priority T intersection to be minimal.

We agree that a roundabout would be the “safest” option for the intersection, however we do not consider the applicant is required to provide the safest option (rather one that adequately mitigates the effect). In this regard the priority-controlled intersection, with speed mitigation measures to reduce speed (providing they occur) would, in our opinion, also adequately mitigate the effects of the PPC.

6.3 SPEED CHANGE

The ITA does not specify any changes to the current speed limits along SH14 and Awakino Point North Road near the PPC site. Given the urbanisation of the surrounding area and the anticipated increase in traffic flows, it is recommended that consideration be given to reducing posted speed limits on SH14 near the intersection and along the full length of Awakino Point North Road.

In our opinion the reduction in speeds should be implemented regardless of the intersection upgrade form.

The reduction in speed limit of SH14 is outside the control of the applicant and rather is controlled / set by Waka Kotahi (the Road Controlling Authority for SH14). The new Land Transport Rule: Setting of Speed Limits 2022 came into force in 2022 replacing the existing Land Transport Rule: Setting of Speed Limits 2017. The 2022 Rule was implemented as part of the *“Road to Zero - New Zealand’s Road Safety Strategy 2020-2030”*. Of note, the new 2022 rule empowered road controlling authorities to set speed limits for roads under their control. The old rule was regarded as complicated, fragmented, and a time-consuming process while the new 2022 rule is more proactive, coordinated and transparent. The new framework made it easier for RCAs (such as Waka Kotahi in this case) to set safe and appropriate speeds, alongside considering safety infrastructure, and keep road users safer. This new rule has resulted in the lowering of speed limits by RCA’s (including Waka Kotahi) throughout the country in response to safety concerns (eg lowering 30km of road between Napier and Taupo to 80km/hr).

Overall, we consider that while the speed limit is outside the control of the applicant, the RCA has full control to implement the appropriate speed limit in the area.

We would encourage further comment from the applicant and Waka Kotahi on this matter in evidence.

6.4 SIGHT DISTANCE

Section 5 of the ITA outlines that the available SISD at the existing SH14 / Awakino Point North Road intersection does not currently comply with the relevant Austroads requirement and notes that the upgraded intersection will be able satisfy the sight distance requirements. As such, it should be ensured that the future intersection can satisfy the Austroads sight distance requirements (along both horizontal and vertical alignment) by means of redesign or reduction in speed limits / speed mitigation measures or both.

6.5 OTHER POTENTIAL ISSUES

6.5.1 BUS STOP

Based on the submissions and our observations, the SH14 / Awakino Point North Road intersection (specifically the area shown in Figure 2 below) is currently being utilised as an informal school bus drop off / pick up area.

Figure 6-1: Existing SH14 / Awakino Point North Road intersection



We consider the safe relocation of the bus stop / pick up drop off location or other mitigation measures should be considered as part of detailed design of any future intersection. This would however be more appropriate to be considered in detailed design / resource consent.

6.5.2 BOUNDARY LOCATION

From a review of boundary information there appears to be two locations near the intersection where the existing SH14 road is outside the road reserve. This could likely cause issues regarding any potential upgrade in future.

Figure 6-2: Existing boundary locations



We consider some commentary from the applicant in evidence on this matter would be useful.

6.6 OUR POSITION

In our opinion we consider that both an upgraded priority-controlled T-intersection option (with speed calming / reductions) or a roundabout option at the SH14 / Awakino Point North Road intersection could mitigate the effects of the PPC.

We agree that a roundabout would be the “safest” option for the intersection, however the priority-controlled intersection, with speed mitigation measures to reduce speed (providing they occur) would also adequately mitigate the effects of the PPC.

We generally agree with the ITA in regards to the timing of the upgrade which states “*It is recommended that the intersection be upgraded (and operational in its upgraded form) by the time the first dwelling within the General Residential Area is occupied or prior to any of the Light Industrial activities are operational*”. We do note that it may be possible to have a small number of dwellings occupied prior to the upgrade.

7 CONCLUSIONS

Following review of the PPC we consider:

- The provision of a shared path from the site to Dargaville is generally appropriate;
- There are no road capacity issues relating to the proposal (with the upgrades proposed);

- The key issue between experts relates to the form of upgrade at SH14 / Awakino Point North Road intersection. This particularly relates to safety;
- We consider an upgraded priority-controlled T-intersection option or a roundabout option could mitigate the effects of the PPC (subject to detailed design).
- The applicant should consider the following in evidence:
 - Providing details or comments regarding the shared path design and its ability to fit within road reserve;
 - Providing details of the intended SH14 / Awakino Point North Road intersection including speed reduction measures and sight distance requirements;
 - Provide commentary regarding setting appropriate posted speed limit for the upgrade priority-controlled intersection option; and
 - Provide commentary regarding the existing SH14 road being outside existing road reserve and how this could change the final upgrade design.

APPENDIX A – PRIMARY SUBMISSIONS SUMMARY

APPENDIX A: PRIMARY SUBMISSIONS SUMMARY – TRANSPORT AND TRAFFIC MATTERS ONLY

Submitter and sub point	Summary of submission / relief sought	Commute Comment
<p>Leanne Phillips: 3.2</p>	<p>Opposes the plan change for the following reasons:</p> <ul style="list-style-type: none"> • Concerns with the increased traffic added to the SH14 / Awakino Point North Road intersection. • Poor safety provisions along Awakino Point North Road, noting that near misses have been observed. • Bus stop at the top of the Awakino Point North Road. Leanne queried whether children be safe catching the bus with the increased volume of traffic, specifically will the children be safe walking to and from the bus stop. 	<p>ITA does suggest a significant increase in traffic movements at the intersection, however SIDRA modelling indicates that the intersection will operate acceptably with the proposed upgraded layout with minimal delay. The intersection is anticipated to perform considerably under capacity, with delay and queuing levels within acceptable levels.</p> <p>A 10 year CAS search indicates that only one non-injury crash occurred on Awakino Point North Road due to a large pothole / metal unpaved road, the crash history is minimal. Given that the PPC proposes Awakino Point North Road to be upgraded / sealed, and reduction of speed limit is expected, this is likely to improve safety provisions.</p> <p>Agree with the concerns around the bus stop and children safety. The location of bus stop facilities / arrangements should be addressed.</p>
<p>Colin and Joanne Rowse: 4.2</p>	<p>Opposes the plan change. Submitter recalls an accident from June 2018, along with two accidents from the last few months identifying the dangers of this portion of road including the blind corner, deep roadside drains, and narrow shoulder.</p>	<p>A 10 year CAS search (100m radius around the intersection) indicates that only one non-injury crash occurred on Awakino Point North Road and 3 near / at the intersection. The crash history is relatively minimal. However, it</p>

		<p>is acknowledged that the intersection is slightly unusual however the PPC proposes:</p> <ul style="list-style-type: none"> - Awakino Point North Road to be upgraded / sealed - Intersection to be upgraded to improve visibility and layout - Reduce the speed limit in the area - Provide separate active mode facilities <p>The above upgrades likely to significantly improve safety provisions.</p>
<p>Colin and Joanne Rowse: 4.3</p>	<p>Opposes the plan change. The submitter agrees with the Stantec report that Covid 19 has skewed traffic volumes, there has been a significant difference in volume in the last two years. The submitter additionally notes that the traffic counter used to obtain the figures is located at Te Wharau and does not account for Awakino Point traffic or the lost tourist traffic. The submitter has observed tourist traffic missing the SH12 turnoff and having to turn back, often resulting in dangerous near misses at North Road and Te Wharau Station Road intersections.</p>	<p>The traffic volumes in Table 3-1 of the ITA represent general volumes in the surrounding area for background information.</p> <p>The existing traffic volumes used in the traffic modelling analysis were not based on data from the Waka Kotahi traffic count site. The modelling was based on accurate traffic volume data from a survey undertaken at the intersection in July 2021. Agree that these volumes may have been impacted by COVID restrictions and does not specifically consider tourist traffic however the volumes have been checked and are considered appropriate.</p>
<p>Colin and Joanne Rowse: 4.4</p>	<p>Opposes the plan change. The submitter has concerns with the trip generation from the PPC site. The submitter notes this is comparable with the Thursday and Friday traffic numbers of the Northland Agricultural Field Days, which are required to employ traffic management (cones and pointsmen) to control volumes. That is undertaken where Awakino Point East Road intersects with SH14 on a straight and flat section of road, with good visibility at a 100km speed limit, but for a maximum of three days. The proposal will see this dramatically increased volume of traffic every day of the year.</p>	<p>Traffic modelling in the ITA indicates that the intersection will operate within acceptable standards. SH14 currently accommodates in the order of 2,000-3,000 vpd, which is relatively low for an Arterial State Highway. Both Awakino Point North Road and SH14 (near the PPC site) has capacity to accommodate higher levels of traffic,</p>

