Department of Climate Change, Energy, the Environment and Water

Your ref: SSD-57838709
Our ref: DOC25/199173

Mr Patrick Nash
Senior Planning Officer
Department of Planning, Housing and Infrastructure
4 Parramatta Square, 12 Darcy Street
PARRAMATTA NSW 2124

11 April 2025

Subject: Environmental Impact Statement – Ross Street Teaching and Learning Hub (SSD-57838709)

Dear Mr Nash

Thank you for your referral received 7 March 2025 seeking comments from the Conservation Programs, Heritage and Regulation (CPHR) Group in the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) regarding the Environmental Impact Statement (EIS) for State Significant Development (SSD) Ross Street Teaching and Learning Hub.

CPHR has reviewed the EIS and relevant supporting technical reports and provides its comments and recommendations at Attachment A. In summary:

- the Flood Impact and Risk Assessment (FIRA) does not appear be a complete cumulative assessment
- the impacts of this proposed development are not assessed in isolation, making it difficult to understand the potential change in flood risk
- high hazard areas on Science Road have become more concentrated and potentially increased across all flood events
- the proponent must demonstrate how floodwater is prevented from entering the basement in all events up to and including the Probable Maximum Flood (PMF) event
- the Flood Risk Management Guideline EM01 Support for Emergency Management Planning should be addressed
- there is an additional Gross Floor Area 713 m^2 difference compared to the Biodiversity Development Assessment Report (BDAR) waiver request report.

Please note that CPHR should not be given a role in any conditions of consent without prior agreement.

Should you have any queries regarding this matter, please contact Angela Stewart, Senior Conservation Planning Officer, at angela.stewart@environment.nsw.gov.au.

Yours sincerely

Louisa Clark
Director
Regional Delivery - Greater Sydney Branch
Conservation Programs, Heritage and Regulation Group

Attachment A

CPHR advice on EIS – Ross Street Teaching and Learning Hub (SSD-57838709)

Documents Reviewed

CPHR has reviewed the following reports:

- *A01 Ross Street Teaching and Learning Hub EIS* (MG Planning, February 2025)
- *Appendix D – Architectural Drawings* (BVN, various dates)
- *Appendix E – Architectural Design Report* (BVN, 18 February 2025)
- *Appendix I – Civil Engineering Drawings* (Robert Bird Group, various dates)
- *Appendix R – Landscape Plans* (Oculus, 20 September 2024)
- *Appendix S – Landscape Report* (Oculus, 23 October 2024)
- *Appendix CC – Arboricultural Impact Assessment* (tree iQ, 26 August 2024)
- *Appendix HH – Flood Impact and Risk Assessment* (GRC Hydro, 19 February 2025).

Key Assessment Issues

Flooding

The Flood Impact and Risk Assessment (FIRA) modelling is based on the Johnstons Creek Flood Study (WMAwater Pty Ltd for the City of Sydney, 2015). CPHR considers this study is relevant to this SSD. Significant changes were presented in the base case data model by GRC Hydro which were not included in the Johnstons Creek Flood Study model. These changes included existing buildings and other developments on the University of Sydney Camperdown Campus (subject site), updated survey data and stormwater management.

In summary, the FIRA has provided response to each of the SEARs, however CPHR is concerned that requirements from the Flood Risk Management Guideline LU01 Flood Impact and Risk Assessment (LU1 Guideline) have not been adequately addressed.

1.	*Flood impact*	The FIRA's cumulative impact assessment considers the proposed development and the approved Science Road stormwater upgrade works undertaken as part of the University of Sydney Campus Improvement Works (SSD-6123). However, it does not provide a cumulative impact assessment for all recent developments across the subject site, only projects from 2015-16. For example, the upgrade to the adjacent University Oval 2 was underway in January 2025, does not appear to be included in the model. The FIRA has not assessed the impacts of this proposed development in isolation, making it difficult to understand the potential change in flood risk. The FIRA interprets the existing demountable buildings on the subject site as a blocked building footprint in the model, preventing floodwater from passing across the subject site. However, these buildings are located on elevated piers over an old car parking area. CPHR highlights that while blocking building footprints is a practice in large scale studies, it can overestimate flood hazards on roads, miss existing flow paths and underestimate the impacts of changes in flood behaviour for new developments, particularly those designed to be above the flood planning level, and exclude water. **Recommended actions:** 1. Provide a map showing all the changes made to the flood model since the Johnstons Creek Flood Study.

