Our Ref: ID 3560
Your Ref: SSD-97092958

28 January 2026

Emma Butcher
Department of Planning, Housing and Infrastructure
Locked Bag 5022
Parramatta NSW 2124

email: Emma.Butcher@dpie.nsw.gov.au
CC: shelly.stingmore@one.ses.nsw.gov.au

Dear Emma,

State Significant Development Application for EIS Bullecourt Avenue, Milperra- Early Works & Stage 1 SSD-97092958

Thank you for the opportunity to provide advice on the State Significant Development Application for 2 & 2A Bullecourt Avenue, Milperra - Early Works & Stage 1. The project will be delivered in stages and across two (2) separate SSDAs. Upon completion of the project, the development will comprise the construction of up to 430 dwellings, three (3) public parks, new roads and shared paths, civil infrastructure, an expanded childcare centre, a car park, and the management of conservation land. Specifically, this first SSDA seeks consent for:[1]

- Tree removal
- Site remediation (excluding works carried out as category 2 remediation works)
- Construction of bulk earthworks, public roads and landscaping, and services
- Augmentation of existing services and road infrastructure
- Construction of three (3) public parks
- Construction of up to 430 dwellings including houses, dual occupancies and attached dwellings
- Construction of a carpark to service the existing childcare centre and E1 Local Centre zoned land
- Subdivision resulting in 430 residential lots, infrastructure lots, remaining super lots, and the creation of a community title lot for land zoned C2 Environmental Conservation and E1 Local Centre, and
- Conservation works including the management of >2Ha Cumberland Plain Woodland Species.
- This SSDA comprises all civil works across the entirety of the site as well as the construction of all 62 dwellings in “Stage 1” and “Stage 2” only.

[1] Beam Planning. 2025. Environmental Impact Statement, page 26 - 27

NSW GOVERNMENT

STATE HEADQUARTERS
93 - 99 Burelli Street, Wollongong 2500
PO Box 6126, Wollongong NSW 2500
P (02) 4251 6111
F (02) 4251 6190
www.ses.nsw.gov.au
ABN: 88 712 649 015

We have reviewed the following documents provided as part of the preparation of our advice.

- Environmental Impact Statement (Beam Planning, Nov 2025)
- Flood Impact and Risk Assessment (Beveridge Williams, Nov 2025)
- Civil Engineering Design Report (Beveridge Williams, Nov 2025)
- Georges River Flood Study (BMT, 2020)
- Kelso Stormwater Catchment Flood Study (BMT WBM & Bewsher Consulting, 2009)

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.

We recommend the proposal considers flooding issues in accordance with the requirements of NSW Government's Flood Prone Land Policy as set out in the Flood Risk Management Manual 2023 (the Manual) and supporting guidelines, including the Support for Emergency Management Planning and relevant planning circulars and directions under the *Environmental Planning and Assessment Act, 1979*, including 4.1 Flooding and PS24-001.

We **emphasise** that if development is approved without providing a thorough Flood Impact and Risk Assessment (FIRA) to clearly outline the full extent of flood risks at the site and demonstrate the suitability of any proposed emergency management and mitigation strategies, this will result in risks to life and property not being appropriately managed.

In summary, we

- **Advise** the consent authority to **request** that a fit for purpose FIRA, consistent with the NSW Government Guidelines,[2] is resubmitted to consider:
    - flood risks from all flooding mechanisms impacting the site, including mainstream flooding of the Georges River;
    - the full range of flood events (from the more frequent ones and up to and including the PMF);
    - time to onset and duration of inundation of any flooding;
    - flooding impacts on access/egress roads, including any proposed internal roads and any risk of isolation. The analysis of the impact of flooding on the roadways should go beyond immediately adjacent to the site to fully understand any isolation risks and evacuation constraints.
- **Note** the Council adopted studies are 16 years old (Kelso Stormwater FS) and 21 years old (Georges River FSMP) and **recommend** referring to the Georges River Flood Study (BMT, 2020) to ensure the best available information is used to determine the flood

[2] LU01 Flood Risk Management Guideline: Flood Risk and Impact Assessment

risk on the site and inform appropriate mitigation measures. This study indicates that the southern part of the proposed development site is impacted by flooding that can exceed **5 metres depth**[3] and **H6 flood hazard** level in a Georges River Extreme Flood Event scenario,[4] while the current FIRA notes that in the modelled overland flow PMF event the site experiences a maximum depth of 2.2 metres in the south-western part[5] and H5 flood hazard level.[6]

