Group Pty Ltd

Cummings Group Pty Ltd

Project Managers and Consulting Engineers Palm Beach PO Box 1288 Elanora, QLD 4221 Ph: 07 5641 1100 cummingsgroup@icloud.com

Our Ref: CG2105-01 GC: DC Your Reference: DA2014-114

12th August, 2024

Attn: Development Engineer **Port Macquarie/Hastings Council** PO Box 84, Port Macquarie NSW 2444

Dear Sir / Madam

#### STORMWATER FLOOD REPORT FOR REZONING AT THRUMSTER BUSINESS PARK Lot 2 DP:1245588, (John Oxley Drive) Port Macquarie DA2014-114.04

#### 1.0. Introduction

Cummings Group Pty Ltd was engaged by Thrumster Business Park Pty Ltd to investigate the impact of the proposed E3 Zoning, including shop top housing and serviced apartments in relation to the flood levels at the Thrumster Business Park development.

The previously approved overall development Stormwater Management Plan outlined that the proposed site levels for both the Staged Residential and Industrial Subdivision complied with PMHCouncil planning policy for flood immunity. The proposed E3 Lots sit within the previously approved development area with no changes to the entrance road or overall earthworks levels.

The proposed E3 Lots include 109 to 114, 117 to 123 and 133 to 134. Lots 101 to 108, 115 & 116, 124 to 128, 135 and 304 are proposed to be zoned E3 with additional permitted uses of shop top housing and serviced apartments. Refer to the Layout Plan in Appendix A. The purpose of this report is to demonstrate compliance with the current PMHC Flood Policy and guidelines.

### 2.0. Flood Levels for the Staged Residential and Industrial Subdivision

The development earthworks for the residential and industrial lots were all set above the 1% AEP flood levels of RL3.50 - RL3.80 as outlined in the previously approved Stormwater Management Reports and Plans. The levels of the entrance road into the Thrumster Development (previously approved) also allow both safe and compliant emergency ingress and egress from the site, greater than 400mm above the 1 in 100 year flood levels (1% AEP event) ; as specified in the Maunsell Aecom Integrated Water Management Plan 2007 and in accordance with Council requirements.

The previous report noted in more detail that: "Site Hydrology - "Whilst substantial earthworks were proposed within the industrial component of development, the overall discharge points remain unchanged". The previously approved Thrumster development design complies with this requirement accordance with the previously approved Stormwater management plan. The existing site (pre-development) is prone to flooding around the site from the north east, north west and south eastern sides ; Refer to the extract of the Council flooding map in Appendix B. As noted in the previously approved King and Campbell flood report dated April 2013 referencing recommendations of the Maunsell reports (Stages 1-3) (Maunsell/AECOM, December 2006) (Maunsell/AECOM, July 2007), and the Cummings Group Stormwater Information Addendum dated November 2021, it is noted that the Sanctuary Residential development and Thrumster Business Park development sites achieved flood free lots and access entrance road levels.

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### 3.0. Compliance for Minimum Floor Levels with Flood Policy Objectives

Similar to the previously approved allotments within the Thrumster Business Park, the proposed development of the proposed E3 Zone lots rely on compliance with the relevant Flood Policy Objectives, to ensure safety and to minimise risk to public and property in all relevant flood events. The minimum permissible Building Floor Levels are to be set greater than 900mm above the 1 in 100 year flood levels in the order of RL:3.5 to RL3.80. This also complies with lots set above the Flood Planning Level 2 (FPL2) as per table 4 of the PMHC Flood Policy. The Levels are also noted as being above the Probably Maximum Flood Event Levels (PMF). The proposed E3 Lot Levels on lots with the additional residential uses of shop top housing and serviced apartments are considerably higher as outlined below:

Lot	Min Lot Level.	Compliant over all Flood Level Requirements
Lot 101	RL: 5.60	Yes
Lot 102	RL: 6.00	Yes
Lot 103	RL: 7.00	Yes
Lot 104	RL: 8.50	Yes
Lot 105	RL: 10.20	Yes
Lot 106	RL: 12.60	Yes
Lot 107	RL: 14.20	Yes
Lot 108	RL: 14.00	Yes
Lot 115	RL: 7.10	Yes
Lot 116	RL: 8.10	Yes
Lot 124	RL: 13.10	Yes
Lot 125	RL: 12.90	Yes
Lot 126	RL: 12.00	Yes
Lot 127	RL: 11.00	Yes
Lot 128	RL: 10.60	Yes
Lot 135	RL: 13.00	Yes
Lot 304	RL: 13.00	Yes

# 4.0 Policy Compliance

The proposed E3 Development Lots were assessed relative to the requirements of the Flood Policy, and therefore consider that further flood impact assessment or risk assessments are not required as there were no changes to the lot levels or impact over the developed footprint / flood regime. This was primarily established with no change to the overall footprint or additional impact beyond the previous flood risk assessment parameters set in the King and Campbell report and model. It is noted that all the surrounding industrial and proposed E3 lots and entrance road remain open and accessible, set greater than 400mm above the 1 in 100 year flood levels (1% AEP flood event), and therefore comply with the flood policy requirements.