		especially given the upgrades to the intersection and sealing proposed.
Colin and Joanne Rowse: 4.5	<p>Opposes the plan change. The submitter notes if the proposed development were to progress then the submitter feels that a roundabout is the only real option to both safely marshal the expected volume but to slow through traffic (as discussed during a meeting held on 27 May 2021).</p> <p>The submitter states that there is plenty of public land available to build a roundabout.</p>	Agree that the intersection will need to be upgraded to accommodate the PPC, however a priority controlled intersection, with speed mitigation measure and other safety provisions may be workable (subject to a review of the proposed intersection layout).
Waka Kotahi: 5.6	<p>Accepts the proposed plan change with amendments. Waka Kotahi note within Attachment 2 of their submission being the Technical Note prepared by Flow Transportation Specialists Ltd that: a. that the Trifecta Development Area Chapter be amended to identify that the intersection of SH14 and Awakino Point North Road be upgraded to a roundabout rather than a priority-controlled T intersection; b. proposed amendments to the Trifecta Development Area Chapter; and c. the current intersection should be upgraded prior to any construction works that will generate more than 10 heavy vehicle movements through the SH14/Awakino Point North Road intersection per day.</p>	Agree that a roundabout would be an appropriate option, however an option for a priority controlled intersection, with speed mitigation measures and other safety provisions may also be workable (subject to a review of the proposed design / layout / future safety audit).
Waka Kotahi: 5.7	<p>Accepts the proposed plan change, subject to greater certainty around the rule framework in PPC81 requiring the provision of a pedestrian and cycle connection from the intersection of State Highway 14 and Awakino Point North Road to Tuna Street. Greater certainty is needed to support this rule, specifically:</p> <ul style="list-style-type: none"> a) the standard and location of the connection; b) that the applicant is responsible for the funding/delivery of the connection; c) that the connection must also safely and efficiently connect with walking and cycling routes within the plan change site; d) that the design takes into account natural hazard risk for access to the plan change site and in particular ensures the proposed pedestrian and cycle link is appropriately designed to be resilient to those risks; and e. e. that the design takes into account Crime Prevention Through Environmental 	We agree that certainty around the provision of the proposed pedestrian / cycle connection is required as outlined.

Waka Kotahi: 5.8	<p>Accepts the proposed plan change, noting there are specific site constraints that need to be managed during detailed design specifically, but not limited to:</p> <ol style="list-style-type: none"> 1. the SH14 bridge over Awakino River; 2. Awakino Point East Road, specifically Lot 22 DP 7811 (NA611/235); and 3. Ensuring grade separation or fencing from the SH corridor 	Support
Waka Kotahi: 5.15	<p>Supports the proposed plan change and requests that TDA-SUB-R9 Transport and TDA-SUB-S10 Transport (2) are retained as notified.</p>	Support
Waka Kotahi: 5.16	<p>Opposes the plan change with regards to the type of intersection upgrade proposed at the SH14 / Awakino Point North Road intersection.</p> <p>Waka Kotahi request that TDA-SUB-S10 Transport (3) is amended to provide for a roundabout, which is the best means to mitigate traffic effects.</p>	See section 5.6
Waka Kotahi: 5.17	<p>Opposes the plan change and requests that TDA-SUB-S10 Transport (4) is amended to allow for the upgrade of the intersection of SH14 and Awakino Point North Road to a roundabout and that the pedestrian and cycle link to Tuna Street is completed.</p> <p>Waka Kotahi also request amendments to the matters of discretion under TDA-SUB-S13 to allow for a safe, efficient and effective transport network and to consider the impact on the transport network and transport outcomes such as a mode shift and emissions reduction.</p>	See section 5.6
Waka Kotahi: 5.18	<p>Opposes the plan change with regards to the type of intersection upgrade proposed at the SH14 / Awakino Point North Road intersection.</p> <p>Waka Kotahi request that TDA- LU-S4 Transport (1) is amended to provide for a roundabout, which is the best means to mitigate traffic effects.</p>	See section 5.6.
Waka Kotahi: 5.19	<p>Opposes the plan change with regards to the type of intersection upgrade proposed at the SH14 / Awakino Point North Road intersection.</p>	See section 5.6.

	Waka Kotahi request that TDA- LU-S4 Transport (2) is amended to provide for a roundabout, which is the best means to mitigate traffic effects.	
Northland Transportation Alliance: 6.1	Supports the proposed plan change, however seek to amend the zoning as proposed with suitable conditions for the road network to ensure they are safe system compliant. Proposal would support the growth of Dargaville and enable Dargaville to have an active mode connectivity.	N/A.
Northland Transportation Alliance: 6.2	<p>Accepts the proposed plan change, subject to the Awakino Point North Road/SH14 intersection upgrade provisions. NTA have requested that this intersection be upgraded to a give-way controlled T intersection, and specifically requested that:</p> <ol style="list-style-type: none"> 1. the intersection is to be upgraded to be Safe System Compliant Primary Treatment facility type; 2. Detailed Design Road Safety Audit and a Post Construction Road Safety Audit as outlined in the Whangarei Road Safety Audit Standard September 2022 of the associated infrastructure upgrades is to be carried out, where all Serious and Significant Risks identified are mitigated to at least a residual risk of Moderate; and 3. The intersection upgrades and Awakino Point North Road upgrades are to be appropriately conditioned for staging. 	Agree.
Northland Transportation Alliance: 6.3	<p>Accepts the plan change, subject to the provision that the shared user path connect with Selwyn Park as a minimum including safe system compliant primary active transport crossing facility for all users.</p> <p>NTA also request that Detailed Design Road Safety Audit and a Post Construction Road Safety Audit as outlined in the Whangarei Road Safety Audit Standard September 2022 of crossing facilities and the associated infrastructure be carried out, where all Serious and Significant Risks identified are mitigated to at least a residual risk of Moderate.</p>	Support. Road safety audits should be carried as per NTA's request.

<p>Northland Transportation Alliance: 6.4</p>	<p>Accepts the plan change, subject to the proposed intersection provisions on Awakino Point North Road. NTA have requested that Awakino Point North Road/Primary access intersection and Awakino Point North Road/Industrial Access intersection into the proposed site are to be a Give-Way controlled T-intersection. NTA request:</p> <ol style="list-style-type: none"> 1. Intersection is to be upgraded to be Safe System Compliant Primary Treatment facility type; 2. Detailed Design Road Safety Audit and a Post Construction Road Safety Audit as outlined in the Whangarei Road Safety Audit Standard September 2022 of the associated infrastructure upgrades is to be carried out, where all Serious and Significant Risks identified are mitigated to at least a residual risk of Moderate; 3. Connectivity (Pedestrian crossing) of the shared user path with the proposed residential zone to be Safe System Compliant Primary Treatment facility type; and 4. The upgrades are to be appropriately conditioned for staging and they are to comply with the revised Whangarei District Council Engineering standards. 	<p>As per previous comments. Agree that upgrades should be appropriately conditioned for staging.</p>
<p>Northland Transportation Alliance: 6.5</p>	<p>Accepts the plan change, subject to a safe system assessment of the intersections and the crossings where the safe system matrix will be utilised to score the existing conditions and proposed conditions by determining the high levels of risk and if it has been addressed.</p> <p>NTA notes that "Primary Treatments" refers to the consideration of solutions which will eliminate the occurrence of fatal and serious injury crashes. "Austroads – Safe System Assessment Framework" outlines the treatment hierarchy and selection and the "Standard Safety Intervention Toolkit" by Waka Kotahi is to be utilised as a supplement. With regard to the revised "Whangarei District Council Engineering Standards" NTA note that the Applicant had utilised WDC EES as part of their proposal and therefore NTA have referred to the latest standards.</p>	<p>Support.</p>

