

BEFORE THE HEARINGS PANEL

IN THE MATTER OF

the Resource Management Act
1991

AND

Proposed Plan Change 95 to the
Western Bay of Plenty District
Plan: Pencarrow Estate
Pongakawa

**SUPPLEMENTARY STATEMENT OF EVIDENCE OF LUCY HOLDEN
ON BEHALF OF BAY OF PLENTY REGIONAL COUNCIL TOI MOANA
SUBMITTER NO: 27
PLANNING**

Topic 8: Stormwater quantity

1. Ms Southerwood's primary statement of evidence raised concerns with the stormwater soakage calculations of the proposal and potential resulting cumulative effects on the Little Waihi Drainage Scheme and the Puanene Stream. As Ms Southerwood stated in the hearing:
 - i. Mr Hight's reply evidence stated that soakage had been recalculated using a soakage rate for silt loam of 7mm/hour (per Table 6.1 of the BOPRC Stormwater Management Guidelines¹) and that a compliant system could fit within the lots; no calculations were provided. Ms Southerwood was not convinced that an appropriately sized soakage device would fit, based on the reasoning in the following paragraph.
 - ii. Any retained stormwater must be drained within 48 hours (per Section 7.2.1 of the BOPRC Stormwater Management Guidelines). A 10-year 48-hour storm would produce 58.1m³ stormwater (using data from the Lysaght Report² Appendix 3 - Preliminary Stormwater Calculations). A 7mm/hour soakage rate would require 173m² of soakage area per lot

¹ Stormwater Management Guidelines for the Bay of Plenty Region. Bay of Plenty Regional Council Guideline 2012/01

² Lysaght, 12 December 2022. Engineering Servicing Report, Pencarrow Estate (Revision 5)

(210m² of impermeable surface) to dispose of this volume within 48 hours. This is a very large soakage area to fit into a small lot, along with providing a suitable building platform and other requirements such as driveways. Ms Southerwood questions whether it can be done.

2. This remains an outstanding issue. Regional Council's position is that there is not sufficient assurance that it will be possible to mitigate stormwater quantity to the required level under the current structure plan design.
3. I recommend an additional plan change provision, as set out in Appendix 1 (in green underline) to this statement, requiring the proposal to mitigate the post-development peak discharge for the 100-year storm to 80% of the pre-development peak discharge (as recommended in paragraphs 18 and 21 of Ms Southerwood's primary statement of evidence).
4. Mitigation for stormwater volumes may affect elements of the structure plan, such as lot and reserve locations and the amount of impervious surfacing. The preference is for this to be resolved before the structure plan is finalised to ensure this level of stormwater mitigation could be provided and to determine if the structure plan would need reconfiguring. This would give assurance that the provision I am suggesting would be able to be implemented.
5. However, if the Commissioners were minded to recommend the plan change be granted, and without this being resolved before the structure plan was finalised, I consider that even with the proposed provision in Appendix 1, it will be important to fully resolve the stormwater quantity mitigation before any subdivision consents are applied for, again to ensure there is sufficient space for the required mitigation.

Topic 10: Ecological

Protection of the Puanene Stream riparian buffer

6. I consider that relying solely on a District Plan rule to prevent urban encroachment into the riparian buffer zone may not be the most effective way to protect the buffer, because landowners, particularly ones who own the landscape buffer strip, are unlikely to check the District Plan rules before they

use this land.

7. As such, I consider the District Plan rule should also require a consent notice to be placed on all titles adjacent to the Puanene Stream within the structure plan area to ensure this ongoing protection of the riparian buffer. This is recommended as an alternative to the entire buffer area being council reserve, which was is what Regional Council had previously sought.
8. I consider that both the District Plan rule and the consent notices will ensure the Puanene Stream riparian buffer is protected in perpetuity.

