

By email
15 December 2022

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Our ref 244326

Lourdes Retirement Village

Response to Submissions – NSW Rural Fire Service

Arup has been commissioned by Levande to assess the transport and traffic impacts of the planning proposal for Lourdes Retirement Village. The planning proposal was exhibited in August and September 2022 and community and agency submissions were collated in October and November 2022.

The NSW Rural Fire Service (RFS) provided the following comments in relation to transport and traffic:

Before R3 Medium Density Residential can be fully commented on, further analysis would need to be undertaken to determine the maximum number of occupants that could be on-site and the adequacy/appropriateness of roadways for emergency egress and fire brigade access given reasonable worst-case bush fire scenarios.

This letter provides an overview of the access to and from the site and adequacy for emergency egress and fire brigade access.

Amended master plan access points

The amended master plan following exhibition includes three access points from Stanhope Road to the site as shown in Figure 1. The provision of multiple access points avoids a single point of failure within the site and improves upon the two access points at the existing site.

Internal roads will be designed to accommodate fire truck access within the site.

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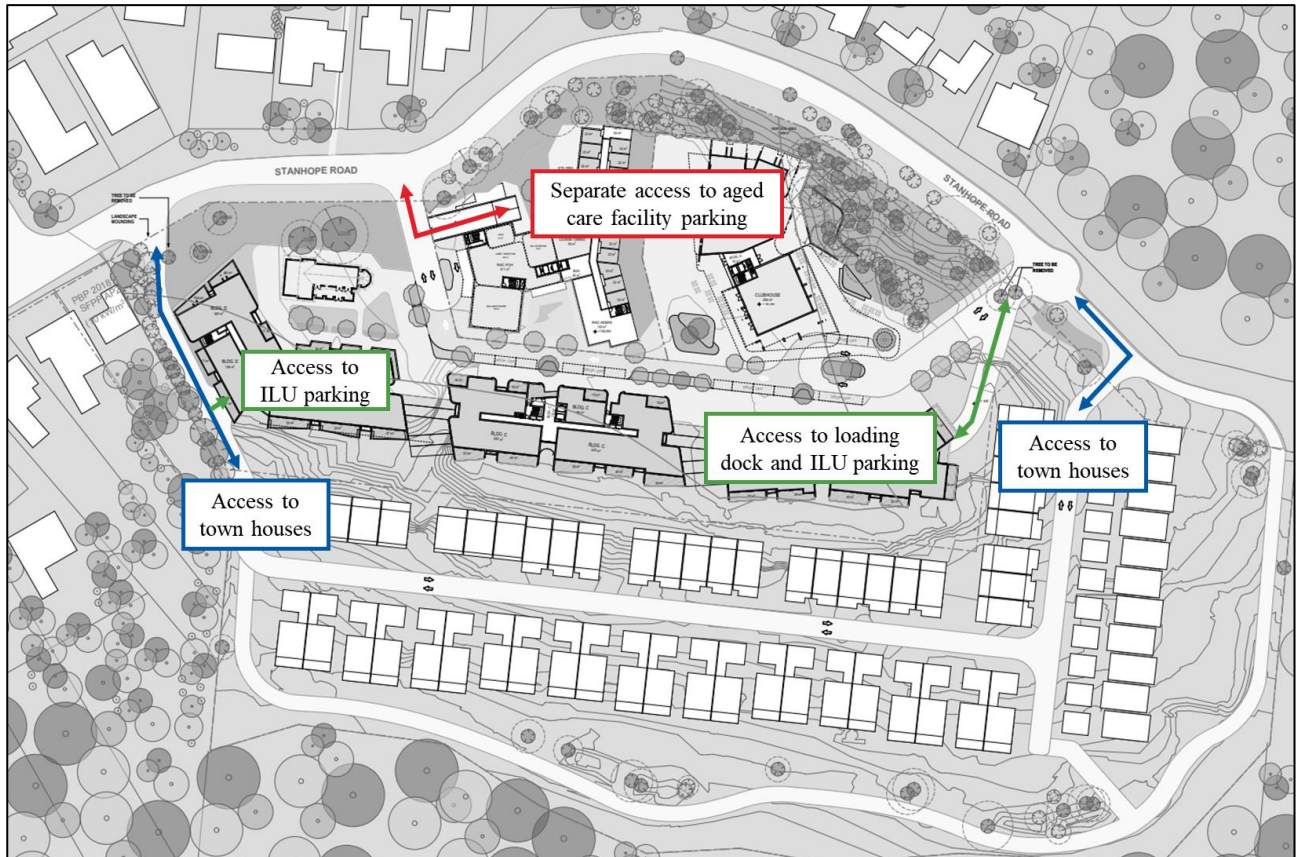


