

Cameron Sargent
 Team Leader, Key Sites and TOD Assessments
 Department of Planning, Housing and Industry
 4 Parramatta Square, 12 Darcy Street,
 Parramatta NSW 2150

Re: Mowbray Road, Lane Cove North, Affordable Housing (SSD-71687208) Request for Additional Information

Dear Cameron,

Thank you for your letter outlining a request for additional information for the assessment of the Mowbray Road, Lane Cove North, Affordable Housing Development (SSD-71687208).

Our response to the matters outlined in the request for additional information letter and comments and recommendations raised by Conservations Programs, Heritage and regulation (CPHR) Group are addressed in the table below and the following attachments:

- Attachment A: Updated Stormwater Management and Flood Impact and Risk Assessment, prepared by WSP
- Attachment B: DPHI and CPHR RtS Response Letter, prepared by WSP
- Attachment C: Updated Architectural Drawings, prepared by DKO
- Attachment D: Updated Landscape Drawings, prepared by Land and Form
- Attachment E: Updated Landscape Design Report, prepared by Land and Form

Table 1: Response to issues raised by DPHI and CPHR Group

RFI matter	Response
Department of Planning, Housing and Infrastructure (DPHI)	
<p><u>1. Flooding</u></p> <p>Provide a revised Stormwater Management, and Flood Impact and Risk Assessment report that addresses the following:</p> <p>(a) Clarify how the entry points to the upper ground level, ground level and lower ground level of the development are protected up to the flood planning level, when the finished floor levels for entry points 5, 7, 8 and 12 are below the flood planning levels (as identified in Table 2 of the report).</p>	<p>This issue is addressed in the updated Flood Stormwater Management and Flood Impact and Risk Assessment at Attachment A and DPHI and CPHR RtS Response Letter at Attachment B.</p>

Include Figure 20, which is missing from the current report.

Conservation Programs, Heritage and Regulation (CPHR) Group

1. Inconsistency in provided documents

CPHR notes that the landscape plans have been updated to show rip rap to the overland flow path. However, the landscape plans show a landscaped retaining wall across the flow path. The flood mapping appears to demonstrate a continuous gradient in this area and no drop pit has been provided in the stormwater pipeline to indicate a change in level. The RTS notes depths of 0.25 m at 2 m/s will flow in the overland flow path in an event as frequent as the 5% event which would be considered H5 hazard. This is not consistent with the provided flood mapping.

Recommended action:

- Check the FIRA and landscape plans for consistency and provide results in a manner which clearly describes expected flood behaviour and how this risk is managed.
- Prepare landscape cross sections and long sections for the constrained overland flow path down the side of the building which can be modelled in the FIRA. This is requested to ensure that the same design criteria are applied to flood modelling, stormwater design and landscape/architectural design.

This issue is addressed in the updated Flood Stormwater Management and Flood Impact and Risk Assessment at Attachment A and DPHI and CPHR RtS Response Letter at Attachment B.

2. Lack of comprehensive mapping for offsite afflux impacts

A thorough flood impact assessment should consider potential effects beyond the immediate development site, including upstream and downstream areas. However, the RTS has not provided flood maps at a sufficient scale to assess offsite afflux impacts. The FIRA does not demonstrate the impacts of the diversion of floodwaters on upstream properties.

Furthermore, the RTS states that the development will result in changes to flood levels of up to 20 mm on surrounding streets. In principle, significant flood impacts are greater than 10 mm, which

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corresponds to the generally acknowledged level of accuracy of flood models to detect impacts. For extreme events, larger flood impacts may be acceptable on a merit basis, but any change in flood levels should be assessed alongside changes in hazard categorisation and therefore a thorough understanding of hazard afflux is in this instance also important.

The newly provided climate change and Probable Maximum Flood (PMF) mapping indicate that the proposed mitigation strategies are not adequate to protect the adjacent property and unacceptable impacts occur. Mitigation of impacts on private property is not limited to those which occur in 1% or smaller Annual Exceedance Probability (AEP). For any locations where significant impacts are proposed, appropriate mitigation measures should be proposed to limit impacts.

Recommended action:

The FIRA should:

- provide flood impact mapping that extends to both upstream and downstream areas to illustrate potential afflux effects and ensure that flood redistribution does not cause adverse impacts to neighbouring properties.
- incorporate any necessary mitigation measures to prevent adverse effects ensuring these are included prior to determination rather than left to future stages.

3. Incomplete flood hazard and hydraulic categorisation mapping

A robust flood risk analysis requires a comparison between existing and post-development conditions to assess any changes in flood hazard levels. However, the revised FIRA has only provided flood hazard mapping for post-development conditions in the PMF event, without including a baseline for comparison. Post development flood hazard results indicate H5 and H6 hazard levels encompass the development site, raising concerns about flood safety. The revised FIRA does not include flood hydraulic categorisation maps, which are critical for assessing flood risk, despite previous requests for the flood assessment to be amended in accordance

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with the Flood Impact and Risk Assessment Guideline LU01.

Recommended action:

The FIRA should include:

- flood hazard mapping for existing conditions for all the modelled events to provide a clear baseline for comparison
- flood hydraulic categorisation maps, to comply with Appendix A of the Flood Impact and Risk Assessment Guideline and ensure that categorisation is provided for all flooding scenarios modelled up to the PMF.

4. Incomplete high hazard conditions on roadways and emergency management strategies

The flood hazard assessment indicates that road conditions will be classified as H4 to H5 hazards, signifying a high danger to people, vehicles, and emergency responders. CPHR has previously recommended consultation with the State Emergency Service (SES) regarding emergency management strategies. This has not been addressed in the revised submission.

Section 2.6 of the FIRA (Flood Emergency Response Strategies) does not adequately address the emergency management constraints of the site requirements. Emergency Management for the site should align with the Flood Risk Management Manual, specifically referencing the 2023 Flood Risk Management Guideline EM01 – Support for Emergency Management Planning, which provides principles for effective emergency management.

Recommended action:

- Consult with the SES to develop an appropriate emergency management strategy tailored to the site’s flood constraints, ensuring alignment with Flood Risk Management Manual requirements.
- Incorporate emergency management strategies that prioritise safe evacuation and accessibility during flood events, including the provision of evacuation maps at an appropriate scale showing flood-free access up to the PMF level.

This issue including correspondence between WSP and SES is outlined in the updated Flood Stormwater Management and Flood Impact and Risk Assessment at Attachment A and DPHI and CPHR RtS Response Letter at Attachment B.

WSP / Homes NSW are still awaiting a response from SES. WSP will continue to liaise with SES to finalise the Flood Emergency Strategy for the site.

Given the site is not significantly impacted by flooding, it is anticipated that further consultation and finalisation of the Flood Emergency Strategy can be addressed post determination and during the detailed design stage.

<p><u>Biodiversity</u></p> <p>CPHR has still not received access to the case in the BAM-C. Once the case is finalised the assessor must 'submit to consent authority' in the BAM-C, the consent authority in this case being 'Greater Sydney – Compliance & Regulation'.</p>	<p>As requested, the case in the BAM-C has now been submitted to the Greater Sydney Compliance & Regulation Authority.</p>

We trust that this information satisfies matters raised by DPHI and CHPR Group and kindly request that DPHI finalise the assessment of this application.

Should you have any queries about the above matters, please do not hesitate to contact Mikhail Pachin at Mikhail.Pachin@homes.nsw.gov.au.

Yours sincerely,



Michael File

Planning Advisor

0433 458 984

Michael.file@homes.nsw.gov.au