

16 March 2026

Illawarra Retirement Trust (IRT)
Att. Nicole William
By email

Dear Nicole,

FLOODING PEER REVIEW FOR STATE SIGNIFICANT DEVELOPMENT APPLICATION (SSDA) AT 4-6 POPES ROAD, WOONONA (SSD-73910208), IN RESPECT OF DEPARTMENT OF PLANNING, HOUSING AND INFRASTRUCTURE RFI DATED 25 FEBRUARY 2026

1 Overview

Martens and Associates Pty Ltd (**MA**) have prepared this peer review on behalf of Illawarra Retirement Trust (**IRT**) in respect of the flood related issues raised by the Department of Planning, Housing and Infrastructure (**DPHI**) in their *Request for Additional Information*, dated 25 February 2026 (the **RFI**) and responses made by ACOR in their letter dated 3 March 2026 and Innovis in their memorandums dated 3 and 10 March 2026.

This peer review has been prepared following our previous flooding peer review of the original SSDA submission and corresponding RFIs and responses documented in our letter dated 4 December 2025 (Ref: P2510919JC01V02).

This letter provides a summary of the outcomes of our further peer review.

2 Information Reviewed

We have reviewed and considered the following:

1. Department of Planning, Housing and Infrastructure (**DPHI**) *Request for additional information*, dated 25 February 2026 (the **RFI**).
2. *Re: IRT Woonona – Responses to Department of Planning, Housing and Infrastructure Request for Additional Information dated 25 February 2026 (RFI Response)*, prepared by ACOR Consultants, dated 13 March 2026.
3. Memorandum dated 3 March 2026, Rev A (Ref: J1406-STR-MEM-006[A]), prepared by Innovis regarding structural soundness of proposed buildings with respect to flooding (**Innovis SS Memo**).

4. Memorandum dated 10 March 2026, Rev A (Ref: J1406-CIV-MEM-003[A]), prepared by Innovis regarding diversion of stormwater to the north of building E (**Innovis SW Memo**).
5. RFI response letter dated 4 December 2025 prepared by ACOR Consultants in response to DPHI and Council's previous RFIs (**ACOR's RFI Response**).

3 Peer Review Outcomes

As part of our peer review process, we asked for additional information to further clarify and evaluate ACOR's responses to the RFI comments and provide additional assessment of whether the overall issues have been effectively addressed.

Based on the additional information provided and the Innovis Memos we are satisfied that the RFI comments have been effectively addressed. Further to our previous peer review, we are still satisfied that the proposed development mitigates flood risks to an acceptable level and is compatible with the site's flood function and behaviour, with no material offsite impacts.

At Table 1 below we provide DPHI's RFI comments, ACOR's response to the RFIs, and our peer review comments in respect of each item.

Table 1 MA peer review of DPHI comments and ACOR responses.

DPHI RFI	ACOR Response	MA Peer Review
1. Wollongong Local Environmental Plan 2009. The Department notes from Section 5 (and associated modelling) of the Flood Report prepared by Acor, dated 26 May 2025 that the proposal is likely to increase flooding impacts upstream of the western boundary. Please investigate and resolve this likelihood of upstream flooding, having regard to clause 5.21 of the Wollongong LEP which seeks "to avoid adverse or cumulative impacts on flood behaviour and the environment"	1. Wollongong Local Environmental Plan 2009 Response: Flood impact maps were updated after Flood Report by ACOR Consultants dated 26 May 2025, with flood impact maps presented in ACOR letter IRT Woonona – SSDA Response dated 4 December 2025. In response to Clause 5.21 of the Wollongong LEP 2009, inspection of model results shows that increases in water level in the 1% AEP event on 2 Popes Road (CPI-/SP96287), upstream of the western boundary, are between 10-43 mm and are contained in a localised area of the open channel upstream of the inlet of the culvert under the driveway. These localised impacts are not likely to cause an actionable nuisance and do not have the potential to worsen the use or enjoyment of the land. Flood impacts are not evident upstream of the western boundary for the 20% AEP event, and negligible and localised within the open channel in the 10% and 5% AEP events.	At Figure 1 and Figure 2 (Attachment A of this letter), we have reproduced the 1% AEP and 1% AEP with climate change impacts to the west of the site including the maximum water level increases. We agree that the impacts further west are confined to within the open channel under both the 1% AEP and 1% AEP with climate change events. Impacts closer to the site boundary are confined immediately behind a solid brick wall north of the existing fence opening. Existing 1% AEP (with and without climate) hazards in this area are already H5 and are unchanged by the proposed development and thus will not affect the safe use of the driveway. Overall, these impacts are considered acceptable, as they do not affect neighbouring buildings or the driveway and would not impact the existing land use of the adjacent land.
2. Diversion of stormwater flow to the north of Building E. While the Department notes that the proposed stormwater culvert is necessary to divert stormwater	2. Diversion of stormwater flow to the north of Building E Response: The Department's suggestion to replace the culvert (in actual fact a	We understand that the proposed northern channel is to be fully enclosed with a grassed swale provided above (refer to Innovis SW Memo).