Figure 1 Revised access points in the amended master plan

Access to and from the site via the wider road network is shown in Figure 2. The key arterial roads near the site are Pacific Highway to the west and Eastern Arterial Road to the east. Vehicles can access these arterial roads from the site using multiple routes such as via Stanhope Road, Rosebery Road, Kardella Avenue and Werona Avenue.

The *Lourdes Retirement Village Addendum Bushfire Report* (Blackash Bushfire Consulting, 2022) identified that the reasonable worst case bushfire scenarios are fires burning from the southeast or northeast of the site and that there is no bushfire hazard to the west and northwest. Therefore, vehicles leaving the site would be travelling to safety away from key bushfire risk areas.

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Figure 2 Access to and from the site via the wider road network

Road network capacity

As outlined in the *Lourdes Retirement Village Addendum Bushfire Report*, the bushfire strategy for the aged care facility residents would be to remain in-situ. The strategy for independent living unit (ILU) and town house residents would be to evacuate to a refuge building within the site.

Notwithstanding the bushfire strategy, a conservative assessment of an evacuation of all residents has been undertaken. The Planning Proposal has been informed by a master plan and indicative layout plan which comprises 141 new independent living units (ILUs), 110 aged care facility suites and 63 town houses. A sensitivity test has been carried out to determine the maximum number of occupants that could be accommodated on site under the proposed LEP controls. An 'upper' scenario of 155 ILUs, 135 aged care facility suites and 66 town houses was considered to assess a bushfire scenario.

Assuming a bushfire scenario where all residents decide to leave in the same hour and one vehicle per hour is generated per ILU, aged care facility suite and town house, up to 356 vehicles would leave the site in one hour.

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Table 4.3 of the *Guide to Traffic Generating Developments* (RTA (now Transport for NSW), 2002) specifies a typical mid-block capacity of 900 passenger car units per hour for a lane with an adjacent parking lane. Therefore, in a conservative scenario where all traffic travels via one access and one route from the site, there is still expected to be spare road capacity. In reality, traffic would be distributed across multiple site accesses and routes. Therefore, the internal and external road networks are expected to adequately accommodate vehicles during a conservative bushfire scenario.

As noted in the *Lourdes Retirement Village Addendum Bushfire Report*, neighbouring residents are unlikely to be evacuated due to their distance from key bushfire risk areas and are not expected to generate a high amount of concurrent evacuation traffic. However, given there is expected to be spare road capacity, impacts to neighbouring residents are expected to be manageable.

Summary

The amended master plan includes three access points to the site, which avoids a single point of failure within the site and improves upon the two access points at the existing site. Internal roads will be designed to accommodate fire truck access within the site.

The key arterial roads near the site are Pacific Highway to the west and Eastern Arterial Road to the east, which can be accessed from the site using multiple routes such as via Stanhope Road, Rosebery Road, Kardella Avenue and Werona Avenue. The reasonable worst case bushfire scenarios are fires burning from the southeast or northeast of the site and that there is no bushfire hazard to the west and northwest. Therefore, vehicles leaving the site would be travelling to safety away from key bushfire risk areas.

For a conservative bushfire scenario where one vehicle is generated in one hour per ILU, aged care facility suite and town house, up to 356 vehicles would leave the site in one hour. This is considered conservative as the bushfire strategy for the aged care facility residents would be to remain in-situ and for ILU and town house residents to evacuate to a refuge building within the site.

Given vehicles would be distributed across multiple access points, internal roads within the site are expected to adequately accommodate vehicles during a conservative bushfire scenario. The external road network is also expected to be able to accommodate this traffic given that traffic would be distributed across multiple roads to the wider arterial road network.

Neighbouring residents are unlikely to be evacuated due to their distance from key bushfire risk areas and are not expected to generate a high amount of concurrent evacuation traffic. However, given there is expected to be spare road capacity, impacts to neighbouring residents are expected to be manageable.