		2. Include the latest works at University Oval 2 in the flood model. 3. Provide flood risk impact mapping for the change in risk from the development, using the Science Road works and all other prior developments as the base case. This should be in addition to the mapping that considers both the proposed development and Science Road works. 4. Remove the blocked footprint of the demountable buildings from the base case flood data model to accurately represent flow paths and impacts. 5. Compare the cumulative impacts of development to the base case Johnstons Creek Flood Study data model including the demountable buildings correction.
	Extent and Timing	Pre-determination at Response to Submissions

2.	*Velocity increase*	CPHR identified that Figures C05, C06 and C07 show increases in velocity greater than 0.4 m/s for each flood event modelled. In comparison this is different to Table 12 where it suggests that flood velocities decrease on Science Road. **Recommended action:** 6. Review and correct any inconsistencies in the reported velocity values.
	Extent and Timing	Pre-determination at Response to Submissions

3.	*Hazard categorisation*	CPHR observed that under existing conditions, Science Road is categorised as H5 and H6. A comparison of the FIRA's hazard figures pre- to post-development indicates that previously spread-out high hazard areas on Science Road have become more concentrated and potentially increase overall across all flood events. Although the maximum hazard category remains unchanged, any increase in depth or velocity is not desirable and efforts have not been made to mitigate these impacts. H5 and H6 hazard categorisations are dangerous for people, vehicles and buildings. While these impacts are confined within the subject site, they would impact existing facilities and roads within the University Campus. The full extent of increase in depth and velocity should be provided, along with modelling of a more frequent flood event to determine if more frequent events result in a change in hazard category. **Recommended actions:** 7. Discuss the concentration of high hazard flows on Science Road and evaluate additional impacts of the development on this change. 8. Include the full extent of increase in depth and velocity within the subject site. 9. Model more frequent flood events in accordance with the requirements of the LU01 Guideline. 10. Include proposed stormwater drainage in the flood model. 11. Provide mitigation measures to demonstrate that changes in flood behaviour are addressed.

	Extent and Timing	Pre-determination at Response to Submissions

4.	*Flood risk to pedestrians*	The proposed development includes increased pedestrian access along Science Road, where new areas of high hazard flooding are observed. CPHR requests further detailed consideration to address flood risk to pedestrians along Science Road. **Recommended action:** 12. Address flood risk to pedestrians on Science Road.
	Extent and Timing	Pre-determination at Response to Submissions

5.	*Potential flood impacts to the basement*	The Architectural Drawings in Section 01 show a basement level of 21.0 m Australian Height Datum (AHD), which is significantly below the design flood planning level of 25.5 m AHD as indicated in the FIRA for this subject site. Although this level is accessed via internal stairs from an upper level, the basement has a larger footprint than the upper levels. It is not clear if all possible entry points, including ventilation for the basement have adequate flood protection. The basement contains critical plant and other infrastructure, and should be designed to exclude water, particularly if the emergency management strategy requires shelter in place. **Recommended action:** 13. Demonstrate how floodwater is prevented from entering the basement in all events up to and including the Probable Maximum Flood (PMF) event.
	Extent and Timing	Pre-determination at Response to Submissions

6.	*Emergency Management*	CPHR requests the Flood Risk Management Guideline EM01 Support for Emergency Management Planning (EM01) be addressed. The EM01 Guideline recommends that any emergency response strategy be consistent with NSW State Emergency Service (SES) local flood plans. Flood emergency management issues should be co-ordinated with the SES and be adequately resolved prior to determination to ensure that the development would be compatible with the flood function and behaviour of the land. CPHR considers private flood emergency response plans are not a substitute for land use planning. Section A2.4.2 of the EM01 Guideline states that 'requiring a site-specific flood response plan as a condition of consent for development is not considered a genuine attempt to manage flood risk to future occupants' and provides further guidance on issues with such plans. Section 1.2 (Regional weather warnings and preliminary evacuation) of the flood emergency management plan includes unfeasible requirements. CPHR requests the proponent review the requirements in consultation with the University's facility manager to discuss the approach of early evacuation for each severe weather or thunderstorm warning. The review should refer to an estimate of the number of such warnings in the Sydney area over the past 12 months. **Recommended actions:** 14. Coordinate flood emergency management issues with the SES.

		15. Update the preliminary management plan in collaboration with the University's facility manager, ensuring it includes only practical and implementable solutions. 16. The flood emergency plan should address the established planning principle on the plans of management in accordance with Renaldo Plus 3 Pty Limited v Hurstville City Council [2005] NSWLEC 315.
	Extent and Timing	Pre-determination at Response to Submissions

7.	*Water Sensitive Urban Design (WSUD)*	'Ocean protect' treatment cartridges are proposed for this development to achieve water quality outcomes. CPHR advises the proposed development should be reviewed to ensure these cartridges are an acceptable alternative to soft landscaping treatments typically recommended by WSUD policies. **Recommended action:** 17. Review the proposed stormwater treatment against Council's requirements.
	Extent and Timing	Pre-determination at Response to Submissions

Biodiversity

8.	*Biodiversity Development Assessment Report (BDAR) waiver*	The project description in the EIS states a gross floor area (GFA) of 6,913 m^2, while the BDAR waiver request report stated a GFA of 6,200 m^2. CPHR seeks clarification on the additional GFA 713 m^2 for the proposed development. CPHR understands the number of storeys and Figure 30 of the EIS appear to be consistent with the BDAR waiver granted for this SSD on 31 May 2024. If the development footprint has changed, the proponent will need to lodge a new BDAR waiver request or prepare a BDAR. **Recommended actions:** 18. Provide a description of the additional 713 m^2 GFA difference between the BDAR waiver report and EIS. 19. Lodge a new BDAR waiver request or prepare a BDAR if the development footprint has changed.
	Extent and Timing	Prior to determination

End of Submission