

Our Ref: 3196 Your Ref: SSD-7712771

10 July 2025

Adam Flynn Department of Planning, Housing & Infrastructure Locked Bag 5022 Parramatta NSW 2124

email: adam.flynn@dpie.nsw.gov.au CC: helen.slater@ses.nsw.gov.au

Dear Adam,

State Significant Development Application for Mixed use with infill affordable housing Help Street, Chatswood

Thank you for the opportunity to provide comment on the State Significant Development Application for Mixed use with infill affordable housing 691-699 Pacific Highway, Chatswood. It is understood that the proposed development seeks approval for:

- Site preparation works including demolition of existing structures, vegetation clearing and bulk earthworks.
- Construction of a 34-storey shop-top housing development comprising:
 - Two-storey podium comprising
 - A 32-storey tower comprising 101 dwellings (including 27 in-fill affordable housing apartments).
- Construction of an 8-level basement providing a total of 179 car parking spaces for residential, non-residential and visitor use.
- Communal open space on level 2 to include a swimming pool, spa, sauna, gym, BBQ area and associated facilities.
- Associated landscaping and preparation works.
- Services and infrastructure improvements as required.

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes, planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

The NSW SES recommends that consideration of flooding issues is undertaken in accordance with the requirements of NSW Government's Flood Prone Land Policy as set out in the <u>Flood</u> <u>Risk Management Manual</u> 2023 (the Manual) and supporting guidelines, including the <u>Support</u> <u>for Emergency Management Planning</u> and relevant planning directions under the



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Environmental Planning and Assessment Act, 1979. Some of the key considerations relating to emergency management are further detailed in Appendix A.

In summary, we recommend:

- **Seeking** further flood information regarding time to overtopping and duration of isolation for the site and surrounding roads, to better understand risks to site users.
- **Further consideration** should be given to the proposed evacuation strategy, the Flood Impact and Risk Assessment (FIRA) states "*The evacuation has to occur in a northerly direction along the Highway which becomes flood free*"¹, however imagery shows a concrete median preventing north bound access to the Pacific Highway.²
- Considering **the impacts of climate change**. It is estimated that the actual probability of a 1 in 100 AEP for this catchment area is approximately a 1 in 44 AEP event for the current 2025 scenario.³ For the proposed development site, this could result in more frequent inundation and/or isolation than what is currently expected based on previous modelling.
- Pursuing site design and stormwater management that **reduces the impact of flooding** and minimises any risk to the community, particularly for the Eastern part of the site which becomes high hazard under proposed conditions.

You may also find the following Guidelines available on the NSW SES website useful:

- <u>Reducing Vulnerability of Buildings to Flood Damage</u>
- Designing Safer Subdivisions
- Managing Flood Risk Through Planning Opportunities

Please feel free to contact Kate Dawes via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely,

Cline Flyhnm

Claire Flashman Acting Manager Emergency Risk Assessment NSW State Emergency Service

¹ SGC Engineering, 2024, Flood Impact and Risk Assessment, Flood Risk, Page 10

² TTPP, 2025, Transport Impact Assessment, Appendix B, Figure 2 Swept Path Analysis, Page 40

³ WMAwater. 2024. Climate Change Calculator. Retrieved 7 July 2025 from

https://ccc.wmawater.com.au/



ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline⁴

Principle 1 Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.

Any proposed Emergency Management strategy for an area should be compatible with the evacuation strategies identified in the NSW State Flood Plan⁵ and the Willoughby/Lane Cove Flood Emergency Sub Plan.⁶

Principle 2 Decisions should be informed by understanding the full range of risks to the community.

Decisions relating to future development should be risk-based and ensure Emergency Management risks to the community of the full range of floods are effectively understood and managed.

Further, risk assessment should consider the full range of flooding, including events up to the Probable Maximum Flood (PMF) and not focus only on the 1% AEP flood. Climate change should also be considered. It is noted that the site itself is partially affected by overland flooding in a 1% Annual Exceedance Probability (AEP) event.⁷ During a Probable Maximum Flood (PMF) event the site becomes a High Flood Island reaching depths in excess of 1 metre and reaching Hazard Level 6 (H6) in a small area to the east of the site, with the remainder of the site reaching Hazard Level 3 (H3). H6 flooding is unsafe for all people and vehicles, with buildings vulnerable to failure. Further it is not consistent with the use of Shelter in Place as a strategy per the Shelter-in-Place guideline.