DPHI RFI	ACOR Response	MA Peer Review
around Building E, the Department is concerned with the poor landscape quality, visual appearance and safety of the culvert dominating the northern part of the site which is highly visible from surrounding residences and the Princess Highway. The Department therefore requires design changes (which could take place via condition, if approved) for this culvert to be replaced with 1.2m pipe, with a slight swale feature above with gentle side batters (at 1:4 to facilitate mowing). The Department considers that this change will improve landscape quality, visual appearance and safety.	concrete open channel) with a 1.2 m pipe will be replaced with a reinforced concrete box culvert (RCBC). The roof of the culvert will be topsoiled and grassed (with a potential slight swale feature). This can be investigated and will require flood model simulations to confirm size of the box culvert. It is agreed that this can be conditioned.	
3. Additional recommended reporting. The Department notes that the Applicant may be preparing an updated Flood Impact Risk Assessment (FIRA) in response to Council's submission to the RtS. The Department requests further updates to the FIRA (which could take place via condition, if approved) to provide the below:	3. Additional recommended reporting Response:	
a. the 1% AEP post development map (Figures 50 to 52) extent is to be updated to show the entire site	a. The 1% AEP post development map (Figures 50 to 52) have been updated to include the entire site. See attached.	No further comment.
b. comparison of the 1% AEP pre-development and post-development flood depths/levels and velocity maps reveals differences in flood extent that may be attributed to variations in post-processing methods. To ensure consistency and comparability, all flood maps are to use the same mapping methodology	b. The same methodology has been applied. No further response is provided.	No further comment.
c. the setback from Collins Creek to buildings in the southern portion of the site is to be shown to confirm the minimum 10m requirement is met	c. The setback from Collins Creek to buildings in the southern portion of the site to show the 10 m setback is shown on Architectural drawings.	No further comment.
d. flood function and flood risk precinct maps are required to address Council's request for pre and post development	d. Flood storage calculations will be undertaken after the completion of flood model simulations for the enclosed channel (culvert) outlined in Item 2 above. It is	The enclosed channel is expected to have a negligible effect on site flood characteristics compared to the open channel design. We understand that the updated hydraulic modelling will

DPHI RFI	ACOR Response	MA Peer Review
<i>flood storage volumes and flood impacts.</i>	<i>agreed that this can be conditioned.</i>	assess pre- and post-development flood storage volumes and verify that the revised design does not result in material off-site impacts or a loss of site flood storage. On this basis, flood function and flood risk precinct mapping is not considered necessary.
4. Structural soundness. <i>The Department requests a statement from a structural engineer (which could take place via condition, if approved) to confirm that the proposed structures on site can withstand the forces of floodwater, debris & buoyancy up to & including a probable maximum flood (PMF) plus freeboard.</i>	4. <i>Structural soundness Response: The project structural engineer shall provide this statement. It is agreed that this can be conditioned</i>	We understand this has been addressed in the Innovis SS Memo.

If you require any further information, please do not hesitate to contact our offices.