The proposed allotments were previously identified and determined as being flood immune and above the Flood Planning level (FPL) in the previously approved King and Campbell flood report dated April 2013.

The proposed E3 zone on these sites have not altered the minimum earthworks levels and are therefore in compliance with the overall requirements (and minimum FPL and relevant freeboard requirements). It is noted that the previous Flood Impact Assessment / Flood Risk Assessment have not changed, and these proposed lots are considered as conforming to the full range of floods (including the Probable Maximum Flood (PMF) as there is no change to the original development footprint or flood hazard level regime compared to the 2018 Flood Policy.

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5.0. Conclusion

The proposed E3 Lots have not changed the previously set earthworks levels and are set greater than 400mm above the 1 in 100 year flood levels (1% AEP flood event), as outlined in the Flood Planning Level 2 (FPL2) requirements as per table 4 of the PMHC Flood Policy; as noted in section 3.0 above.

The levels of the entrance road are greater than 400mm above the 1 in 100 year flood levels (1% AEP event) for safe ingress and emergency access as specified in the Maunsell Aecom Integrated Water Management Plan 2007 and in accordance with Council requirements. There is no change to the development footprint outside the previously approved King and Campbell flood report dated April 2013 referencing recommendations of the Maunsell reports (Stages 1-3)

(Maunsell/AECOM, December 2006) (Maunsell/AECOM, July 2007).

Therefore, it is considered that no further flood impact assessment or risk assessments are required. The proposed E3 Development lots comply with the requirements of the PMHCouncil Flood Policy.

Yours faithfully CUMMINGS GROUP PTY LTD

David Cummings NER:2383439

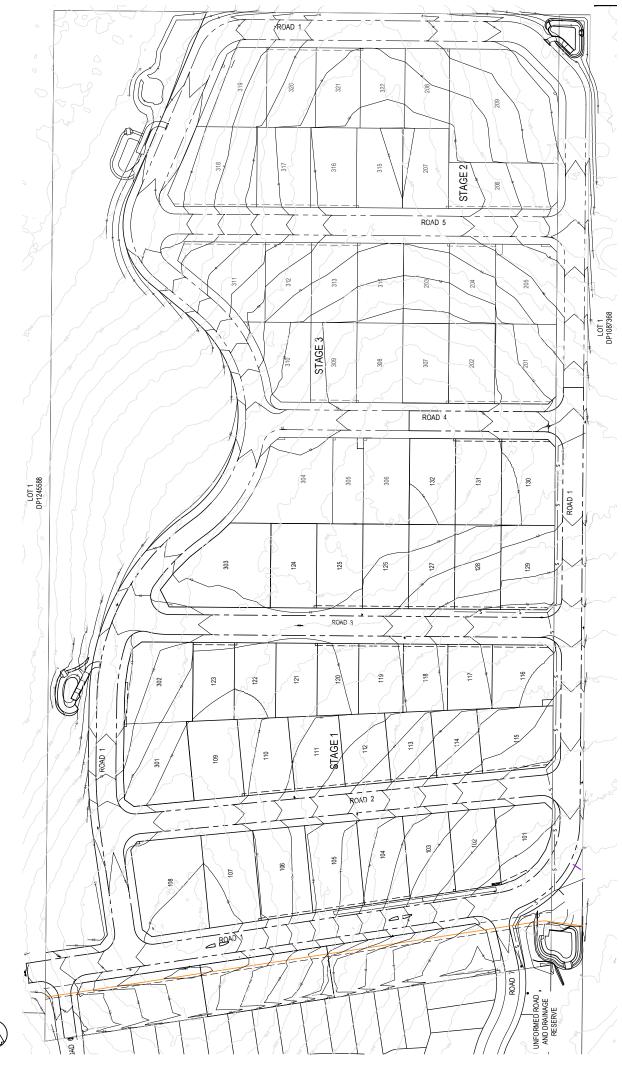
cc. Thrumster Business Park Pty Ltd Encl. Appendix 1: Overall Layout Plans Appendix 2: Extract of the Council Flooding Map

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# **Appendix 1: Overall Layout Plans**





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Appendix 2: Extract of the Council Flooding Map

