



File ref. no: BFS23/1695
Doc. ref. no: D23/57434
Contacts: Engineer Andy HUYNH
Senior Firefighter Nathan EVERETT

17 July 2023

Mark Turner
TSA Management
Level 15, 207 Kent Street
Sydney NSW 2000

Mark.Turner@tsamgt.com

Dear Mark,

Re: Cockle Bay Park Redevelopment – Blast and DG Assessment of Land Bridge & Supplemental DG Assessment of Landbridge Plank Design.

I refer to your application for Fire & Rescue NSW (FRNSW) written report lodged on the 28th of March 2023 in relation to the Cockle Bay Park Redevelopment located at 201 Sussex Street, Sydney.

The relevant details of the submitted reports (the Reports) reviewed by FRNSW are:

- *Cockle Bay Park Redevelopment – Landbridge DG Blast Assessment Report*, document reference CBP-ARP-01-XX-RP-Y-0002, Revision 1 dated 12/12/2022, prepared by James Bache and Christopher Hill of ARUP Pty Ltd.
- *Cockle Bay Park Redevelopment – Supplemental DG Assessment of Landbridge Plank Design*, document reference CBP-ARP-01-XX-RP-Y-0003, Revision 1 dated 23/03/2023, prepared by Joel Smith and James Bache of ARUP Pty Ltd.

It is understood that the Reports have been prepared on behalf of DPT Operator Pty Ltd & DPPT Operator Pty Ltd.

FRNSW's overriding purpose is to enhance community safety, quality of life, and confidence by minimising the impact of hazards and emergency incidents on the people, property, environment, and economy of NSW. The Fire Safety Branch assists industry professionals by providing advice on matters relating to life safety and firefighter intervention for new and existing development.

The following comments and recommendations are submitted for consideration following a review of the Reports.

1. FRNSW provide in-principle support that the structure proposed to be constructed over the existing Western Distributor be defined as a 'land bridge', and that the space enclosed does not constitute a tunnel as defined within AS 4825-2011 *Tunnel fire safety*. This support is subject to justification being provided by way of a future detailed comparative and absolute assessment.

This in-principle support acknowledges that several design changes have been proposed since the original design submission in SSD-9978934 (FRNSW ref: D21/129156) such that the performance of the enclosed space exceeds that of a space that is not a tunnel, i.e., a substantially enclosed roadway that is less than 80 m in length. These design changes have been supported by preliminary comparative and absolute analysis.

2. Validation and verification of consequence assessments (including associated inputs, assumptions, and analyses etc.) contained within the Reports relating to incidents involving dangerous goods has not been undertaken by FRNSW and is considered to be outside of the scope of FRNSW's review. It is recommended that the Reports be submitted to the NSW Department of Planning and Environment (DPE) to enable detailed review and verification of all assessments, noting that any errors or inaccuracies contained therein may have bearing on assessment outcomes and conclusions. Furthermore, FRNSW recommend that all risks associated with an incident involving dangerous goods be duly considered within DPE's assessment and determination of the proposed development.
3. FRNSW request that confirmation be provided by Transport for NSW that the Dangerous Goods Heavy Vehicle (DGHV) survey undertaken by Aurecon in 2022 over a seven-day period is an accurate representation of the types, classes, number, and capacities of DGHV movements over the long-term. FRNSW note that this survey is relied upon to inform subsequent assessments and any inaccuracies contained therein may have bearing on assessment outcomes and conclusions. Furthermore, FRNSW recommend that an assessment should be undertaken that considers potential future changes to DGHV movements that may be reasonably expected to occur on this route. This confirmation and assessment should be documented and detailed as part of the required fire engineering process.
4. FRNSW recommend that all structural elements be designed to withstand the effects of an incident involving dangerous goods such that occupants and attending emergency services are not put at risk of harm resulting from structural collapse.
5. FRNSW reaffirm the position that fire and life safety systems and measures are to be provided to ensure that an acceptable level of occupant safety is achieved for road users and to aid firefighter intervention. These systems and measures should be appropriate to meet the extent of credible scenarios and should be documented and detailed as part of the required fire engineering process, in consultation with FRNSW.

For further information, please contact the FRNSW Fire Safety Branch, referencing file number BFS23/1695. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours faithfully



Matthew Rowley
Manager Fire Safety Infrastructure Unit
Community Safety Directorate