APPENDIX 1 – RECOMMENDED AMENDMENTS TO PPC95 PROVISIONS

Chapter 12 – Proposed Amendments

The below are proposed as new rules to be added to Chapter 12, below the most recent Structure Plan introduced to the District Plan (Rule 12.4.23 – Washer Road Business Park Structure Plan). This would therefore be a new section, Rule 12.4.24 – Pencarrow Estate Pongakawa Structure Plan.

Working Set – Reflecting s.42A Report (11/10/24) Changes, subsequent Evidence of Vincent Murphy (24/10/24), and subsequent Evidence of Lucy Holden (4/11/24). Produced 13/11/24. Highlighted [track change](#) text reflects amendments to address matters arising at the hearing.

Lucy Holden’s suggested additions in [green underline](#) and deletions in ~~red strikethrough~~

12.4.24 Pencarrow Estate Pongakawa Structure Plan

12.4.24.1 General

- a. Any subdivision or development (including delivery of stage pre-requisites) of land zoned Residential or Commercial within the Pencarrow Estate Pongakawa Structure Plan shall be undertaken in general accordance with that structure plan as set out in Appendix 7 [plans including notes](#) and in the Pencarrow Estate Pongakawa Structure Plan Stage Prerequisites below.
- b. All roofs of buildings constructed in the Pencarrow Estate Pongakawa Structure Plan Area within lots adjoining a Rural Zoned site, or above one storey in height, shall be of a finish with a reflectivity (Light Reflectance Value) of no greater than 37%, measured and determined in accordance with AS/NZ Standard 1580.

12.4.24.2 Staging Details

- a. Subdivision or development of land within the Pencarrow Estate Pongakawa Structure Plan shall occur sequentially in that Stage 1 shall be completed prior to, or at the same time, as Stages 2 and 3.
- b. Subdivision to create separate lots that reflect the boundaries of the Pencarrow Estate Pongakawa Structure Plan area (in its entirety or individual stages), including prior to the delivery of any stage pre-requisites, is a Controlled Activity.

Council shall exercise control over the following:

- i) The new lot(s) to be established shall be generally consistent with the boundaries of the structure plan area or individual stages.
- ii) Provision of legal and physical access to all proposed lots.

12.4.24.3 Pencarrow Estate Pongakawa Structure Plan – Stage Prerequisites

Stage **Prerequisites to subdivision 224 certificate being granted or to land use or building consent activity being established**

The pre-requisites below in part correspond to details on Pencarrow Estate Pongakawa Structure Plan drawings, see Appendix 7, Section 13 of the District Plan.

All Stages **Stormwater**

a. In events up to the 10-year storm event, all site stormwater, except stormwater from grassed yards, berms and roads, will discharge via reticulation to ground soakage.

b. In events up to the 10-year storm event, stormwater from grassed yards, berms and roads will be conveyed to the stormwater treatment wetland.

c. Beyond the 10-year storm event, stormwater from roads will pipe to a vegetated swale, which will discharge to the stormwater treatment wetland.

d. The post-development peak discharge for the 100-year storm event will be mitigated to 80% of the pre-development peak discharge.

e. An engineering design report, prepared by a suitably qualified chartered civil engineer, shall be provided to Council to demonstrate compliance with: i. 12.4.24.3 a, b, c, and d e ii. Relevant stormwater sizing details iii. Detailed engineering design drawings.

Stage 1

Roading and Access

- Intersection of Arawa Road and State Highway 2, and Arawa Road carriageway to the vehicle entrance to the plan change site, to be upgraded generally in accordance with the concept 'Pencarrow Estate – Arawa Road/SH2 Intersection Upgrade', refer to preliminary design at Appendix 7, Section 13.5 of the District Plan, or alternative design approved by to the satisfaction of Waka Kotahi for the State Highway, and to the satisfaction of Council for the balance of Arawa Road.
- Footpaths and roads formed within Stage 1, in accordance with the Council's Development Code (or successor document) and as approved by Council.
- Footpath to frontage of Commercial Zone to be provided.
- Access to, and bus stop established within, the Commercial Zone meeting design requirements of Council's Development Code (or successor document).

