

14 July 2020

TL162-02F05 Acoustic Review of Building K (r3)

Jeremy Madden

MIRVAC

Level 28, 200 George Street Sydney NSW 2000

Dear Sir/Madam

6-30 Artarmon Road, Willoughby - Acoustic Review of Building K

The Chanel Nine Campus located at 6-30 Artarmon, Road (the Site) is proposed for redeveloped into a residential development in accordance with an existing Concept Plan Approval MP_10_0198 MOD 2. Additionally, the lot south of the Chanel Nine Campus (TX Australia Site) is proposed to be included in the overall concept plan for the Site through a Section 75W Modification. The proposed residential building located within the TX Australia Site (Building K) is near a major road (Gore Hill Freeway) and therefore must comply with Clause 102 of the State Environmental Planning Policy Infrastructure 2007 (ISEPP). The Clause 102 of the ISEPP states the following:

3. *If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:*
 - a. *in any bedroom in the building - 35 dB(A) at any time between 10 pm and 7am,*
 - b. *anywhere else in the building (other than a garage, kitchen, bathroom or hallway) - 40 dB(A) at any time.*

Renzo Tonin and Associates have undertaken long term noise monitoring at the TX Australia Site from 14th October 2019 to 21st October 2019. The measured noise levels were used to determine the existing ambient noise levels at the TX Australia Site and have been summarised in the table below.

Table 1: Representative day and night road traffic noise levels

Monitoring Location	Survey Period	Representative Noise Levels $L_{Aeq, T^{1,2}}$, dB(A)
TX Australia Site	Day time (7am to 10pm)	64
	14 October 2019 to 21 October 2019	
	Night time (10pm to 7am)	59
	14 October 2019 to 21 October 2019	

Notes:

1. Noise levels presented are facade corrected values.
2. Representative external noise levels in measured L_{Aeq} over 15 hour and 9 hour day and night period respectively.

Based on the noise levels measured in Table 1, the TX Australia Site (Building K) is capable of complying with Clause 102 of the ISEPP by implementing mitigation methods to the noise affected facades.

Indicatively, these treatments will consist of:

- Medium performance acoustic glazing (R_w 31-35 glazing, typically 6.38mm-10.38mm with acoustic seals) for windows and glazed doors. Precise glazing acoustic requirements will differ for individual apartments (depending on glazed area and orientation relative to the road).
- In the event that light weight façade elements (ie – not masonry) are incorporated, this will require a review of the surface density of any external cladding. Any issue of noise through non-glazed elements would be capable of being resolved using acoustic insulation to the external wall cavity and (although unlikely to be needed) 2 layers of plasterboard for the internal wall lining.

Specific details building shell acoustic treatments will be provided in the Design Development/ Construction Certificate phases of the project.

Regards,



Nicholas Tselios

Director

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