- **Recommend** consulting with the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) in relation to the modelling approach and regarding the impacts of the proposed development on flood behaviour at the site and adjacent areas, noting that the proposed site filling disturbs the overland flow resulting in localised water level increases at the intersection of Flanders Avenue and Ashford Avenue.[7]
- **Note** the FIRA proposes a shelter in place strategy for lots affected by inundation,[8] and **advise** that the strategy of isolation or sheltering in buildings surrounded by flood water are not equivalent, in risk management terms, to evacuation and it should not be used to justify *future development*. We **reiterate** that a robust FIRA considering flood risks from all mechanisms impacting the site **must be provided** to inform the appropriate emergency management approach for the site; however, we **advise** that noting the different flood mechanisms and durations affecting the site **this development is not suitable for sheltering in place.** Should shelter in place be proposed, the consent authority should request the proponent to **demonstrate consistency** with the Shelter in Place Guideline, *prior to granting consent,* including (but not limited to):

    - does shelter in place align with existing emergency management strategies for the area, as determined through the flood risk management process and by the NSW SES;
    - detailed assessment of evacuation off-site (the primary emergency management strategy) to determine that evacuation off-site is not achievable;
    - the flood behaviour at the site, with consideration of climate change and assessment of the potential maximum duration of isolation up to and including the PMF to identify that:
        a. flash flooding is the only flood risk present at the site, whether it be from overland flooding, local creek or riverine flooding,
        b. the flooding occurs within less than 6 hours from the commencement of causative rain and the duration of shelter in place due to isolation by floodwaters is less than 12 hours from the commencement of rainfall,

[3] BMT. 2020. Georges River Flood Study. Final Mapping Compendium, Figure A-8
[4] BMT. 2020. Georges River Flood Study. Final Mapping Compendium, Figure A-15
[5] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 16
[6] Beveridge Williams. 2025. Flood Impact and Risk Assessment, Figure B6
[7] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 18
[8] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 22

c. the development is not subject to high hazard flooding (e.g. floodways, high hazard H5 or H6 areas) or surrounding roadways are not subject to high hazard flooding.

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

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

Please feel free to contact Ana Chitu 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,

Peter Cinque
Senior Manager, Emergency Risk Management
NSW State Emergency Service

ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline[9]

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 strategies identified in the NSW State Flood Plan[10] and the Canterbury-Bankstown Flood Emergency Sub Plan,[11] where evacuation is the preferred emergency management strategy for people impacted by flooding.

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. Risk assessment should consider the full range of flooding, including events up to the Probable Maximum Flood (PMF), along with climate change impacts in line with NSW Government guidelines.

We note that *Council advised the 2009 BMT Flood Study Model provided by Council is "the one used by Council for its mapping for the Kelso Swamp catchment" and should be used.*[12] However, the Kelso Stormwater Catchment Flood Study (BMT WBM & Bewsher Consulting, 2009) available on the Canterbury-Bankstown Council website highlights that *"this report predominately relates to the quantification of stormwater flooding problems within the Kelso stormwater catchment. However, there are a number of potential flooding mechanisms within the study area, including flooding from the Georges River and floodwater ponding behind the Kelso levee when the Georges River is in flood. These other flooding mechanisms also need to be considered when quoting flood levels within the catchment."*[13]

Council also adopted the Georges River Floodplain Management Study and Plan (Bewsher Consulting, 2004) in late 2004.[14]

Noting that the study recommended by Council to be used for this assessment is mainly focused on stormwater problems, [15] (providing local catchment runoff flooding only mapping),[16] we **advise** the consent authority to **request** that a fit for purpose Flood Impact and Risk Assessment (FIRA) consistent with the NSW Government Guidelines[17] is resubmitted to consider flood risks from all flooding mechanisms impacting the site, for the full range of

[9] NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

[10] NSW Government. 2024. NSW State Flood Plan. Section 5.1.7, page 34

[11] NSW SES. 2021. Canterbury-Bankstown Flood Emergency Sub Plan. Section 1.6.2, page 7

[12] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 8

[13] BMT WBM & Bewsher Consulting. 2009. Kelso Stormwater Catchment Flood Study, page 9

[14] Canterbury Bankstown Council. (n.d.). Floodplain and stormwater management. Retrieved 13/01/2026 from https://www.cbcity.nsw.gov.au/environment/rivers-creeks-and-waterways/floodplain-and-stormwater-management

[15] BMT WBM & Bewsher Consulting. 2009. Kelso Stormwater Catchment Flood Study, page 11

[16] BMT WBM & Bewsher Consulting. 2009. Kelso Stormwater Catchment Flood Study, Appendix D: Peak Flood Depth Maps

[17] LU01 Flood Risk Management Guideline: Flood Risk and Impact Assessment

flood events (from the more frequent ones and up to and including the PMF), time to onset and duration of inundation of any flooding, along with flooding impacts on access/egress roads, including any proposed internal roads and any risk of isolation. The analysis of the impact of flooding on the roadways should go beyond immediately adjacent to the site to fully understand any isolation risks and evacuation constraints.