Stormwater, Wastewater and Water Infrastructure

- Stormwater wetland installed in identified reserve location, formed and planted.
- Stormwater conveyance infrastructure within Stage 1 installed.
- Construction of overland flowpaths within Stage 1, formed and planted.
- Preparation of wastewater disposal field and supporting infrastructure of adequate size to service the number of lots within Stage 1.

- Water mains of sufficient pressure and capacity to service all lots within Stage 1 inclusive of firefighting requirements. This requires upgrading the 100mm ID main connecting the Arawa Road development to Maniatutu Road (a 2.1km long length of watermain) to a 250mm OD MDPE main.

Deviation from these requirements shall be in accordance with an engineering design report prepared by a suitably-qualified chartered civil engineer, and as approved by Council.

Landscaping and Reserves

- Landscaping mitigation measures within and at the boundary of Stage 1, including in Reserve to Vest, established in general accordance with the structure plan landscaping plan.
- There shall be no buildings, or structures, fences, decks, pools, paving, or planting of non-native species within the 8m riparian reserve and landscape buffer strips, and a consent notice shall be placed on all titles adjacent to the Puanene Stream within the structure plan area to ensure this ongoing protection of the riparian buffer.

Reverse sensitivity

Prior to Stage 1 being completed, all effluent pond and storage infrastructure within the Pencarrow Estate Pongakawa Structure Plan area shall be relocated so as to be west of the north-western boundary of the structure plan area, and north of the existing milking shed and stock pad.

Commercial Land

The commercially-zoned land shall be established and available for future commercial and community service activities.

Stage 2

Roading and Access

- New roads and footpaths within Stage 2 constructed, in accordance with the Council's Development Code and as approved by Council.
- Footpath connection between Arawa Road to internal roads through to 'Village Green' established.

Stormwater, Wastewater and Water Infrastructure

- Stormwater conveyance infrastructure within Stage 2 installed.
- Construction of overland flowpaths within Stage 2, formed and planted.
- Preparation of wastewater disposal field and infrastructure of adequate size to service the number of lots within Stage 2.
- Water mains and reservoirs (if necessary) of sufficient pressure and capacity to service all lots within Stage 2 inclusive of firefighting requirements.

Deviation from these requirements shall be in accordance with an engineering design report prepared by a suitably-qualified chartered civil engineer, and as approved by Council.

Landscaping, Reserves

- Formation of reserve around stormwater treatment wetland and adjacent overland flowpath, including 'Village Green' seating area.
- Landscaping mitigation, including planting in Reserve to Vest, within Stage 2 boundaries established in general accordance with the structure plan landscaping plan.
- There shall be no buildings, ~~or~~ structures, fences, decks, pools, paving, or planting of non-native species within the 8m riparian reserve and landscape buffer strips, and a consent notice shall be placed on all titles adjacent to the Puanene Stream within the structure plan area to ensure this ongoing protection of the riparian buffer.

Reverse sensitivity

Dairy cow milking shall cease to occur at the existing milking shed.

Stage 3

Roading and Access

- New roads or privateways within Stage 3 constructed, in accordance with the Council's Development Code (or successor document) and as approved by Council.

Stormwater, Wastewater and Water Infrastructure

- Construction of overland flowpath within Stage 3, formed and planted.
- Stormwater conveyance infrastructure within Stage 3 installed.
- Preparation of wastewater disposal field and infrastructure of adequate size to service the number of lots within Stage 3.
- Water mains and reservoirs (if necessary) of sufficient pressure and capacity to service all lots within Stage 3 inclusive of firefighting requirements.

Landscaping and Reserves

- Formation of the private playground reserve within the Commercial Area as shown on the structure plan.
- Landscaping within Stage 3 boundaries established in general accordance with the structure plan landscaping plan.