

By email  
6 February 2026

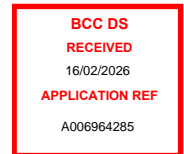
Jenny Keys  
Project Manager  
NextDC  
jenny.keys@nextdc.com

Our ref 288776  
File ref ACD17

Level 5  
151 Clarence Street  
Sydney  
NSW, 2000  
Australia

t +612 9320 9320

arup.com



## NextDC B2 S2 Minor Height Reduction - Acoustic Impacts

### 1. Introduction

This letter presents an acoustic assessment of the proposed minor height reduction for the NextDC B2S2 project. The assessment has been undertaken in response to a recent design change, which involves a reduction in overall building height by approximately 2 metres. The purpose of this assessment is to evaluate the implications of this change on noise emissions and compliance with relevant planning criteria.

### 2. Proposed modifications

NextDC B2S2 is Stage 2 development of the B2 datacentre located in Brisbane. The project has previously undergone acoustic assessment as part of its planning and design process, with noise criteria established in accordance with state and local regulatory requirements as outlined in the Noise and Vibration Impact Assessment (B2-AC-02-REP [C]-DVA-REV-20230213 Noise Impact Assessment Report, Arup, November 2023, NVIA henceforth) and planning approval subsequently granted.

The recent design modification involves a reduction in the building's overall height by 2 metres, including the building infrastructure and services located within and on the rooftop.

### 3. Assessment

A 3D noise model was developed as part of the NVIA, with modelling details outlined in the NVIA report. The height of the NextDC B2S2 development was reduced by 2 metres and predicted noise emission levels updated.

#### 3.1 Level 8 & 9 roof top parapet

To control noise impacts from the rooftop plant, an acoustic barrier/screen is required, as outlined in the Acoustic Tender Design Report (B2-AC-02-00-RPT-B-TDR-REV-Acoustic Design Report v3, Arup, July 2024).

Based on the reduced building height, the acoustic assessment model has been updated to reflect the latest building design. Acoustic mitigation measures have also been updated, i.e. increase the height of the solid screen by 2 metres along the northern edge, as shown in the below figures.

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No changes to other elevations of solid screen are proposed. The exiting solid screen configurations are presented in , and for reference.

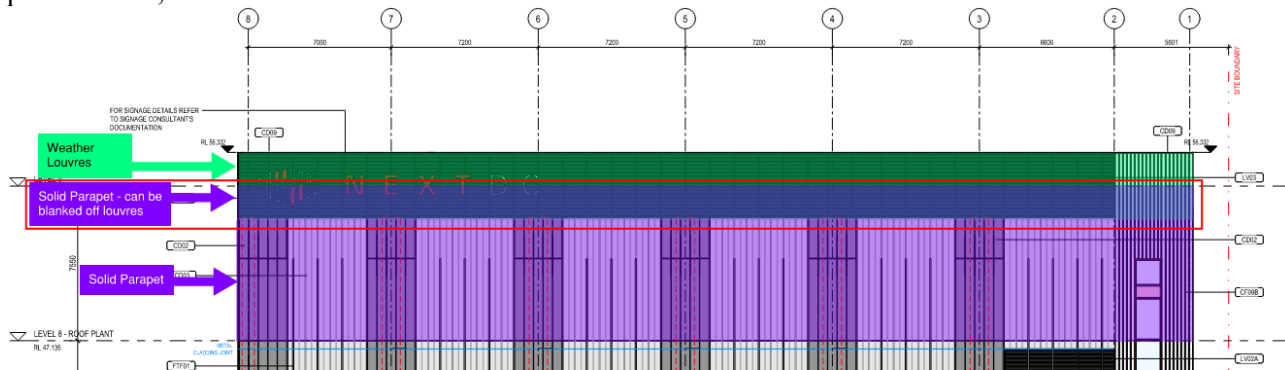


Figure 1: Rooftop acoustic barrier / screen north elevation (Solid up to +8 m From Level 8 FFL). New solid parapet section highlighted in red

