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6 September 2019

Dear John Collins,

## Sydney Opera House - Tours Immersive Digital Experience DA Support Letter - Operational Noise and Vibration

This letter is provided in support of Development Application (DA) for the proposed Tours Immersive Digital Experience (TIDE) project at the Sydney Opera House.

A high-level analysis has been undertaken of potential operational noise and vibration impacts to spaces surrounding the proposed development site and is based on our current understanding of the proposed experience.

Full acoustic design scope is currently being progressed and will include due consideration of operational noise and vibration impacts to surrounding spaces and vice versa. Construction noise and vibration is addressed in the environmental component of the DA submission.

The main purpose of the project is to provide an experience will incorporate audio-visual content that will be played as part of an immersive tour. The auditory component of the experience's content will use a loudspeaker system which will be considered when designing acoustic treatment for the development. There is also the potential for the space to be used for other functional purposes. These will also be allowed for in the acoustic design to preserve the amenity of surround spaces.

The location of works is depicted in Figure 1 in the context of surrounding spaces.

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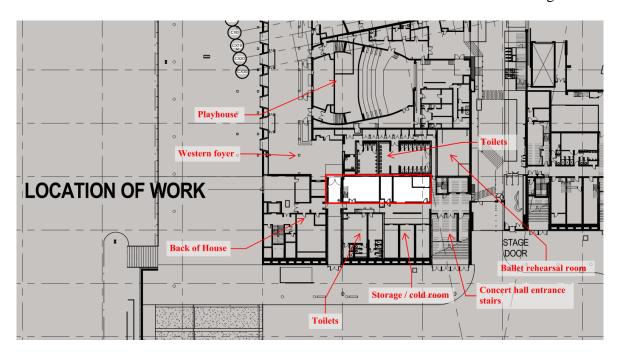


Figure 1: TIDE development site and surroundings

In addition to the spaces depicted in Figure 1, the space immediately above the TIDE experience is the Concert Hall foyer.

The most sensitive spaces in the vicinity of the TIDE site are noted as being:

- The Ballet Rehearsal Room; and
- The Playhouse

Neither of these spaces have a shared common partition with the TIDE site.

The existing location of works is encapsulated by core-filled blockwork partitions and currently houses various storage and cool room areas. The proposed scheme allows for additional sound insulating ceiling and partitions to be included, allowing for further sound insulation as required to preserve the amenity of surrounding spaces. Work in progress architectural drawings are provided in Figure 2 for reference.

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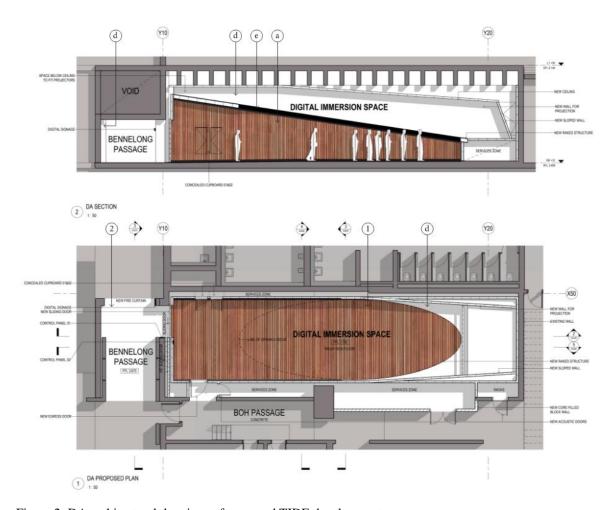


Figure 2: DA architectural drawings of proposed TIDE development

Based on our initial analysis, there are no anticipated issues with regard to operational noise and vibration impacts to surrounding spaces that are not able to be accommodated within the acoustic design for the proposed experience.

Yours sincerely

Mitchell Allen Senior Consultant