<p>Fire and Emergency New Zealand: 8.5</p>	<p>Supports the proposed plan change and requests an addition to TDA-SUB-S10 to require that "Every allotment provides for emergency service response access".</p>	<p>Consider that this is not required at Plan Change stage but rather is already considered at Building Consent stage.</p>
<p>Fire and Emergency New Zealand: 8.8</p>	<p>Supports the proposed plan change and requests an addition to TDA-LU-S4 - Transport matters of discretion to allow for the provision for emergency service response access.</p>	<p>Consider that this is not required at Plan Change stage but rather is already considered at Building Consent stage.</p>
<p>CJ Farms 202 Limited: 10.3</p>	<p>Opposes the plan change for the following reasons:</p> <ul style="list-style-type: none"> • Increase in traffic movements from Awakino North Point Road onto an already busy SH14 • Awakino Point Road is especially busy during kumara season, with some workers travelling on the metal road at speeds of up to 100 km/hr • Poor safety provisions, particularly with regards to active mode facilities 	<p>SH14 currently accommodates in the order of 2,000-3,000 vpd, which is relatively low for an Arterial State Highway. Both Awakino Point North Road and SH14 (near the PPC site) has capacity to accommodate higher levels of traffic, especially given the upgrades to the intersection and sealing proposed.</p> <p>Speed limits are likely to be reduced on SH14 near the intersection and on Awakino Point North Road.</p> <p>With the reduced speed limits, sealing and separate active mode facilities proposed, safety provisions are considered adequate.</p>
<p>Awakino Point Rate Payers Inc: 12.7</p>	<p>Opposes the plan change for the following reasons:</p> <ul style="list-style-type: none"> • Significant increase in congestion on SH14 between the PPC site and Dargaville • Traffic modelling suggests significant increase in traffic movements at the SH14 / Awakino Point North Road intersection • Concerns with the assumption that a 4km walking / cycling path to Dargaville will be utilised by new residents enough to mitigate any adverse effects on the surrounding transport network, particularly when a significant portion of residents are likely to be elderly (likely to drive) 	<p>SH14 has relatively low daily / peak hour traffic volumes, congestion is unlikely to increase significantly.</p> <p>Agree, significant increase in volumes anticipated at the intersection, however modelling suggests that it will operate under capacity.</p> <p>Agree that 4km is a long distance for elderly to walk / cycle. However, not all residents will be elderly, eg. families with school children who prefer to cycle to school may reside. No</p>

		adverse effect on the surrounding transport network has been identified as anticipated trip generation can be accommodated within the surrounding network (assuming the upgrades are implemented). Furthermore, the modelling undertaken assumes a high trip generation rate that considers a higher proportion of residents travel via private vehicle.
Awakino Point Rate Payers Inc: 12.8	Opposes the plan change. Submitter is concerned that the provisions as proposed do not provide any certainty that traffic and transport effects will be mitigated through the physical works recommended by Stantec. It is noted that Waka Kotahi have only provided their agreement in principle to provide for the walking/cycling link into town from the site.	Agree that certainty should be provided around the timing and funding for the proposed upgrade works.
Awakino Point Rate Payers Inc: 12.9	Opposes the plan change. Submitter notes that the PPC subdivision provisions require upgrades to intersections and the provision of pedestrian connections into Dargaville where subdivision is of any allotment in the proposed General Residential Area. However APRP consider it is unclear how the requirement for these mitigation measures would be triggered if the applicant applied for land use consent to establish multiple residential units without subdividing. APRP consider that the PPC81 provisions that trigger infrastructure upgrades must be strengthened to ensure that the costs of infrastructure upgrades are borne by the developer, and not ratepayers and occur in a sequenced manner before any residential development takes place.	Agree that certainty should be provided around the process, timing and funding for the proposed upgrade works.
Shane and Megan Philips: 14.2	Opposes the plan change, noting specific concerns in relation to the school bus service pick up and drop off area (Bus stop located at the SH14 / Awakino Point North Road intersection). With PPC, the intersection would require significant redevelopment and subsequently use considerably more land along with the significant increase in traffic movements (935 traffic movements per hour in peak times, morning, afternoon). The submitter feels that the safety of the children using this service	Agree with the concerns around the bus stop and children safety. The location of bus stop facilities / arrangements should be addressed.

	<p>will be severely compromised. The submitter notes that if PPC were to go ahead the safety concerns raised may result in children being fearful of the pick up and drop off area and result in a reduced attendance rate at school.</p>	
<p>Leo Glamuzina and Kim Harrison: 15.2</p>	<p>Opposes the plan change, noting concerns with regard to the impact of increased traffic from the PPC on SH14 and Awakino Point North Road, specifically heavy vehicle and commuter traffic to and from Whangarei.</p> <p>The submitter has witnessed accidents and increased speed incidents. The submitter has increased apprehension at a calculated increase of 935 vehicles per hour at peak as shown in the Stantec report and the impact this will have on an already busy and dangerous SH. The submitter believes poor road conditions do not support this level of increase.</p>	<p>See previous comments.</p>
<p>Leo Glamuzina and Kim Harrison: 15.6</p>	<p>Opposes the plan change, as the location of the PPC is not viable due to its isolation from services (4km from town).</p> <p>The submitter notes that access to town by walking, cycling or car is problematic given the busy SH, wide roadside drains, and barrier of Awakino River. The submitter also notes not everyone is able to afford cars. The submitter considers that infrastructure costs to provide access to town from PPC will be an enormous and fall as a burden on ratepayers.</p>	<p>Whilst the PPC site may be isolated at present, the PPC site is within the Dargaville Spatial Plan, along with surrounding development areas between the PPC site and Dargaville Town. The timing of development is difficult to control, however the PPC site is anticipated to be well-integrated in the future as per the Spatial Plan. The proposed shared path connection to the town is considered to be an acceptable solution to mitigate effects as a result of the PPC development and in the future when surrounding development occurs.</p> <p>As per previous comments on SH14 traffic volumes.</p> <p>Greater certainty should be provided around the process, timing and funding for the proposed upgrade works for pedestrian /cycle facilities connecting the PPC site with the town.</p>

<p>Janice and Michael Brenstrum: 16.2</p>	<p>Opposes the plan change, as the SH14 / Awakino Point North Road intersection has a high accident rate and the PPC will make this worse.</p>	<p>Based on the 10 year CAS data, only 2 crashes have occurred at the intersection.</p> <p>The PPC proposes to upgrade the intersection which will significantly mitigate any safety concerns.</p>
<p>Dargaville Community C/- Roger Rowse: 17.4</p>	<p>Opposes the plan change, due to concerns with the lack of connectivity to Dargaville township, including the distance, lack of footpath, narrow width of the road, open council drains, lack of pedestrian access on Awakino River Bridge and the 100kmph speed limit.</p>	<p>Upgrade works are proposed as part of the PPC.</p>
<p>Dargaville Community C/- Roger Rowse: 17.5</p>	<p>Opposes the plan change, noting major changes will be required to the intersection of SH14 and Awakino Point North Road to accommodate significant increase in traffic. Submitter notes poor quality of current roads prior to the addition of an extra 450 households.</p>	<p>Upgrade works are proposed as part of the PPC.</p>
<p>Jarrold McKelvie and Stephanie Rockell: 18.4</p>	<p>Opposes the plan change with regards to safety, noting they already struggle to cross the road to set out our rubbish for collection on the side of the road requested by the refuse collectors, and having been one of the first on the scene to the Tangiteroria pedestrian casualty earlier this year, every time we do so we are reminded of this horrific event.</p>	<p>Support that the existing safety provisions are poor. The road upgrades, proposed active mode facilities and reduced speed limit as part of the PPC will improve safety for pedestrians.</p>

APPENDIX B – FURTHER SUBMISSIONS SUMMARY

APPENDIX B: SECONDARY SUBMISSIONS SUMMARY

Submitter and sub point	Summary of submission / relief sought	Commute Comment
Awakino Point Rate Payers Inc. (APRP)	Support all transport and traffic related requests / concerns made by various submitters, excluding NTA's request for the SH14 / Awakino Point North Road to be upgraded to a give-way priority controlled T intersection. APRP supports a roundabout at this intersection to manage traffic effects.	As per comments under Primary Submissions Summary.
Nathaniel Everett	Supports Waka Kotahi's request for improvements / upgrades to the road layout / intersection to ensure the safety of Awakino Point North Road residents and motorists. He notes that getting into the road from left hand lane is very dangerous as it's a blind corner and a busy main road. Crossing the oncoming traffic lane of cars doing 100km per hour is difficult now.	As per comments under Primary Submissions Summary.
Waka Kotahi	Support all transport and traffic related requests / concerns made by various submitters. No indication of any opposition. Waka Kotahi supports NTA's submission however seeks clarification on the proposed intersection control.	As per comments under Primary Submissions Summary.
Northland Transportation Alliance	Support all transport and traffic related requests / concerns made by various submitters.	As per comments under Primary Submissions Summary.
Te Houhanga a Rongo Marae	Support (or support in part) all transport and traffic related requests / concerns made by various submitters. No indication of any opposition.	As per comments under Primary Submissions Summary.
Te Kuihi	Support (or support in part) all transport and traffic related requests / concerns made by various submitters. No indication of any opposition.	As per comments under Primary Submissions Summary.
Te Whanau Parore	Support (or support in part) all transport and traffic related requests / concerns made by various submitters. No indication of any opposition.	As per comments under Primary Submissions Summary.



