#### **BEFORE THE HEARINGS PANEL**

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER OF	Proposed Plan Change E: Roxburgh Residential
	Area to the Palmerston North City Council
	District Plan

# STATEMENT OF REPLY EVIDENCE OF KRISHNA VENI DEMADO ON BEHALF OF PALMERSTON NORTH CITY COUNCIL

# STORMWATER – INFRASTRUCTURE UPGRADES

Dated: 16 May 2025

#### **REPLY EVIDENCE OF VENI DEMADO**

# A. INTRODUCTION

- [1] My full name is Krishna Veni Demado.
- [2] I prepared a memorandum dated 24 April 2025 on behalf of the Palmerston North City Council (Council) for proposed Plan Change E: Roxburgh Residential Area to the Palmerston North District Plan (PCE).
- [3] I hold a tertiary qualification of Bachelor of Engineering Civil from the University Science of Malaysia, and a Master of Engineering Degree in Water Engineering from University Putra of Malaysia. I am also a licensed Professional Engineer (PE) of Water Resources in Malaysia.
- [4] I have more than 23 years of experience in dealing with all facets of stormwater and drainage matters. My experience also includes hydrologic and hydraulic modelling of stormwater network and asset management.
- [5] I confirm that I have read and will comply with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023, and that my report has been prepared in compliance with that Code.

### B. SCOPE

- [6] My reply evidence responds to points made by submitters prior to the hearing for PCE:
  - (a) Mr. Paul Thomas on behalf of Frances Holdings Limited regarding his evidence about the timing of the stormwater outlet pipe upgrade at Roxburgh Crescent.

### C. RESPONSE TO MR. THOMAS ON BEHALF OF FRANCES HOLDINGS LIMITED

[7] I consider that the Storm Servicing Assessment (SA) was quite clear in its approach in regard to Stage 1 and Stage 2. The LTP and the relevant programs to support the servicing assessment is on track with 50% design completion expected by end of June. Geotechnical and land contamination assessments have been completed with resource consent application to Regional Council on track to be submitted by end of September. We are working with the Regional Council's consenting and Engineering team to ensure there are no surprises and all approached has been dully agreed.

### <u>SW item 12</u>

- [8] The SA did not finalise the future pipe alignment, however left the options that the upgrade works could be a duplicate within the existing alignment or install new pipe within corridor C and D as per the proposed structure plan to be determine during the detailed design stage.
- [9] The current concept design will table both the options and study the economics and technical viability of both options and a decision will be made thereafter to determine the preferred option and alignment. As the new pipe invert level remains quite deep (6m-8m), it's likely that the new pipe upgrade will require micro tunnelling and the duplicate could not be located parallel the existing alignment (requires wider corridor). I would be looking to discussing both options with Horizon's Regional Council which will than lead to finalising the outfall design. It's expected that the existing 750 pipe will remain and an easement placed.

### D. CONCLUSIONS

[10] I do not recommend any changes to the plan changes as a result of Mr. Thomas's submission.

#### 16 May 2025

Krishna Veni Demado