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**Subject: Storage and Distribution Warehouse Development –
 SSDA Flooding Risk**

Dear Mike ,

This letter has been prepared in support of a development proposal at 221-235 Luddenham Road, Orchard Hills (the site). The project seeks to deliver a new a new Storage and Distribution Warehouse within the Alsip Industrial Business Park (AIBP).

Specifically, the project comprises the following:

- Construction of a new warehouse with a two-level ancillary office. The warehouse is predominantly 14.7 metres in height, with a high-bay warehouse component at the western portion of the building which achieves a maximum height of 39 metres.
- A total building area of 45,449sqm; broken down as follows:
 - Warehouse area: 43,606sqm
 - Office Area: 1,843sqm
- Loading areas at the north and south sides of the warehouse, with hardstand surrounding the perimeter of the warehouse. Hardstand and carpark areas are accessed via four new driveways from the AIBP internal estate road.
- Provision of vehicular parking onsite to accommodate cars, vans, semi-trailers and B-doubles. It is envisaged that approximately 329 spaces will be provided on site within the proposed hardstand and carparking areas.
- Perimeter landscaping and tree planting with a total area of 10,236sqm (10%).

This letter has been prepared in response to the requirements contained within the Secretary’s Environmental Assessment Requirements (SEARs) dated 04 April 2025 and issued for the SSDA (SSD-81434988). Specifically, this letter has been prepared to respond to the SEARs requirement and government agency comments issued below.

Table 1 – SEARs Requirements & Government Agency Comments

Item	Description of Requirement
14	<ul style="list-style-type: none"> • Identify the flood planning level as set out in the relevant council LEP or SEPP and identify any: <ul style="list-style-type: none"> ○ flood risks on site having regard to adopted flood studies ○ the potential effects of climate change, and ○ any relevant provisions of the NSW Flood Risk Management Manual. • Where the development is occurring on flood prone land a flood impact and risk assessment (FIRA) must be prepared having regard to the Flood Impact and Risk Assessment Guideline - LU01 (FIRA guide). When

Item	Description of Requirement
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- determining the scope and category of the FIRA the requirements outlined in the FIRA guide must be considered.
- Detail any flood risk management measures that are to be incorporated as part of the development having regard to relevant guidelines (including any design solutions, flood modification measures, property modification measures, operational procedures or Flood Emergency Response Plan).

This letter draws on the findings of the approved flood assessment report titled:

Alspec Industrial Business Park Application - Flood Assessment
Report Number: 30088823-EF-002-03-DA-Flood Assessment
Prepared by Arcadis
Dated: 30 August 2024

It is important to note the broader business park is subject to another SSD application and multiple DAs seeking approval for medium to large format industrial warehouses. The subject site location within the Business Park is shown in Figure 1 below:



Figure 1 - ALSPEC INDUSTRIAL BUSINESS PARK

Flood Planning Level and Flood Risks

In accordance with the Penrith Local Environmental Plan (LEP) 2010 and Penrith City Council's adopted flood studies, the 1% Annual Exceedance Probability (AEP) event is taken as the Flood Planning Level (FPL) for the purposes of this assessment.

This assessment confirms that:

- The site is not impacted by inundation from the 1% AEP event.
- The site is elevated above the Probable Maximum Flood (PMF) level associated with South Creek and the unnamed watercourse to the west.
- The proposed development will not adversely impact existing flood behaviour and remains flood-free for events up to and including the PMF.

These findings confirm that the site is not flood prone under regional flooding conditions and that no significant regional flood risks exist within the proposed development footprint.

It is noted, however, that the regional model does not resolve internal site conveyance or local overland flow patterns. While no significant regional flood risks are identified, internal drainage infrastructure and site grading remain critical to ensuring effective management of local runoff and avoiding localised ponding or nuisance flooding within the site.

Climate Change Considerations

The flood assessment also considered the potential impacts of climate change, including:

- Increased rainfall intensities in accordance with the NSW Government's climate adjustment factors, and
- Future conditions hydrology scenarios consistent with the NSW Flood Risk Management Manual.

The modelling demonstrated that flood-free conditions will be maintained for the site even under climate-adjusted scenarios, and critical evacuation routes remain accessible.

NSW Flood Risk Management Manual and LU01 Guideline Compliance

Although the site is not located on flood-prone land, the development has been assessed in accordance with the principles of the NSW Flood Risk Management Manual and the Flood Impact and Risk Assessment – Flood Risk Management Guide LU01. In this regard, the following measures and procedures have been implemented as part of the development:

Design Solutions

- **Integrated Stormwater Management:**
The civil design by Henry & Hymas incorporates internal stormwater drainage and on-site detention systems that manage local runoff and control peak discharges from increased impervious areas proposed by the development, prior to discharging this runoff offsite. These systems mitigate any increase in downstream flow rates and volumes, preserving pre-development flow characteristics.
- **Ground Level Design:**
The proposed pad levels are consistent with the bulk earthworks strategy endorsed in the approved flood assessment. These levels ensure overland flow routes are preserved, and no adverse redirection or concentration of flow occurs.

Operational Procedures

- **Evacuation and Access:**

The site is flood-free in all modelled events up to and including the PMF. Egress from the site is via Luddenham Road, which remains trafficable during PMF conditions in the southbound direction towards Badgerys Creek Airport. However, it is acknowledged that this assessment focuses on regional flood risks, and does not explicitly assess localised flash flooding that may result from high-intensity short-duration rainfall events. It is therefore recommended that flood evacuation planning also consider local drainage limitations that could affect access or egress under certain conditions. In accordance with best-practice flood risk management, it is recommended that the site be safely evacuated ahead of forecast flooding, due to uncertainties beyond the site's immediate flood-free evacuation path.

- **Flood Emergency Response:**

Operational protocols should include early warning systems, proactive site shutdown procedures, and coordination with regional emergency services, consistent with LU01 recommendations for non-sensitive, flood-free developments.

Conclusion

The proposed development is supported by a comprehensive flood assessment (Arcadis, 2024) which demonstrates compliance with all applicable flood-related planning controls and guidelines, including the NSW Flood Risk Management Manual, the FIRA LU01 Guide, and the flood-related provisions of the Penrith LEP and SEARs Item 14.

Importantly, the site:

- Is not affected by the 1% AEP flood extent;
- Is flood-free during the PMF event;
- Incorporates appropriate drainage design and operational flood risk measures; and
- Maintains safe, trafficable access and egress routes under regional flooding scenarios.

The development is therefore considered to pose negligible flood risk and complies with the relevant flood risk planning and management requirements under the SEARs.

Should you have any questions or require further information regarding this matter, please do not hesitate to contact me.

Kind regards,
Arcadis Australia Pacific Pty Ltd



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