MEMO

TO: David Usmar **DATE:** 18th November, 2022
FROM: Sejal Sangwai **PROJECT NO.:** J000663
REVIEWE: James Taylor
SUBJECT: Initial Review of Stormwater Management for Private Plan Change 81

INTRODUCTION

Dargaville Racing Club Incorporated (DRC) have submitted a Private Plan Change 81 (PPC81) to support the development of the existing Dargaville Racing Club site in Dargaville. As noted in the Statutory Assessment Report submitted as a part of Dargaville Racecourse Private Plan Change Request, the Plan Change seeks to rezone the site from the current Rural Zone under the Operative Kaipara District Plan to a Development Area that provides for a mix of Residential, Neighbourhood Centre, Open Space and Light Industrial. The land use details supplied by Lands and Survey Limited as follows:

Table 1 Anticipated land use and activities (supplied by Lands and Survey Limited)

ZONE	AREA OF ZONE (ha)	NUMBER OF LOTS
Light Industrial – Small or Large/ Commercial	9.53	24
Residential – General or Lifestyle	23.67	435
Neighbourhood Centre	0.29	1
Open Space	4.16	n/a
Infrastructure	1.59	n/a
Road Reserve	6.19	n/a
Total	45.43	

SCOPE OF REVIEW

Kaipara District Council (KDC) have engaged Awa Environmental Ltd (Awa), to undertake a preliminary review of the proposed stormwater management discussed in the Civil Engineering Assessment Report submitted as a part of PPC81 by Lands and Survey Engineering Ltd (L&S). The scope of work is to complete a preliminary review of the proposed stormwater management strategy to identify potential effects, how they are managed and to provide a list of recommended further information requests, if any, to KDC.

DOCUMENTS REVIEWED

Table 2 Summary of Documents Reviewed

DOCUMENT NAME	AUTHOR	REVISION	DATE	FORMAT
Civil Engineering Assessment Report	L&S on behalf of DRC	Final – Issued for Plan Change Lodgement	9 February 2022	Report
Statutory Assessment Report	L&S on behalf of DRC	-	17 February 2022	Report (Used for Context)
Further Information Request	KDC	-	16 March 2022	Memorandum

LIMITATIONS

The review memorandum has been prepared for Kaipara District Council only and should not be used or relied on by any other person or entity. We note that this review has been undertaken purely from a compliance with regulatory requirements and ‘assessment of effects’ perspective only.

REVIEW OF PROPOSED STORMWATER MANAGEMENT

STORMWATER DRAINAGE

The application states that the site conveys stormwater via overland flows and natural channels, discharging to the roadside table drain. Two overland flow paths are indicated within the site area – both generating from near the center of the northern site boundary with one traversing diagonally towards the eastern boundary whereas the other traversing along what appears to be the channel drain within the property before turning to flow along the southern site boundary. Both the overland flows combine and exit the site at the south-eastern corner and appear to travel along Awakino Road from where it is directed south-east to then discharge into the Wairoa River.

The stormwater management strategy is purportedly to maintain pre-development peak flows, post-development by way of hydraulic neutrality. We consider this approach to be reasonable where there are downstream capacity constraints or flood hazard, as is the case for this site.

This is proposed by the applicant to be achieved by directing flows from the site to three on-site detention devices (one for each respective sub-catchment) which provide approximately 11,884m³ of storage volume thereby limiting the post-development flows to less than or equal to pre-development flows.

It is important to note however, that maintaining flows at pre-development rates does not equate to their being sufficient capacity to service the development. It is also noted that the proposed zoning will result in the level of service increasing from a 20% AEP design storm for primary drainage, to 5% AEP. We would consider it to be highly unlikely that downstream drainage has capacity for this event. The applicant’s assessment has shown that the downstream roadside table drain does not have sufficient capacity. We also note that the low-lying nature of the site may result in downstream capacity having a backwater effect on the development.

The rainfall data for runoff calculations was taken from NIWA HIRDS V4 Depth-Duration-Frequency Results. Historical data for pre-development and RCP8.5 Climate Change rainfall for post-development was utilized. This leads to very conservative allowance for the effects of climate change, with the applicant effectively offering to mitigate the effect of climate change on their site.

The applicants assessment for the change in land-use is based on worst case scenario for impermeable areas based on the conceptual model of the Outline Development Plan V4.0 as follows:-

- Light Industrial, Neighborhood Centre – 100% impervious surfaces
- Infrastructure – near 100% impervious surfaces
- Residential – 70% impervious surfaces
- Lifestyle Lot Residential – 40% impervious surfaces

This change in land use appears sufficiently conservative for the proposed zoning.

FLOOD HAZARD

It is noted that according to the Northland Regional Council hazard layers, a small portion of the site depicted on the updated regionwide flood hazard maps appear to be susceptible to river flooding during all events ranging from the 10 year to 100 year ARI. However, we note that the naming of this flood layer as ‘river flooding’ may be misleading, as the NRC river models still include rainfall-runoff flooding which appears to be what is affecting this site.

Awa has also used the preliminary Dargaville Urban Stormwater Hydraulic Model, currently being built by Awa for KDC to check the potential flooding impacts on the site. The model currently only contains a 2D domain, with 1D pipe networks still to be added. It is noted that there are presently few/no pipe networks in this area, therefore the predicted flooding in this is unlikely to substantially change as the model is further developed.

The model shows that the existing site is subject to substantial ponding in the 100-year ARI event, as it is low-lying and is effectively bounded by Awakino Point Road. It will be necessary for any development to displace or drain this flooding in order to create safe building platforms, which could have an adverse impact on downstream flooding if not adequately mitigated.

The application provides no discussion as to how this low-lying ponding will be managed.

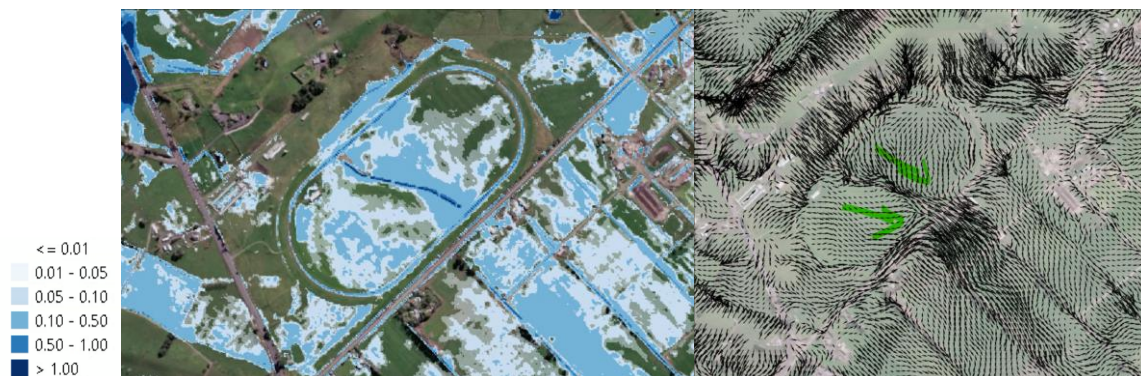


Figure 1: Extracts from Awa's Dargaville Urban Stormwater Model

SUMMARY

In summary, whilst the applicant has shown that it may be possible to mitigate some of the adverse impacts of their development, there is missing information that will need to be provided to demonstrate that the development can be adequately serviced in terms of stormwater drainage and flood hazard. The following key findings are noted:

- Given the low-lying nature of the site, it is unclear how future stormwater networks and ponds will drain into the existing downstream drains without extensive fill earthworks.
- It is not clear whether the stormwater infrastructure in the area will have capacity to cater to the requirements of design periods for commercial land use i.e. 5% AEP. An upgrade of infrastructure may be required to provide a suitable level of service to the development.

