City of Greater Geelong, Statutory Planning - Date Received 1/07/2026

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Ref: J10325
Contact: [redacted]

30 June 2026

City of Greater Geelong

RE: PP-1233-2023 – 10 & 20 BATH ST, LARA
FURTEHR INFORMATION LETTER (25 May 2026)

We refer to comments previously provided by Council in the request for further information letter dated 25 May 2025 in relation to flooding and drainage. We thank you for the opportunity to provide additional detail and clarification to the queries raised.

The below response outlines the items raised and provides responses that have been prepared by Loetis in conjunction with Venant Solutions. We note that the work prepared by Loetis and Venant Solutions on this project builds upon the earlier works undertaken under the permit application for 10 Bath Street prepared by Water Technology and Stantec. We provide the following responses:

(Note Council RFI raised in bold and italics, Loetis & Venant Solutions response in regular text)

Item #6 Flood impact assessment does not specify what modelling scenarios have been used for existing and developed conditions for the 1% AEP event.

ARR 2019 (ARR v4.1) no climate change is adopted as the Venant Solutions report, page 1, first dot point.

Item #7 - In relation to the Existing Conditions Assessment:
a. Existing drainage conditions should be defined, including network configuration, capacity constraints, outfall conditions, and known flood behaviour.

Please refer to the Venant Solutions Flood report, pages 1 – 5.

b. Catchment response should be modelled using SSP3-7.0 (2030) rainfall intensities to identify the critical storm duration and establish baseline hydraulic performance.

The report presents flood impact assessment rather than a local drainage design. It is noted that the proposed drainage outfalls into Elco drain rather than an existing underground drainage network. The existing flood behaviour is presented as part of the flood level and depth mapping (Venant Solutions report, figure 4).

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The Site is located within a large and complex Catchment. The flood modelling undertaken for this flood assessment is based on the current Council Lara flood study which it is understood Council has not yet updated to the latest ARR version (ARR v4.2) (although we understand this may be currently underway).

For such small development, it is considered unreasonable to expect council the extensive flood mapping to be updated given the significant work that would be required for such an update. We also please note that the flooding on the site is influenced by the local catchment as well as Elco Drain on the northern boundary.

Any Council requirement to update modelling for such a large and complex model for small infill (brownfield) developments is considered unreasonable and impracticable to undertake. The proponents earlier work and submissions on this site were not subject to this request and it is understood were accepted by Council. As such, it is considered that this request is not reasonable, nor practicable and is not in line with any current legislative requirements.

Item #8 - In relation to the Developed Conditions Assessment:
c. Stormwater infrastructure should be designed to accommodate SSP3-7.0 (2100) rainfall intensities.
d. System performance should be verified under design events to demonstrate compliance with adopted levels of service.

Please refer to response 7b.

The flood report assesses the 1% AEP event and demonstrates no flooding on the proposed lots or adverse impact on the neighbouring properties. The local drainage pipe network will be required to be designed and documented in the detail design phase to demonstrate to Councils satisfaction that it meets the minor event (20% AEP) requirements as set out in the IDM. In line with the IDM and standard practise, it is considered that this is not required to be demonstrated at a pre permit phase of the development.

Item #9 - Please provide a proposed concept layout which clearly demonstrates how stormwater flows for the minor and major events are going to be conveyed to the legal point of discharge. It also should include indicative pipe sizes and proposed lot and road network layout.

The flood report demonstrates the management of the 1% (major) AEP event. Minor events were not run in TUFLOW for the purposes of impact assessment because these events for the Lara flood study were not provided by Water Technology and a request for Council to provide a RORB model was refused on 27/01/2026.

The road/lot layout have been included in the Appendix A (page 10-12 & fig 7 of the Venant Solutions report has the imbedded background pipes included in the 1% model). Noting the above comments, we enclose a plan detailing the adopted pipe sizes as modelled in the Venant Solutions report. These pipes will be considered the basis for the minor (5%) design when undertaken in the detail design, noting that there may be requirement for upsizing or argumentation for minor event control at this time, however given their embedment in the TUFLOW model, no downsizing would be undertaken (unless remodelled to the responsible authorities satisfaction).

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Noting all of the issues raised with respect to the flood modelling. It is not considered reasonable to require a relatively small brownfields / infill site to model regional flood events to the same extent and detail as say a new growth precinct. Given that the underlying model being used in this instance is a larger regional model that was prepared for Council, and Council has previously advised that they are unwilling to give approval for the full hydrological model information to be supplied to Venant Solutions (via Water Technology), it is considered impracticable to undertake detailed assessment of potential future climate change scenarios without re-creating the model in its entirety. Given this is a small site (~1.7Ha) within a much larger regional catchment ~10+km^2, this is not considered reasonable or practicable to deliver and results in an unreasonable impost on the proposed development of this site.

Item #9 - Environment Unit is also requesting further information for demonstration of how the volumetric reduction targets in EPA 1739.1 Urban stormwater management guidance note will be achieved as per Standard C25 from Clause 56.07. This request is to ensure there is minimal increase in stormwater and protect any environmental values within receiving waters from degradation by stormwater. The proposed Stormwater Management Plan outlines that the proposed basin will be a detention basin but it's not clear how much it will store and whether it meets the volumetric reduction targets in the EPA publication 1739.1.

The current design treatment train which incorporates a wetland within the proposed drainage basin results in a reduction in the mean annual flows for the developed site of 1.73ML per year. This equates to 32.2% reduction in volume of the developed site. This information is available in table 6 of the submitted SMP report for the site, a copy is recreated below.

Table 6 - MUSIC Results – Ultimate

Treatment Train Effectiveness - Receiving Node

	Sources	Residual Load	% Reduction
Flow (ML/yr)	5.36	3.63	32.2
Total Suspended Solids (kg/yr)	227	44.6	80.3
Total Phosphorus (kg/yr)	0.936	0.479	48.8
Total Nitrogen (kg/yr)	12.1	6.62	45.3
Gross Pollutants (kg/yr)	224	0	100

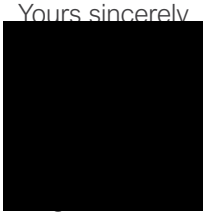
Noting this reduction in volumes against the guidelines outlined in EPA publication 1739.1, it is noted that the site is located within a developed catchment with a highly modified flow regime. Further, there is limited opportunity to provide for additional volume reductions in a development of this size, there are no nearby potential water users and the soil type is not suitable for infiltration. Accordingly it is considered that the development has undertaken all practicable measures to reduce increases in mean annual flows volumes and thereby accords wit the requirements of the EPA publication 1739.1.

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We trust that the above satisfies the items raised in the RFI, however should you wish to discuss further, we would welcome the opportunity to arrange a meeting with representatives of Council, Venant Solutions and Loetis to discuss these matters further.

Should you have any questions, please contact me on telephone 0400 550 096 or email info@loetis.com.au

Yours sincerely



Director
Loetis Pty Ltd