

# LETTER

## Transport Engineering



REF: N183633

DATE: 9 November 2021

Hansen Yuncken  
Sydney Corporate Park  
Building 1, Level 3,  
75-85 O'Riordan Street  
ALEXANDRIA NSW 2015

**Attention: Sasha Vuckovic (Senior Design Manager)**

Dear Sasha

**RE: TAFE NSW MEADOWBANK – SSD-10349 SECTION 4.55(2) ADDITIONAL LEVELS IN MULTI-STOREY CAR PARK**

### Introduction

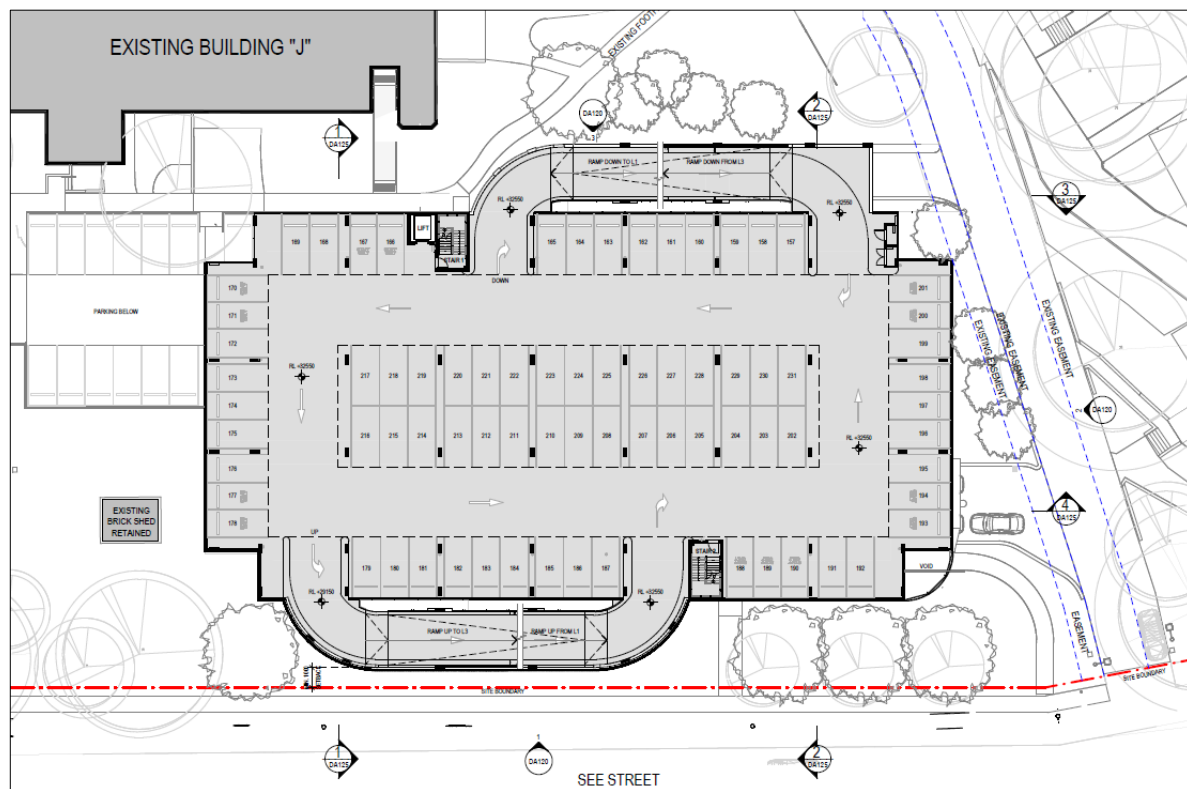
It is understood that a Section 4.55(2) application is to be lodged with the Department of Planning, Industry and Environment (DPIE) for the TAFE Meadowbank Multi-Trades and Digital Technology Hub (MTDTH) project as it relates to SSD-10349. The application seeks approval for the construction of two additional levels on the approved two-storey car park adjacent to Block J on the TAFE Meadowbank campus.

GTA, now Stantec was commissioned by Hansen Yuncken to prepare a transport impact statement to accompany the Section 4.55(2) application.

### Proposal

The modification seeks consent for construction of two additional levels on the approved multi-storey car park (MSCP), increasing the total parking provision within the MSCP to 394 spaces. The typical floor plan for the MSCP is shown in Figure 1.

Figure 1: MSCP typical floor plan



Source: Gray Puksand, Drawing Number DA102 dated November 2021

## Parking Appraisal

### Car Parking Requirements

The Transport and Accessibility Impact Assessment (TAIA)<sup>1</sup> prepared by GTA that accompanied the approved SSDA indicated that it is expected that an additional 75 staff and 330 students would be attending the Meadowbank TAFE campus during peak periods by 2032. Based on car parking rates outlined in the Ryde Development Control Plan (DCP) 2014, this generated an additional parking requirement of 104 car parking spaces for the campus.

As part of the project, a total of 289 car parking spaces have been removed, including the following

- 212 spaces in the location of the MTDTH
- 77 spaces in the location of the MSCP.

An additional 277 car parking spaces were approved to be provided as part of the project, with the approved plans detailing the following breakdown:

- 32 spaces in the MTDTH
- 245 spaces in the MSCP.