- The assessment does not appear to have considered the upstream catchment draining into the site which could both be impacted by the proposed development, and could impact the development.
- Whilst the applicant has proposed stormwater attenuation devices to mitigate the effects of increased impervious area, they have not assessed what the potential impact the development will have on downstream flooding, in terms of the displaced ponding on the site.
- There are a large number of unknown culverts in place that the development will need to rely on in terms of stormwater servicing, for which no capacity assessment has been carried out. It is therefore currently unclear whether the site can be designed to meet the required level of service in terms of drainage and flood hazard.

It is noted that the permeability rate of the underlain soil is considered very low to negligible and that the site appears to be generally waterlogged. It is unclear how this matter will be managed, especially in the areas where detention ponds are proposed. The water table may impact on the ability of detention ponds to provide the necessary storage without substantial engineering/earthworks.

Should you have any queries relating to any of the above, please do not hesitate to contact us via details provided below.

SEJAL SANGWAI

WATER INFRASTRUCTURE ENGINEER

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m: +64 22 476 1857 e: sejal.sangwai@awa.kiwi w: www.awa.kiwi

164 Bank Street
Whangarei, New Zealand

Tel. 0800 SURVEY
Web. www.landsandsurvey.co.nz
Email. henk@landsandsurvey.co.nz

Wednesday, February 22, 2023

Ref: 10484

Kaipara District Council
42 Hokianga Road
Dargaville
0340
Attention: David Usmar

RESPONSE TO INITIAL REVIEW OF STORMWATER MANAGEMENT FOR PRIVATE PLAN CHANGE – DARGAVILLE RACING CLUB INCORPORATED.

Dear David,

An initial review of the stormwater management for the proposed development (Dargaville Racecourse Development), for which a private plan change is being sought, was undertaken by Awa Environmental Limited, on behalf of the Kaipara District Council. The findings and recommendations of this initial review was published in a memorandum addressed to yourself, which was dated 18 November 2022, with reference J000663. The memorandum was shared with the applicant, who was offered the opportunity to provide a response.

The memorandum concluded with a statement saying that *“whilst the applicant has shown that it may be possible to mitigate some of the adverse impacts of their development, there is missing information that will need to be provided to demonstrate that the development can be adequately serviced in terms of stormwater drainage and flood hazard.”*

We thank you for the opportunity to provide a response to the review, including further information to address the key findings of the report.

The response below, should be read in conjunction with the latest version of the Civil Engineering Assessment Report included in the application, prepared by Lands and Survey Engineering.

1. Query:

“Given the low-lying nature of the site, it is unclear how future stormwater networks and ponds will drain into the existing downstream drains without extensive fill earthworks.”

1. Response / Clarification:

Although the site is relatively flat, it must be noted that there is a generous fall across the site towards Awakino North Road, which will facilitate good surface drainage. Obviously, the site will undergo surface terrain modifications and recontouring at the development stage, to direct runoff to the points of treatment, attenuation and discharge.

The elevations of development areas across the terrain ranges between 8.0 NZVD and 4.5 NZVD, with the invert level of the roadside drainage at the lowest point of discharge being at 3.3 NZVD. The details of how the terrain will be modified through a cut and fill operation and how the surface and subsurface drainage will function is

details that are expected to be developed during the design stage, when subdivision resource consents are being sought.

It is anticipated that runoff from the developed site will be conveyed to a series of treatment and attenuation devices via the on-site stormwater pipe network, roads and surface drains.

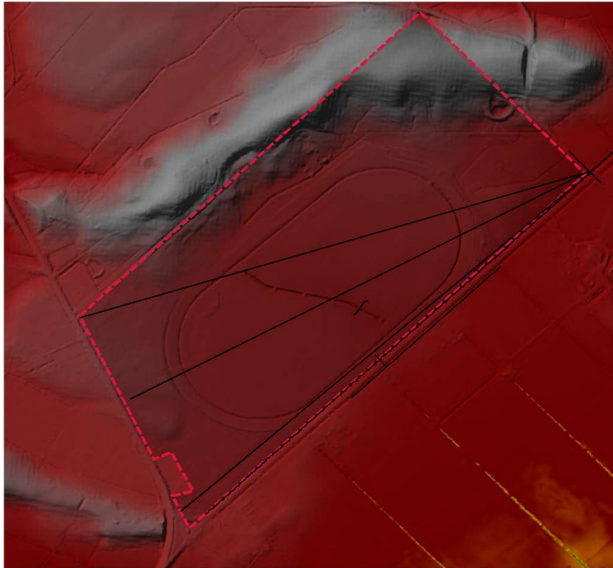


Figure 1 - Lidar Terrain Surface (Source: LINZ)

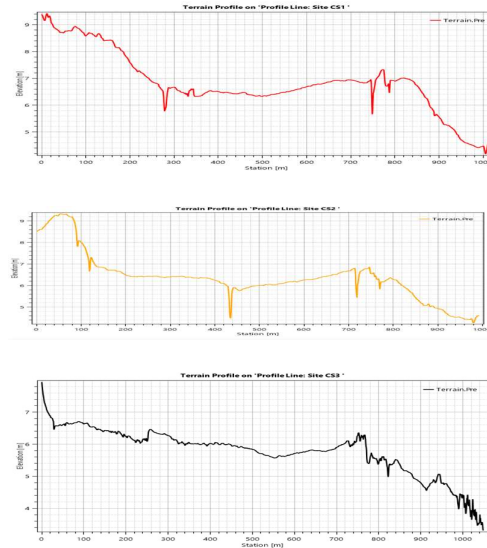


Figure 2 - Surface profiles across the subject site

Figures 1 and 2 above shows the slopes of 3 sections taken across the site towards the lowest point of discharge in the north-east corner. The average slopes are measured as being 4.0 to 4.5%, which is considered adequate to drain into the existing downstream networks.

The existing downstream network consist of a series of open drains, generally with slopes in an eastern to north easter direction. There are various discharge and distribution options to direct flows from Awakino roadside drains, to ensure an adequate level of service is achieved. Again, the arrangement, upgrades and drainage improvements to establish the discharge distribution can be designed and developed when subdivision resource consents are being contemplated.

We conclude that although the assessment is not explicit on how the future stormwater network and management devices will drain into the existing downstream network, the information provided above demonstrates that drainage of the site is possible, subject to further investigation and design.

2. Query:

"It is not clear whether the stormwater infrastructure in the area will have capacity to cater to the requirements of design periods for commercial land use i.e. 5% AEP. An upgrade of infrastructure may be required to provide a suitable level of service to the development."

2. Response / Clarification:

It is expected that minor upgrades and maintenance will be required to enhance conveyance capacity and functionality of downstream drainage infrastructure, however detailed assessment and design of these upgrade requirements can be addressed and developed during the resource consent stage. Having said that, the focus of

the proposed concept stormwater management included in our engineering assessment report, is to maintain hydraulic equilibrium to that of the predevelopment stage. The internal infrastructure will be designed to provide the level of service for that of a 5% AEP event and provide further mitigation for events exceeding the level of service, however the management controls will be done at a subdivision catchment level, where the discharge from the site is limited to that of the predeveloped state.

The NRC River Flood Hazard maps indicates that the surrounding and downstream area is subject to flooding in 1%, 2% and 10%AEP events. A simulation with the aid of 2D hydraulic modelling software was undertaken to understand the overland and surface drainage from the site towards the flood susceptible areas and discharge points and test the capacity of the existing roadside table drains and downstream drainage network for the various events, up to and including the 1% AEP rainfall event.

