

29 August 2019

Ashleigh Smith  
Willowtree Planning

**St Aloysius SSDA**  
Response to IPC letter dated 26 August 2019

Dear Ashleigh

In response to the relevant items raised in the letter from the IPC noted above, we advise as follows:

**Item 9 – New Rooftop Structure**

We do not agree that the proposed structures are inconsistent with the design quality principles of the Education SEPP.

The plant areas were revised in the 15 August 2019 submissions, and these changes significantly mitigated the perceived impacts. The vast majority of the equipment on the rooftop are air cooled and therefore requires exposure to external space and air circulation in order to operate. Plant which can be located internally has been so located, on Levels 0, 1 and 2. It is therefore not feasible to simply move the plant within the building. Alternative HVAC strategies, such as water cooled chillers have been considered however this strategy would require large cooling towers on the roof which is considered to be an inappropriate solution for the school due to the risk of Legionella. The proposed strategy was developed giving consideration to rooftop plant requirements, WHS and the ESD ambitions for the project.

We do not agree that the proposed structures are inconsistent with the design quality principles of the Education SEPP.

The plant areas were revised in the 15 August 2019 submissions, and these changes significantly mitigated the perceived impacts. The vast majority of the equipment on the rooftop are air cooled and therefore requires exposure to external space and air circulation in order to operate. Plant which can be located internally has been so located, on Levels 0, 1 and 2. It is therefore not feasible to simply move the plant within the building. alternative HVAC strategies, such as water cooled chillers have been considered however this strategy would require large cooling towers on the roof which is considered to be an inappropriate solution for the school due to the risk of Legionella. The proposed strategy was developed giving consideration to rooftop plant requirements, WHS and the ESD ambitions for the project.

As the plant will necessarily be located on the top floor(s), the loss of floor area is far from insignificant, and would greatly compromise the operation of the College in relation to its music teaching facilities. The proposal in its original form has impacted these facilities already, in order to enable the removal of the existing stairwell.

Further detailed consideration of the plant locations can provide the following amendments (refer supporting drawings):

1. The plant located on the Level 3 roof of the NE wing can be moved to the extreme NE corner and lowered so as to not exceed the level of the parapet. This can be achieved by redesigning the stair and extending its intermediate landing, with some loss of functional area.
2. The plant proposed in the 15 August 2019 response, located along the southern face of the level 4 roof on the western wing, can be shortened in length as shown. The screen enclosure could be constructed in “hit and miss” brickwork if this material choice was considered important, although the Applicant's preference remains a metal louvred screen for adequate airflow for the equipment.  
The accompanying diagrams, overlaid on aerial photographs, indicate that the impact on views towards the Bridge from the apartments at similar levels are either not significant or negligible.
3. The reduced plant proposed in the 15 August 2019 response, abutting level 5 on the level 4 roof on the northern wing, can be shortened in length as shown, and moved to the northern edge of the roof. The screen enclosure on the north and east could be constructed in “hit and miss” brickwork for consistency with the facade. Again, the Applicant's preference remains a metal louvred screen for adequate airflow for the equipment.  
The accompanying diagrams, overlaid on aerial photographs, indicate that the impact on views towards the Bridge from the apartments at similar levels are either not significant or negligible.  
The accompanying photographs, taken from the level 4 roof in line with the line of sight from the apartments, demonstrate the benefit achieved by removing the existing stairwell, which far outweighs the minor impacts of the proposed new plant enclosures.
4. The plant enclosure behind the LMR on level 5 does not impede any significant views, as shown in the accompanying photograph. Whilst it is larger in footprint, it is lower in height than the existing plant which it replaces.

Yours sincerely  
UMOW LAI

Afroz Awan  
Associate