It is noted that the description of the development in the Development Consent has a minor error and indicates 36 spaces in the MTDTH and 241 spaces in the MSCP.

<sup>1</sup> Multi-Trades and Digital Technology Hub, TAFE NSW Meadowbank, Transport and Accessibility Impact Assessment prepared by GTA dated 1 May 2020

As part of this modification, the two additional levels of parking within the MSCP will provide an additional 149 car parking spaces from the current approval, with a breakdown of the total parking being provided as part of the project as follows:

- 32 spaces in the MTDTH
- 394 spaces in the MSCP.

An additional 100 spaces were also available on the western side of the campus at the time of the SSDA submission, however it is understood that these spaces will be removed under a separate planning pathway.

The TAIA indicated that a net increase of 88 car parking spaces would be provided as part of the project (and other planning pathways). This represented a minor shortfall of around 16 spaces against Ryde DCP 2014 guidance, however was considered within the day-to-day variation in parking demand and tolerance of future staff and student estimates.

The proposed modification would result in a net increase of 137 car parking spaces, and hence a surplus of 33 spaces against Ryde DCP 2014 guidance. As such, the additional car parking further to that required by the project will assist with alleviating any of the existing car parking demand associated with the site that currently occurs on the surrounding streets.

The National Construction Code requires 1 accessible parking space for every 100 spaces or part thereof. Based on a total of 394 car parking spaces, there is a requirement for at least four accessible spaces to be provided. This is met with the provision of six accessible spaces on the ground floor.

### Bicycle Parking

Bicycle parking guidance for different development types is set out in the Ryde DCP 2014. Bicycle parking for new buildings which exceed 600 square metres gross floor area is required to be provided at a rate equivalent to 10 per cent of the required car parking spaces of part thereof.

As detailed in the TAIA (GTA, 2020) that accompanied the approved SSDA, a minimum of 11 bicycle parking spaces were required to be provided for the project based on the DCP 2014 car parking requirement of 104 car parking spaces. The bicycle parking being provided within the multi-trades and digital technology hub will exceed this minimum requirement. As the additional two levels of car parking within the MSCP do not impact the car parking requirements for the site, there is no additional bicycle parking requirement as a result of the proposal.

### Car Park Compliance

The car parking layout for the MSCP, including the proposed additional levels, has been reviewed against the requirements of the Australian Standard for Off Street Car Parking (AS/NZS2890.1:2004 and AS/NZS2890.6:2009). The review indicates that the car park is compliant with the above-mentioned standards and is expected to operate satisfactorily.

### Queuing Assessment

The TAIA (GTA, 2020) prepared for the approved SSDA was based on 241 car parking spaces within the MSCP, with around 132 vehicles estimated to enter the car park in the critical AM peak hour. Through design development, this supply was increased to 245 spaces due to a reduction of car parking spaces within the MTDTH. This modification will increase the total supply within the MSCP by 149 spaces to a total of 394 spaces. Based on this proportional increase in parking, it is anticipated that around 216 vehicles would enter the car park in the AM peak hour with the additional two levels of car parking. This represents around 84 vehicles that would have been previously parking on the surrounding streets during the critical AM peak hour now parking within the MSCP.

Based on the above and a standard ticket machine service rate of 300 vehicles per hour per boom gate, this would result in a 95<sup>th</sup> percentile queue of three vehicles on entry to the MSCP in the critical AM peak hour. This anticipated queue can adequately be accommodated in the available queuing area between the boom gates and the access driveway from See Street.

## Traffic Impact Appraisal

As detailed in the TAIA (GTA, 2020) prepared for the approved SSDA, the anticipated traffic generation for the proposed development was estimated based on the forecast increase in student enrolments from existing conditions.

Considering that this application only seeks to increase the total on-site car parking provision and no changes are proposed to staff and student numbers previously forecast, no increase in traffic generation is expected from that previously assessed in the original TAIA (GTA, 2020). That said, a minor redistribution of traffic could be expected on the surrounding local road network associated, with some staff/ visitors who would have otherwise been parking on the surrounding local streets now accessing the additional car parking within the MSCP.

Modelling results in the TAIA (GTA, 2020) indicated that the Angas Street/ See Street/ MSCP access was expected to operate with a Degree of Saturation of 0.05 and a Level of Service A overall for the future 2032 Scenario in the AM peak hour. This indicates there is ample capacity to accommodate the anticipated increase in turning movements at this intersection, which provides access to the MSCP.

## Conclusion

The proposed additional car parking levels within the MSCP will result in a surplus in parking from DCP 2014 requirements and would assist with internalising some of the existing car parking demand that currently occurs on-street. The proposed increase in parking within the MSCP would not result in any increase in traffic generation from that previously assessed in the original TAIA (GTA, 2020), however a minor redistribution of traffic could be expected on the surrounding local road network associated with some staff/ visitors who would have otherwise been parking on the surrounding local streets, now parking within the MSCP. Overall, the proposal would not cause any discernible change to the anticipated operation of key intersections surrounding the site from that assessed in the original TAIA (GTA, 2020).

I trust the above provides the necessary information. Should you have any questions or require any further information, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely

GTA, NOW STANTEC



Brett Maynard  
Director