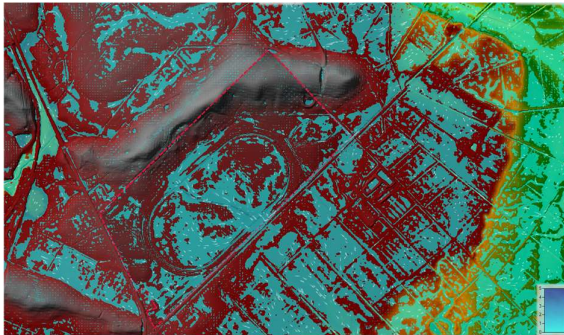


Figure 3 - 2D Surface drainage - 1% AEP Event

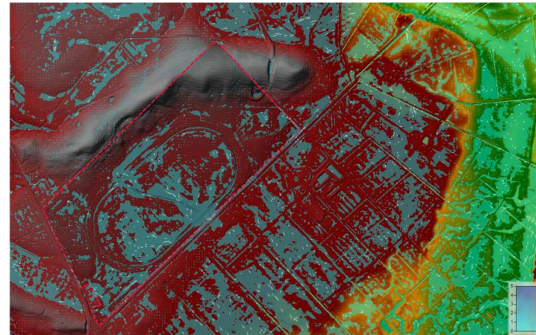


Figure 4 - 2D Surface drainage - 5% AEP Event

Figure 4 above clearly depicts that the surface flows from the site for the 5% AEP event is mostly contained within the roadside drain, which discharges towards the northeast, whereas the larger 1% AEP event depicted in figure 3 is expected to flood across Awakino North Road.

Observation note: Large parts of the areas that suggests “flooding”, is limited to sheet flow or shallow runoff during rainfall events. Figure 5 below depicts a depth analysis for surface runoff for the 1% AEP rainfall event.



Figure 5 - Surface runoff maximum water depth for 1% AEP event

Although the works and anticipated stormwater infrastructure upgrades associated with the proposed development will not result in specific mitigation and relief to existing downstream flooding issues, it will be able to ensure that the effect from the development provides a nett improvement by way of more controlled discharge and more even discharge distribution from the site, with specific improvements on critical downstream reaches to service the development.

It must be noted that the main risk of downstream flooding is driven by the river flood hazard of the Wairoa River, which has a very different hydrological response to large rainfall events, compared to that of the subject site.

The recent flooding events caused by the Cyclone Gabrielle, is testimony to this, where it was observed that during the peak of the flooding experienced in and around Dargaville township, the runoff from the site and downstream receiving environment was nearly non-existent, with little to no major flow in the existing drainage network near the site. This is discussed further in our response to query number 4 below.

Our assessment provides an indication that the downstream infrastructure may lack capacity, however this can be mitigated by way of minor upgrades and maintenance, supplemented by a on-site catchment management scheme to reduce peak discharge from the development during rainfall events up to and including the 5% AEP event, to ensure an appropriate level of service is maintained.

3. Query:

“The assessment does not appear to have considered the upstream catchment draining into the site which could both be impacted by the proposed development, and could impact the development.”

3. Response / Clarification:

A detailed catchment delineation was undertaken to understand the wider catchment area contributing to flow in the downstream infrastructure (“catchment of influence”) and the potential effect the development may have on runoff from an upstream contributing catchment area. The catchment delineation shown in Figure 6 below, clearly depicts that the “catchment of influence” is mostly contained within the boundaries of the site. The delineated “catchment of influence” is measured as 50.6ha, compared to the overall surveyed site area included in the assessment in section 4.2.5 of our report of 45.06ha. The variation on the catchment area is attributed to road surfaces downstream of the site (drains within Awakino North Road and lower parts of Part Lot 35 DP 11124) and a part of Part Lot 36 DP 11719 draining into the site. The additional predevelopment flows from Part Lot 36 DP 11719 can easily be managed through the proposed drainage infrastructure and conveyed through the site.

There is not expected to be any effect on the ability to drain Part Lot 36 DP 11719 through the subject site, where the inflows are from the upper parts of the catchment, some 7 meters higher than the highest development area within the subject site. Therefore, we conclude that the effects from the upstream catchment draining into the site are less than minor.

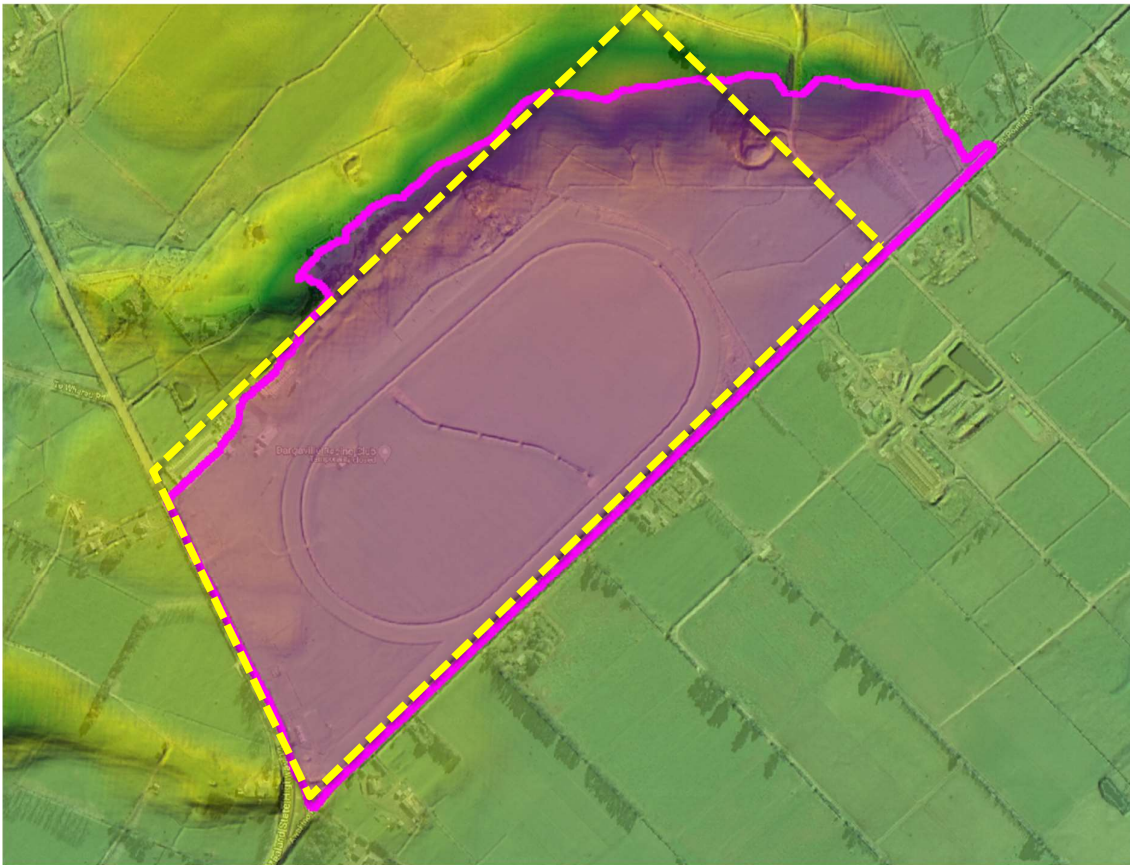


Figure 6 - Subject site catchment of influence.

4. Query:

“Whilst the applicant has proposed stormwater attenuation devices to mitigate the effects of increased impervious area, they have not assessed what the potential impact the development will have on downstream flooding, in terms of the displaced ponding on the site.”

4. Response / Clarification:

On site depressions will be filled in, and the site will be recontoured to provide more affective drainage of rainfall from the site, as soon as excess rainfall is converted to runoff. Considering the typical shape of a conventional runoff hydrograph, and the fact that the subject site is situated at the bottom end of the Wairoa River catchment, we envisage that the displacement of on-site depressions is negligible.

To understand this, and put the statement above in context, we investigated the potential impact on the downstream river flooding and compared the concentration times of the respective contributing catchments.

Catchment and flood statistic and data was sourced from NIWA website for New Zealand River Flood Statistics.

The Wairoa River has a catchment area of 2827km², with the longest flow path being approximately 127km. The time of concentration for the river reach near the subject sites point of discharge where flooding may be of concern is estimated as 25.5 hours using Ramser Kirpich formula.

The simulations included in our engineering assessment report, suggests the time of concentration for peak discharge to reach the discharge points of concern is approximately 45minutes. Therefore, any additional runoff

volume from the subject site, that is conveyed off the site and discharged, prior to the peak rainfall intensity that is expected to drive the peak discharge, will have little effect of the conveyance capacity of downstream infrastructure, and almost certainly no impact on downstream flooding due to the substantial variation and extreme unlikely circumstances where the additional volume being discharge will influence or coincide with the peak river flood.