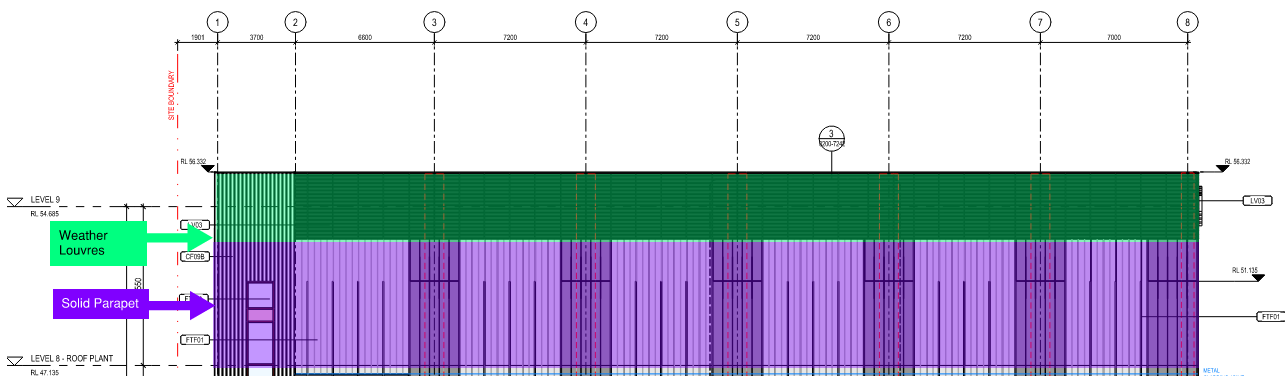


Figure 2: Rooftop acoustic barrier / screen south elevation (Solid up to +6 m From Level 8 FFL) – no change from existing

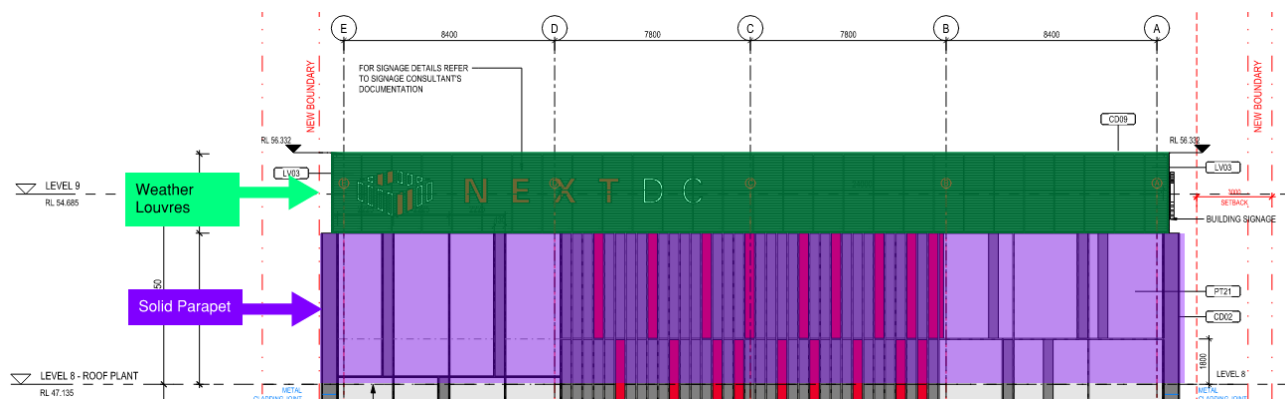
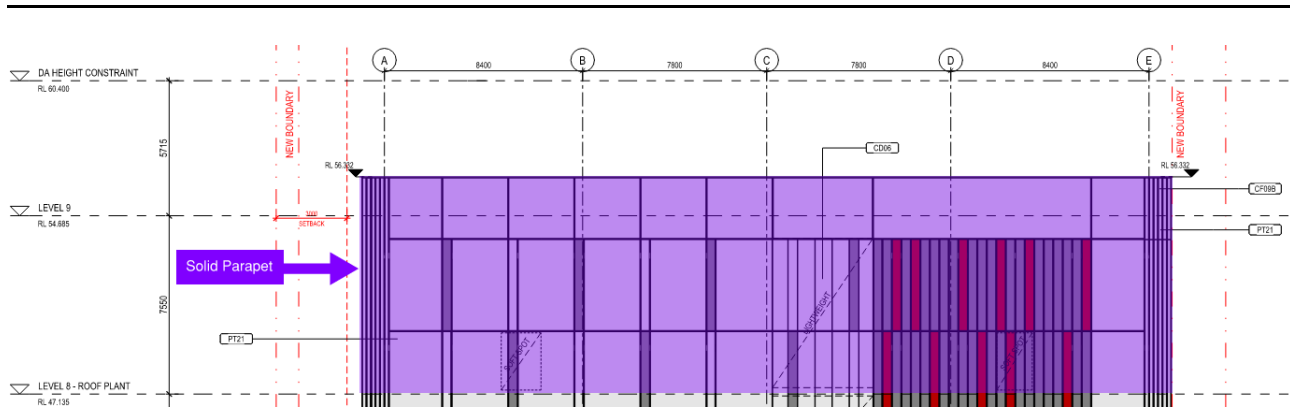