For and on behalf of

Martens & Associates Pty Ltd



Ryan Doyle

BEng (Hon1), DipProfEngPrac
Senior Civil Engineer

Attachment A – Figures

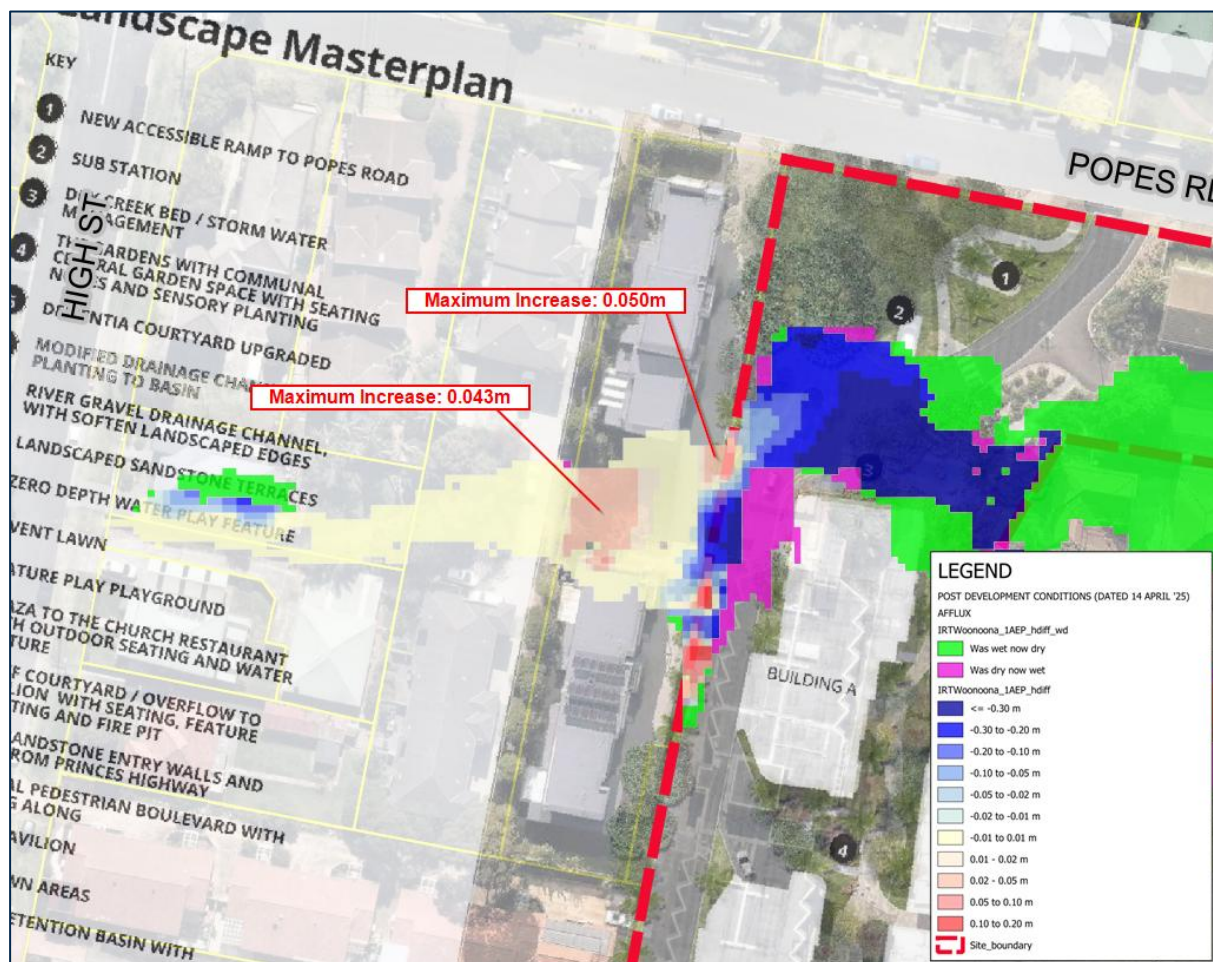


Figure 1 1% AEP water level afflux from ACOR RFI Response (4 December 2025). (Max water level increases provided by ACOR on 6 March 2026).

