

**From:** [Thomas Chris \(Sydney\)](#)  
**To:** [Kris Letsch](#)  
**Cc:** [To Lennox \(Sydney\)](#)  
**Subject:** RE: Bradfield - First Building Flood Advice  
**Date:** Friday, 15 July 2022 11:24:19 PM

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Hi Kris,

Further to our discussion with AECOM, we have undertaken some additional flood simulations aimed at assessing the potential for runoff from the land to the north-west of the First Building site to "drain" toward the First Building and present as a flood risk for the development. This has involved the following simulations:

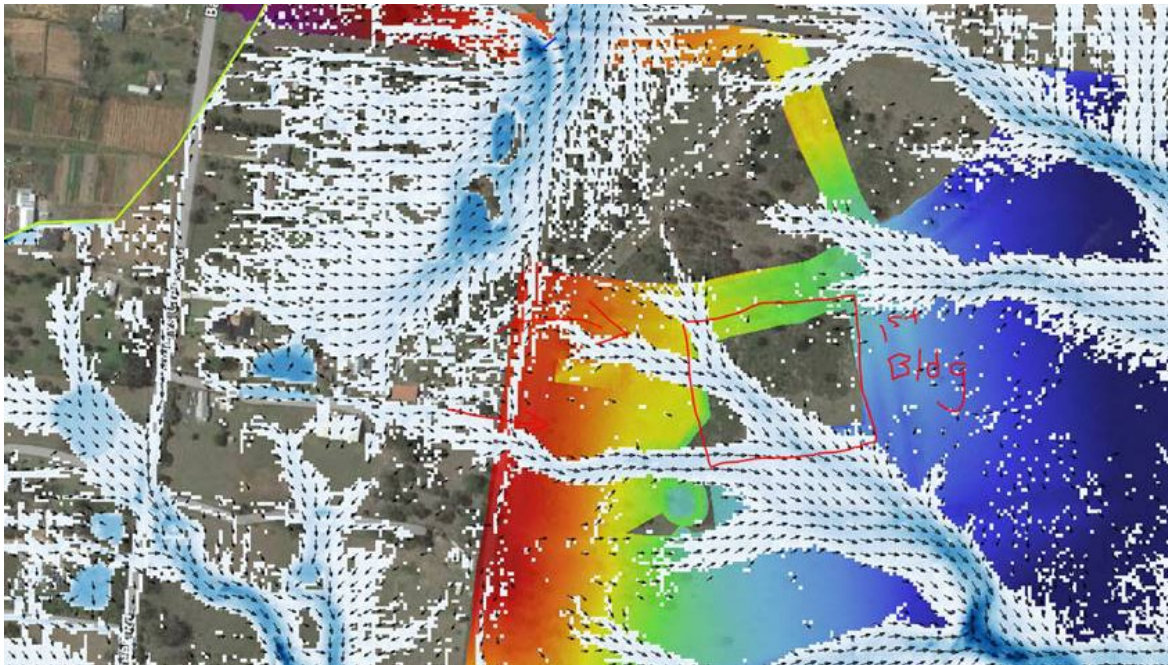
- (i) Simulation of the 1% AEP storm assuming all existing storages (farm dams) are full
- (ii) Simulation of an Extreme Event based on multiplication of the design rainfall in the 1% AEP hyetograph by 5, while also assuming all storages are full

**Key Findings:**

- In the 1% AEP event, water does not spill towards the First Building Site from the flow path draining towards the north. That is, there is no flood risk to the First Building due to overland flows in the 1% AEP event.
- Some water spills towards the First Building in Extreme Event. However, the overtopping would be relatively minor and characterised by the following:
  - > Floodwater / runoff depths are generally less than 0.25 metres and therefore could be accommodated in the road reserve
  - > Hazard according to ARR 2019 is H1 to H2
- Assuming the location of the First Building has not changed, flood levels in the immediate vicinity are lower than 77.0 mAHD. Based on the plans you forwarded to me, the minimum FFL is 77.5 mAHD. Therefore, the FFL of the building is at least 500 mm above the predicted peak level of flooding / inundation that could potentially occur in the worst possible storm event.

**Extreme Event Results** (as screenshots)

**Depth**



ARR 2019 Hazard



[REDACTED]

[REDACTED]

[REDACTED]

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