Figure 3: Rooftop acoustic barrier / screen east elevation (Solid up to +6 m From Level 8 FFL) – no change from existing

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**Figure 4: Rooftop acoustic barrier / screen west elevation (Solid up to +10 m From Level 8 FFL) – no change from existing**

The solid parapet section shall meet a minimum acoustic transmission loss of  $R_w + C_{tr} 31$ , indicative surface mass of  $13\text{kg/m}^2$ . This solid section can comprise a weather louvre with solid 9mm fibre cement sheet backing.

### 3.2 Results

Updated predicted noise levels at noise receivers are presented in Table 1.

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**Table 1: Predicted noise impacts, dBA**

Assessment location	Standard operations (24 hours, assessed to most stringent night criteria)				Maintenance operations (Day criteria)				Emergency operations – Power failure (Adjusted night criteria, i.e. +5 dB)			
	Worst affected floor	Noise planning criteria	Predicted noise level <sup>1</sup>	Compliance	Worst affected floor	Noise planning criteria	Predicted noise level	Compliance	Worst affected floor	Noise planning criteria	Predicted noise level	Compliance
R1	F 14	45	40	Yes	F 14	55	41	Yes	F 14	50	47	Yes
R2	F 8	45	22	Yes	F 8	55	28	Yes	F 8	50	32	Yes
R3	F 8	45	24	Yes	F 8	55	28	Yes	F 8	50	33	Yes
R4	F 15	45	28	Yes	F 15	55	36	Yes	F 15	50	41	Yes
R5	F 13	45	24	Yes	F 13	55	35	Yes	F 13	50	41	Yes
R6	F 1	45	17	Yes	F 1	55	25	Yes	F 1	50	31	Yes
R7	F 1	50	23	Yes	F 1	57	29	Yes	F 1	55	34	Yes
R8	F 17	50	45	Yes	F 18	57	48	Yes	F 17	55	54	Yes
R9	F 1	50	22	Yes	F 1	59	30	Yes	F 1	55	32	Yes
R10	F 15	45	35	Yes	F 15	55	51	Yes	F 15	50	45	Yes

Notes:

1. Highest predicted noise level per assessment location.

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**Table 2: Predicted noise impacts, dBC**

Assessment location	Standard operations (24 hours, assessed to most stringent night criteria)				Maintenance operations (Day criteria)				Emergency operations – Power failure (Adjusted night criteria, i.e. +5 dB)			
	Worst affected floor	Noise planning criteria	Predicted noise level <sup>1</sup>	Complies with Noise planning criteria	Worst affected floor	Noise planning criteria	Predicted noise level <sup>1</sup>	Noise planning criteria	Worst affected floor	Noise planning criteria	Predicted noise level <sup>1</sup>	Compliance
R1	F 14	60	50	Yes	F 14	65	58	Yes	F 14	65	63	Yes
R2	F 8	60	36	Yes	F 8	65	45	Yes	F 8	65	48	Yes
R3	F 8	60	39	Yes	F 8	65	46	Yes	F 8	65	50	Yes
R4	F 15	60	41	Yes	F 15	65	49	Yes	F 15	65	54	Yes
R5	F 13	60	39	Yes	F 13	65	47	Yes	F 13	65	54	Yes
R6	F 1	60	31	Yes	F 1	65	39	Yes	F 1	65	45	Yes
R7	F 1	70	35	Yes	F 1	75	42	Yes	F 1	75	47	Yes
R8	F 17	70	52	Yes	F 18	75	59	Yes	F 17	75	66	Yes
R9	F 1	70	35	Yes	F 1	75	45	Yes	F 1	75	49	Yes
R10	F 15	60	46	Yes	F 15	65	61	Yes	F 15	65	59	Yes

Notes:

1. Highest predicted noise level per assessment location.

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Results show, provided an increased solid parapet height along the northern roof boundary, predicted noise levels comply with noise criteria as per planning requirements.

#### **4. Conclusion**

The minor height reduction for NextDC B2S2 has been assessed for acoustic impacts. With the proposed increased parapet height along the northern edge, the project is expected to remain compliant with relevant noise criteria.

Yours sincerely



**Mathew Simon**

Associate | Acoustic, AV & Theatre Team Leader

**d** +61 2 9320 9736

**e** [mathew.simon@arup.com](mailto:mathew.simon@arup.com)