If development is approved without providing a thorough FIRA to clearly outline the full extent of flood risks at the site and demonstrate the suitability of any proposed emergency management and mitigation strategies, this will result in risks to life and property not being appropriately managed.

In addition, noting the Council adopted studies are 16 years old (Kelso Stormwater FS) and 21 years old (Georges River FSMP), we also **advise** referring to the Georges River Flood Study (BMT, 2020) to ensure the best available information is used to determine the flood risk on the site and inform appropriate mitigation measures. This study indicates that the southern part of the proposed development site is impacted by flood depths that can exceed 5 metres[18] and H6 flood hazard level in a Georges River Extreme Flood Event scenario,[19] while the current FIRA notes that in the modelled overland flow PMF event the site experiences a maximum depth of 2.2 metres in the south-western part[20] and H5 flood hazard level.[21]

We also **recommend** consulting with the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) in relation to the modelling approach and regarding the impacts of the proposed development on flood behaviour at the site and adjacent areas, noting that the proposed site filling disturbs the overland flow resulting in localised water level increases at the intersection of Flanders Avenue and Ashford Avenue.[22]

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.**

It is understood that vehicular access points are available from Ashford Avenue, Bullecourt Avenue and Horsley Road.[23] We **emphasise** that the NSW SES has responded to multiple flood

[18] BMT. 2020. Georges River Flood Study. Final Mapping Compendium, Figure A-8
[19] BMT. 2020. Georges River Flood Study. Final Mapping Compendium, Figure A-15
[20] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 16
[21] Beveridge Williams. 2025. Flood Impact and Risk Assessment, Figure B6
[22] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 18
[23] Beam Planning. 2025. Environmental Impact Statement, page 16

related requests in this area, including people trapped in floodwaters on Bullecourt Avenue and flooding across Ashford Road.

The FIRA states that in a PMF event, "*lots affected by inundation will adopt a shelter-in-place strategy to ensure resident safety, while lots remaining above the PMF level will evacuate via the designated evacuation route. The proposed internal road network provides a continuous rising egress towards higher ground, facilitating safe evacuation for the unaffected lots during extreme events.*"[24]

The strategy of isolation or sheltering in buildings surrounded by flood water are not equivalent, in risk management terms, to evacuation and it should not be used to justify *future development*. We **reiterate** that a robust FIRA considering flood risks from all mechanisms impacting the site **must be provided** to inform the appropriate emergency management approach for the site; however, we advise that noting the different flood mechanisms affecting the site, with the critical duration for the Georges River catchment typically 24 – 48 hours,[25] while the FIRA overland flow assessment identified that the critical duration is 120min and 60min for the 100-Year and PMF storm events,[26] **this development is not suitable for sheltering in place according to the Shelter In Place Guideline for flash flooding** (NSW Government, 2024).

Should shelter in place be proposed, the consent authority should request the proponent to demonstrate consistency with the Shelter in Place Guideline, **prior to granting consent,** including (but not limited to):

- does shelter in place align with existing emergency management strategies for the area, as determined through the flood risk management process and by the NSW SES.
- detailed assessment of evacuation off-site (the primary emergency management strategy) to determine that evacuation off-site is not achievable.
- the flood behaviour at the site, with consideration of climate change and assessment of the potential maximum duration of isolation up to and including the PMF to identify that:
    a. flash flooding is the only flood risk present at the site, whether it be from overland flooding, local creek or riverine flooding,
    b. the flooding occurs within less than 6 hours from the commencement of causative rain and the duration of shelter in place due to isolation by floodwaters is less than 12 hours from the commencement of rainfall,
    c. the development is not subject to high hazard flooding (e.g. floodways, high hazard H5 or H6 areas) or surrounding roadways are not subject to high hazard flooding.

[24] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 22
[25] BMT. 2020. Georges River Flood Study, page 120
[26] Beveridge Williams. 2025. Flood Impact and Risk Assessment, page 11

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 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.

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.

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

Development within a floodplain will necessitate ongoing involvement from the NSW State Emergency Service (SES) in community awareness, preparedness, and response activities.

Importantly, a private flood management plans is insufficient to address flood risk on this site.