Figure 7 - Wairoa River Reach for station near site (127km long)

Table 1 – Time of Concentration Calculation for Wairoa River Reach

L	127166.8	m		
S _a (Equal Area Method)	0.00386	m/m		
Acatch	2827.3	km ²		
dH	268.2	m		
T _c (Ramser Kirpich)	1411.5	mins	23.5	hrs
T _c (Bransby-Williams)	47.2	hrs	47.2	hrs
T _c (US Soil Conservation Service)	29.7	hrs	29.7	hrs

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APPENDIX B

TIME OF CONCENTRATION FORMULAE

1. RAMSER-KIRPICH

$$T_c = 0.0195 L^{0.77} S_a^{-0.385}$$

where T_c = time of concentration, in minutes
 S_a = average channel slope, in m/m
 L = flow length from the farthest point on the catchment to the outlet, in m.

2. BRANSBY-WILLIAMS

$$T_c = \frac{0.953L^{1.2}}{A^{0.1} H^{0.2}}$$

where T_c = time of concentration, in hours
 L = maximum flow length, in km
 A = catchment area, in km²
 H = the difference in elevation between the highest and lowest points on the main channel, in m.

3. U.S. SOIL CONSERVATION SERVICE

$$T_c = \left(\frac{0.87L^3}{H} \right)^{0.385}$$

where T_c = time of concentration, in hours
 L = maximum flow length, in km
 H = the difference in elevation between the highest and lowest points on the main channel, in m.

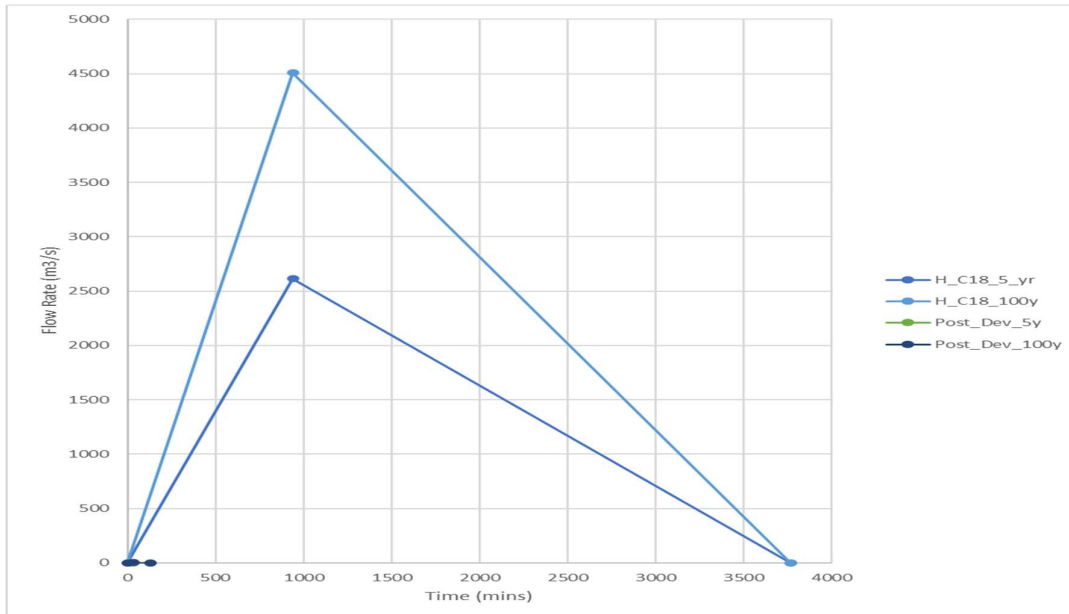


Figure 8 - Simple hydrograph comparison depicting TC variation.

5. Query:

“There are a large number of unknown culverts in place that the development will need to rely on in terms of stormwater servicing, for which no capacity assessment has been carried out. It is therefore currently unclear whether the site can be designed to meet the required level of service in terms of drainage and flood hazard. It is noted that the permeability rate of the underlain soil is considered very low to negligible and that the site appears to be generally waterlogged. It is unclear how this matter will be managed, especially in the areas where

detention ponds are proposed. The water table may impact on the ability of detention ponds to provide the necessary storage without substantial engineering/earthworks.”

5. Response / Clarification:

The response to this query is provided in two parts:

Part 1 – Unknown culverts and capacity assessment...

As discussed throughout this response, it is acknowledged that there are several issues that remains unclear and unknown, which includes current capacity of downstream infrastructure, however our 2d hydraulic model suggests that for the most part that there is adequate capacity to convey runoff for the 5% AEP event. Again, this is a matter which can be further investigated and resolved during resource consent stage, where lack of capacity of infrastructure is not an objective impossibility in respect to level of service. There are multiple drainage routes and options that can be explored during a more detailed assessment at resource consent stage.

Part 2 – High ground water levels, permeability of soils and in- ground stormwater management devices...

The excavated stormwater management devices will naturally draw down the ground water and constantly drain to maintain a maximum permanent water depth within the device. (Devices being contemplated being constructed wetlands.) Downstream infrastructure will be assessed, upgraded and modified as required to ensure continuous drainage is maintained, where it has been demonstrated in our response to query 1 above, that there is no lack in hydraulic head to achieve good drainage. It is noted that continuous drawdown of ground water may influence ground stability. Therefore, it is envisaged that this will be considered when more detailed geotechnical investigation and analysis is undertaken during the resource consent stage.

Should you have any queries regarding the above, please do not hesitate to contact me on 021 024 99917 or via email at henk@landsandsurvey.co.nz.

Kind regards,



Henk de Wet CPEng, CMEngNZ, IntPE(NZ) / APAC Engineer

Technical Director

Lands and Survey Engineering LTD



MEMO

TO: David Usmar **DATE:** 02nd March, 2023
FROM: Sejal Sangwai **PROJECT NO.:** J000663
REVIEWE: James Taylor
SUBJECT: Review of response to initial review of the Stormwater Management for Private Plan Change 81

INTRODUCTION

Referencing our original memorandum dated 18th November 2022 and Lands and Survey Engineering Ltd (L&S) response letter dated 22nd February 2023, we have following comments (in green) on the response to each of the queries as listed below. 4

Please note we have not been provided with any additional information other than the response letter.

COMMENTS ON RESPONSE

1. **Awa Query:** “Given the low-lying nature of the site, it is unclear how future stormwater networks and ponds will drain into the existing downstream drains without extensive fill earthworks.”

L&S Response / Clarification: Although the site is relatively flat, it must be noted that there is a generous fall across the site towards Awakino North Road, which will facilitate good surface drainage. Obviously, the site will undergo surface terrain modifications and recontouring at the development stage, to direct runoff to the points of treatment, attenuation and discharge. The elevations of development areas across the terrain ranges between 8.0 NZVD and 4.5 NZVD, with the invert level of the roadside drainage at the lowest point of discharge being at 3.3 NZVD. The details of how the terrain will be modified through a cut and fill operation and how the surface and subsurface drainage will function is details that are expected to be developed during the design stage, when subdivision resource consents are being sought. It is anticipated that runoff from the developed site will be conveyed to a series of treatment and attenuation devices via the on-site stormwater pipe network, roads and surface drains. Figures 1 and 2 above shows the slopes of 3 sections taken across the site towards the lowest point of discharge in the north-east corner. The average slopes are measured as being 4.0 to 4.5%, which is considered adequate to drain into the existing downstream networks. The existing downstream network consist of a series of open drains, generally with slopes in an eastern to north easter direction. There are various discharge and distribution options to direct flows from Awakino roadside drains, to ensure an adequate level of service is achieved. Again, the arrangement, upgrades and drainage improvements to establish the discharge distribution can be designed and developed when subdivision resource consents are being contemplated. We conclude that although the assessment is not explicit on how the future stormwater network and management devices will drain into the existing downstream network,

the information provided above demonstrates that drainage of the site is possible, subject to further investigation and design.

Awa Comment: *Based on the provided information showing the fall across the site we agree a drainage solution appears to be feasible subject to further investigation and detailed design at the Resource Consent stage.*

- 2. Awa Query:** “It is not clear whether the stormwater infrastructure in the area will have capacity to cater to the requirements of design periods for commercial land use i.e. 5% AEP. An upgrade of infrastructure may be required to provide a suitable level of service to the development.”