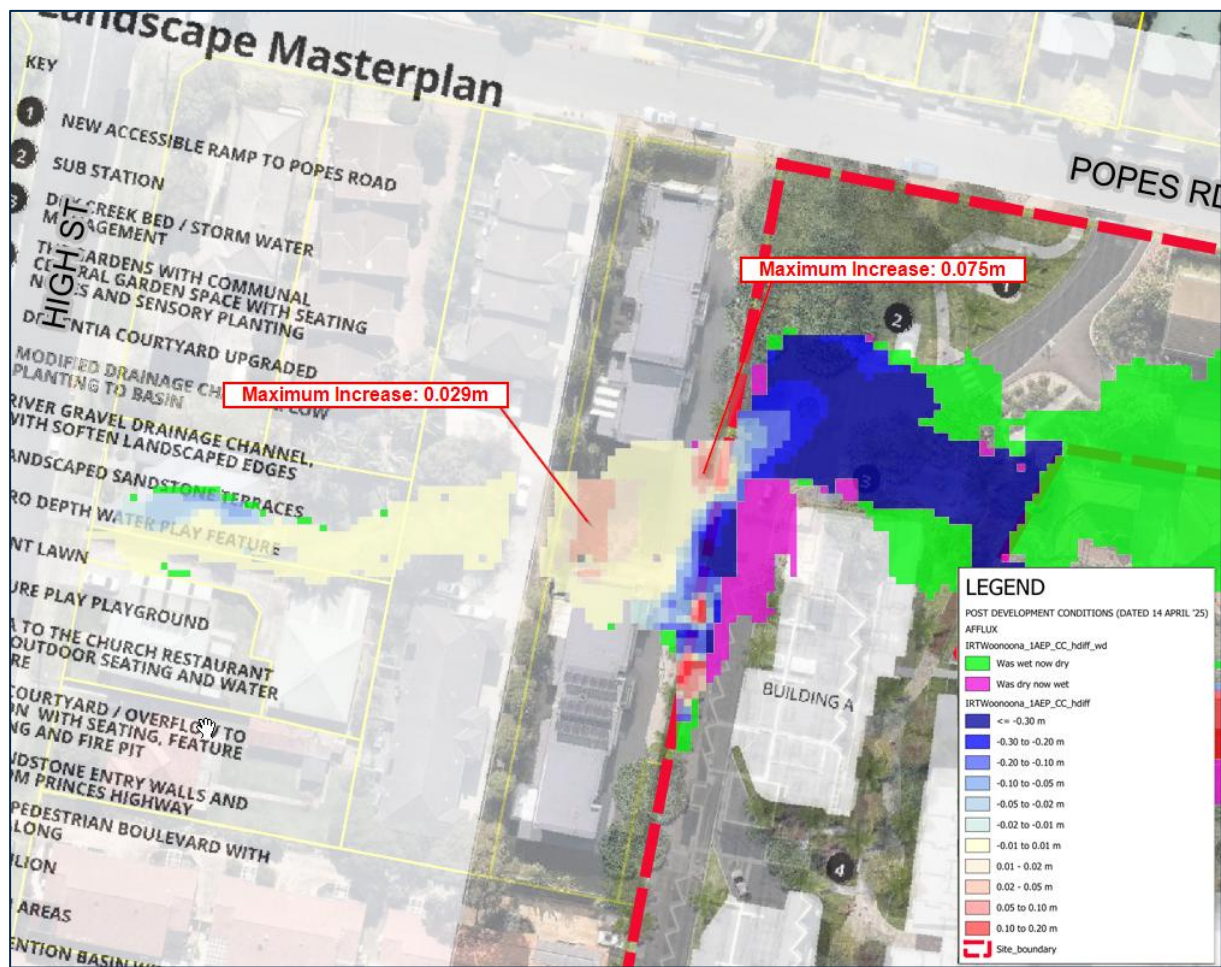


Figure 2 1% AEP with climate change water level afflux from ACOR RFI Response dated 4 December 2025. (Maximum water level increases provided by ACOR on 6 March 2026).