

18 August 2016



Statewide Planning Pty Ltd

Attn: Matt Daniel

Dear Sir,

Re Planning Proposal for 181 James Ruse Drive Camellia

In response to the exhibition of the Planning Proposal for the rezoning of 181 James Ruse Drive, Camellia, the Department of Planning and Environment (DPE) wrote to Parramatta City Council raising issues on flooding and hazards in the Attachment A to the DPE undated letter. Our letter responds to the issues raised by DPE with respect to flooding and hazards.

1. DPE raises the issue of hazard from the high pressure hydrocarbons pipeline adjacent to the eastern boundary of the site and the setback required to the residential uses to satisfy HIPAP No. 10

The Jacobs Health and Safety report submitted with the Planning Proposal refers to SEPP 33 Hazardous and Offensive Development and notes that the Department of Planning and Environment (DPE) adopts a fatality risk criteria of 1 fatality per million people per year (pmpy) as a suitable criteria for residential land uses. This increases to 5 pmpy for commercial land uses which will be the uses at the lowest level of the Camellia development. Typically, commercial uses will occupy the first two levels and residential apartments will be located in upper levels. The acceptable criteria for the proposed development would be somewhere between 1 and 5 pmpy. These criteria are very conservative given that the risks associated with everyday activities such as travelling in a car or a train which are 45 pmpy and 30 pmpy respectively. The SEPP also recommends that the proposed land use not be considered in terms of these risks in isolation but need to be considered within the full gambit of the environmental and social outcomes for the project.

Jacobs has assessed qualitatively based on their experience that all the potential risks from existing hazardous activities would be below the criteria of 1 pmpy.

SEPP 33 provides Hazardous Industry Planning Advisory Papers (HIPAP) explaining the approach to be taken in the assessment of hazard and risks. HIPAP No. 4 and 10 are particularly relevant to the assessment of risk to the proposed development from existing hazardous industries/pipelines. HIPAP 10 provides a process of increasing levels of investigation as a development proceeds from the development application phase to post approval stage. A preliminary hazard analysis is required for the DA stage to demonstrate that existing risk levels do not preclude development. This preliminary assessment involves qualitative and some quantitative assessment of risks while the full quantitative assessment is undertaken at the detailed design stage. As such, for the planning proposal for the subject site, it is proposed to provide a qualitative assessment supported by reference to quantitative assessments for other similar projects.

The existing industries and those which have been noted as particularly hazardous by EPA in their submission (Caltex refinery) are over a 1000m from the subject site. Other residential development in Camellia will be located much closer to these hazardous industries. This separation distance will allow sufficient dissipation of any risk down to the DPE acceptable risk criteria. The most immediate

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risk is related to the pipelines along the eastern boundary of the site. The gas and water pipelines located adjacent to the eastern boundary of the subject site are also located in new or proposed residential areas positioned in the road verges. This is considered an acceptable risk as it is adopted practice. This places these pipelines within about 8m of residential houses and apartments. This risk therefore does not preclude residential development on the subject site. It does require a suitable setback of the residential from the centreline of these pipes. At present, these pipes are located between approximately 2m and 8m east of the site eastern boundary. This means that residential development would be allowable within 0m to 6m of the eastern boundary. The setback required from the eastern boundary to deal adequately with the risk from the gas and water pipelines will be determined at the DA stage with a more detailed assessment of risks.

The hydrocarbon pipeline is located approximately 10m east of the site eastern boundary. A quantitative assessment of risk for a similar hydrocarbon pipeline at the Ermington Defence lands for a proposed residential development identified a setback requirement of 13m to achieve the DPE fatality criteria of 1 pmpy. This was based on an investigation and report by KBR (Kellogg Brown & Root P/L). The investigation examined the impact of incidences leading to outcomes such as a jet fire, flash fire/vapour cloud explosion and pool fires. The fatality risk was assessed for each of these outcomes to recommend an acceptable offset distance for typical one and two storey residences. It also undertook sensitivity testing for extreme events to identify the need for possible increases in the setback distances.

For the Camellia site, the apartment buildings will be more structurally sound buildings compared to the typical residence buildings which will assist to reduce the setback compared to the Ermington development. However, based on this type of assessment, the residential development on the Camellia site would need to be setback 3m from the eastern boundary. A quantitative risk assessment would be undertaken at the DA stage to determine the appropriate setback to manage this pipeline risk. It is likely that the risk at Camellia will be less than at Ermington because the commercial uses will be the closest to the source of risk and the apartments elevated further away from the risk.

In summary, the proposed residential land use on the Camellia site is acceptable with respect to the risk from existing hazardous industries and pipelines. Detailed quantitative assessments of risks and possible mitigation measures will be undertaken at the DA stage.

2. DPE raises the issue of High Flood Risk on the site and notes that this will have implications on urban design for the site including basement car parking as well as emergency evacuation from the site.

The issues of high flood risk on the site, basement car parking and evacuation have been dealt with by additional reports provided after the Planning Proposal submission. These include the NPC report entitled Flood Impact Study at Attachment A and the NPC letter entitled Flood Related Issues at Attachment B.

Yours sincerely

M Tooker

A handwritten signature in black ink, appearing to read 'M Tooker', is written over the typed name. The signature is fluid and cursive, with a long horizontal stroke extending to the right.