L&S Response / Clarification: It is expected that minor upgrades and maintenance will be required to enhance conveyance capacity and functionality of downstream drainage infrastructure, however detailed assessment and design of these upgrade requirements can be addressed and developed during the resource consent stage. Having said that, the focus of the proposed concept stormwater management included in our engineering assessment report, is to maintain hydraulic equilibrium to that of the predevelopment stage. The internal infrastructure will be designed to provide the level of service for that of a 5% AEP event and provide further mitigation for events exceeding the level of service, however the management controls will be done at a subdivision catchment level, where the discharge from the site is limited to that of the predeveloped state. The NRC River Flood Hazard maps indicates that the surrounding and downstream area is subject to flooding in 1%, 2% and 10%AEP events. A simulation with the aid of 2D hydraulic modelling software was undertaken to understand the overland and surface drainage from the site towards the flood susceptible areas and discharge points and test the capacity of the existing roadside table drains and downstream drainage network for the various events, up to and including the 1% AEP rainfall event. Figure 4 above clearly depicts that the surface flows from the site for the 5% AEP event is mostly contained within the roadside drain, which discharges towards the northeast, whereas the larger 1% AEP event depicted in figure 3 is expected to flood across Awakino North Road. Observation note: Large parts of the areas that suggests “flooding”, is limited to sheet flow or shallow runoff during rainfall events. Figure 5 below depicts a depth analysis for surface runoff for the 1% AEP rainfall event. Although the works and anticipated stormwater infrastructure upgrades associated with the proposed development will not result in specific mitigation and relief to existing downstream flooding issues, it will be able to ensure that the effect from the development provides a nett improvement by way of more controlled discharge and more even discharge distribution from the site, with specific improvements on critical downstream reaches to service the development. It must be noted that the main risk of downstream flooding is driven by the river flood hazard of the Wairoa River, which has a very different hydrological response to large rainfall events, compared to that of the subject site. The recent flooding events caused by the Cyclone Gabrielle, is testimony to this, where it was observed that during the peak of the flooding experienced in and around Dargaville township, the runoff from the site and downstream receiving environment was nearly non-existent, with little to no major flow in the existing drainage network near the site. This is discussed further in our response to query number 4 below. Our assessment provides an indication that the downstream infrastructure may lack capacity, however this can be mitigated by way of minor upgrades and maintenance, supplemented by a on-site catchment management scheme to reduce peak discharge from the development during rainfall

events up to and including the 5% AEP event, to ensure an appropriate level of service is maintained.

Awa Comment: *Existing road frontages and drainage infrastructure currently comprising of open drains may require upgrade in order to achieve a 5% AEP level of service of drainage. This may be the case irrespective of whether hydraulic neutrality is achieved. However, we are comfortable that infrastructure upgrades will be feasible subject to further investigation and detail design at the Resource Consent stage.*

- 3. Awa Query:** “The assessment does not appear to have considered the upstream catchment draining into the site which could both be impacted by the proposed development, and could impact the development.”

L&S Response / Clarification: A detailed catchment delineation was undertaken to understand the wider catchment area contributing to flow in the downstream infrastructure (“catchment of influence”) and the potential effect the development may have on runoff from an upstream contributing catchment area. The catchment delineation shown in Figure 6 below, clearly depicts that the “catchment of influence” is mostly contained within the boundaries of the site. The delineated “catchment of influence” is measured as 50.6ha, compared to the overall surveyed site area included in the assessment in section 4.2.5 of our report of 45.06ha. The variation on the catchment area is attributed to road surfaces downstream of the site (drains within Awakino North Road and lower parts of Part Lot 35 DP 11124) and a part of Part Lot 36 DP 11719 draining into the site. The additional predevelopment flows from Part Lot 36 DP 11719 can easily be managed through the proposed drainage infrastructure and conveyed through the site. There is not expected to be any effect on the ability to drain Part Lot 36 DP 11719 through the subject site, where the inflows are from the upper parts of the catchment, some 7 meters higher than the highest development area within the subject site. Therefore, we conclude that the effects from the upstream catchment draining into the site are less than minor.

Awa Comment: *Based on the provided information the assessment appears reasonable and any effect on upstream catchments can be managed subject to further investigation and detail design at the Resource Consent stage.*

- 4. Awa Query:** “Whilst the applicant has proposed stormwater attenuation devices to mitigate the effects of increased impervious area, they have not assessed what the potential impact the development will have on downstream flooding, in terms of the displaced ponding on the site.”

L&S Response / Clarification: On site depressions will be filled in, and the site will be recontoured to provide more effective drainage of rainfall from the site, as soon as excess rainfall is converted to runoff. Considering the typical shape of a conventional runoff hydrograph, and the fact that the subject site is situated at the bottom end of the Wairoa River catchment, we envisage that the displacement of on-site depressions is negligible. To understand this, and put the statement above in context, we investigated the potential impact on the downstream river flooding and compared the concentration times of the respective contributing catchments. Catchment and flood statistic and data was sourced from NIWA website for New Zealand River Flood Statistics. The Wairoa River has a catchment area of 2827km², with the longest flow path being approximately 127km. The

time of concentration for the river reach near the subject sites point of discharge where flooding may be of concern is estimated as 25.5 hours using Ramser Kirpich formula. The simulations included in our engineering assessment report, suggests the time of concentration for peak discharge to reach the discharge points of concern is approximately 45minutes. Therefore, any additional runoff volume from the subject site, that is conveyed off the site and discharged, prior to the peak rainfall intensity that is expected to drive the peak discharge, will have little effect of the conveyance capacity of downstream infrastructure, and almost certainly no impact on downstream flooding due to the substantial variation and extreme unlikely circumstances where the additional volume being discharge will influence or coincide with the peak river flood.

Awa Comment: *The applicant appears to have misunderstood the purpose of our query. We are not concerned about the effects of the development on flooding from the Wairoa River. We are concerned about potential effects due to displaced ponding on the properties immediately downstream of the site. Any filling of existing depressions which currently store flood water could result in an increase in peak flows and flood levels and volume due to the loss of attenuation provided by flood waters ponding on the existing site. This may require larger attenuation devices be proposed on the site to mitigate any effects. However, we are comfortable that assessment of this and design solutions are likely to be feasible which can be carried out at the Resource Consent stage.*

- Awa Query:** “There are a large number of unknown culverts in place that the development will need to rely on in terms of stormwater servicing, for which no capacity assessment has been carried out. It is therefore currently unclear whether the site can be designed to meet the required level of service in terms of drainage and flood hazard. It is noted that the permeability rate of the underlain soil is considered very low to negligible and that the site appears to be generally waterlogged. It is unclear how this matter will be managed, especially in the areas where detention ponds are proposed. The water table may impact on the ability of detention ponds to provide the necessary storage without substantial engineering/earthworks.”

L&S Response / Clarification: The response to this query is provided in two parts: Part 1 – Unknown culverts and capacity assessment... As discussed throughout this response, it is acknowledged that there are several issues that remains unclear and unknown, which includes current capacity of downstream infrastructure, however our 2d hydraulic model suggests that for the most part that there is adequate capacity to convey runoff for the 5% AEP event. Again, this is a matter which can be further investigated and resolved during resource consent stage, where lack of capacity of infrastructure is not an objective impossibility in respect to level of service. There are multiple drainage routes and options that can be explored during a more detailed assessment at resource consent stage. Part 2 – High ground water levels, permeability of soils and in- ground stormwater management devices... The excavated stormwater management devices will naturally draw down the ground water and constantly drain to maintain a maximum permanent water depth within the device. (Devices being contemplated being constructed wetlands.) Downstream infrastructure will be assessed, upgraded and modified as required to ensure continuous drainage is maintained, where it has been demonstrated in our response to query 1 above, that there is no lack in hydraulic head to achieve good drainage. It is noted that continuous drawdown of ground water may influence ground stability. Therefore, it is envisaged that this will be considered when more detailed geotechnical investigation and analysis is undertaken during the resource consent stage.

Awa Comment: Based on the provided response we agree that the issues can be managed subject to further investigation and detail design at the Resource Consent stage. This may include a detailed geotechnical investigation and assessment of effects on ground water.

CONCLUSION

We generally agree with Lands and Survey Engineering Ltd that the development is serviceable. However, this will be subject to further investigation and detailed engineering design at the Resource Consent stage for the development to meet Kaipara District Council's level of service and avoid adverse effects on the neighboring properties, asset owners and receiving environment.

Should you have any queries relating to any of the above, please do not hesitate to contact us via details provided below.

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