The proposed evacuation strategy contained in the FIRA is evacuation, with the FIRA stating *"The evacuation has to occur in a northerly direction along the Highway which becomes flood free"*⁸, however imagery shows a concrete median preventing north bound access to the Pacific Highway.⁹ Further consideration should be given to emergency management at this site and the development of a suitable evacuation strategy.

⁴ NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

⁵ NSW Government. 2024. NSW State Flood Plan. Section 5.1.7, page 34

⁶ NSW SES, Willoughby/Lane Cove Flood Emergency Sub Plan, Endorsed February 2023, Section 5.8

⁷ SGC Engineering, 2024, Flood Impact and Risk Assessment, Figure A1.2 Flood Depth and WSL Contours 1% AEP Existing Site Conditions Page 14

⁸ SGC Engineering, 2024, Flood Impact and Risk Assessment, Flood Risk, Page 10

⁹ TTPP, 2025, Transport Impact Assessment, Appendix B, Figure 2 Swept Path Analysis, Page 40



Principle 3 Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.

The ability of the existing community to effectively respond (including self-evacuating) within the available timeframe on available infrastructure is to be maintained. It is not to be impacted on by the cumulative impact of new development.

Risk assessment should have regard to flood warning and evacuation demand on existing and future access/egress routes. Consideration should also be given to the impacts of localised flooding on evacuation routes. Evacuation must not require people to drive or walk through flood water.

Development strategies relying on an assumption that mass rescue may be possible where evacuation either fails or is not implemented are not acceptable to the NSW SES.

Principle 4 Decisions on development within the floodplain does not increase risk to life from flooding.

Managing flood risks associated with High Flood Islands requires careful consideration of development type, likely users, and their ability respond to minimise their risks. This includes consideration of:

- Isolation There is no known safe period of isolation in a flood, the longer the period of isolation the greater the risk to occupants who are isolated.
- Secondary risks This includes fire and medical emergencies that can impact on the safety of people isolated by floodwater. The potential risk to occupants needs to be considered and managed in decision-making.
- Consideration of human behaviour The behaviour of individuals such as choosing not to remain isolated from their family or social network in a building on a floor above the PMF for an extended flood duration or attempting to return to a building during a flood, needs to be considered.

Current evidence suggests that flood events will become more frequent due to climate change. A Climate Change Calculator has been developed to address the updated ARR climate change guidelines (Wasko et al, 2024), recommending the adjustment of the BoM 2016 IFDs to account for the warming that has occurred since the mid-point of the data used for their development (1961-1990). This results in a significant increase in existing conditions flood levels.¹⁰

The change in flood probabilities with climate change for this catchment area results in the new probability of the 1 in 100 AEP to be approximately 1 in 44 AEP event for the current 2025

¹⁰ Babister et al. 2024. Climate Change Calculator: Estimating Changes to Flood Probability Under Different Climate Change Scenarios, page 1



scenario, becoming even more frequent in the future.¹¹ For the proposed development site, this could result in more frequent inundation and/or isolation than what is currently expected based on previous modelling.

Principle 5 Risks faced by the itinerant population need to be managed.

Any Emergency Management strategy needs to consider people visiting the area or using a development.

Principle 6 Recognise the need for effective flood warning and associated limitations.

An effective flood warning strategy with clear and concise messaging understood by the community is key to providing the community an opportunity to respond to a flood threat in an appropriate and timely manner. As the site is affected by overland flooding little to no warning is likely to be available, with Severe Weather Warnings and Severe Thunderstorm Warnings from the Bureau of Meteorology the only warnings currently available for the site.

Principle 7 Ongoing community awareness of flooding is critical to assist effective emergency response.

The flood risk at the site and actions taken to reduce risk to life should be communicated to all site users (includes increasing risk awareness, community connections, preparedness actions, appropriate signage and emergency drills) during and after the construction phase. However, it is important to note that the NSW SES is opposed to the imposition of development consent conditions requiring private flood evacuation plans rather than the application of sound land use planning and flood risk management.

Development in a floodplain will increase the need for NSW SES to undertake continuous community awareness, preparedness, and response requirements. Residents and users of the proposed development should be made aware of their flood risk, the <u>Hazards Near Me</u> app (a tool to receive flood warnings as part of the Australian Warning System) and the <u>NSW SES</u> <u>website</u> which contains comprehensive information for the general community about what to do before, during and after floods as well as in-language resources and HazardWatch (NSW SES interactive information and warnings site).

¹¹ WMAwater. 2024. Climate Change Calculator. Retrieved 7 July 2025 from <u>https://ccc.wmawater.com.au/</u>