

The Manager

Northern Beaches Council

725 Pittwater Road

Dee Why NSW 2099

21st March 2019

Dear Sir,

Attention: Mr Daniel Milliken

Re: 184 Wyndora Ave Freshwater

MOD 2018/0432

Further to the Northern Beaches Local Planning Panel decision to defer the above Modification of the Development Consent, we wish to be submitted amended plans as requested by the Panel.

The Panel has requested that all air conditioning condensers be relocated from the roof of each townhouse to the basement of each townhouse and that the basement ventilation shaft cowling be replaced with a flat cowling to reduce the height of the ventilation shaft.

IPM can comply with the replacement of the ventilation shaft cowling, however the relocation of the condenser units to the basement is not feasible or sustainable.

Attached is an advice from the Mechanical Engineer stating the reasons why the relocation of the condensers to the basement area is not appropriate.

The attached amended plans show the location of the condensers on the rear terraces of each townhouse, which we believe is their most appropriate location.

The condenser units:

- are typical of those used in domestic situations in all residential areas and their noise attenuation properties will ensure that adjoining properties will not be affected by the installation of them as proposed; and
- will be screened and not visible from any public area or neighbouring property.

We note that State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 specifies domestic air conditioning units as "exempt development" and provides the following standards which require that units:

- not to be located on the wall or roof of a building that faces the primary road, or forward of the building line to the primary road;
- to be located at least 450mm from each lot boundary;
- to be attached to the external wall of a building or ground mounted;
- to be not higher than 1.8m above ground level (existing);
- not to involve work that reduces the structural integrity of the building; and
- not to reduce the existing fire resistance level of a wall.

The condenser units on the rear terraces of each townhouse, as proposed, are to comply with the requirements for "exempt development".

Any noise from the condensers is controlled by the Protection of the Environment Operation (Noise Control) Regulation Operations Act 2000, which provides strict controls over the operations and use of the air conditioning plant.

IPM believes that the proposed location of the condenser units is in line with Council's wishes to remove them from the roof of the townhouses and the most appropriate way of resolving the issues associated with the application.

Yours Faithfully,

Alek Novakovic

Managing Director



Consultants Advice

20160405

CA Number

M-1

Project Name

184 Wyndora Ave Freshwater

Project Number

20160405

To:

IPM Holdings Pty Ltd

Attention:

Mr Oscar Herranz

Document Date

19/03/2019

From

Solomon Aluaque (Senior Mechanical Engineer)

Building Services Engineers

Summary

Condenser units are required to be located in an outdoor area or within partially enclosed well ventilated area.

As indicated on the architectural drawings the existing car park exhaust air riser size has an internal clearance of 1m x 1m. This can accommodate approximately 10,000L/s of airflow and can cater for a limited number of condenser units.

If any of the condenser units are in the basement car park, the existing car park exhaust air riser would need to be modified to cater for the condenser unit by replacing the exhaust fan and carrying out modification works to the ventilation system.

To prevent the accumulation of heat generated from the condenser units the car park exhaust air riser would need to operate when the basement car park exceeds approx. 35°C. The exhaust air fan system would maintain the operation of the condenser units.

Without the exhaust air fan system, the condenser units will overheat and shut down.

Locating all the condenser units within the basement will require a new second car park exhaust air riser of similar size and height to prevent the hot air from accumulating within the basement.

Locating all the condenser units within the car park would also generate additional heat within the basement and would require the fans to operate regularly during summer.

Any exhaust air fan system utilised to assist with the ventilation of the condenser units is not ideal as the fans would generate higher electrical running cost. Maintenance cost would also increase and if required to be replaced then a high cost would be incurred.

We therefore do not recommend relocating all the condenser within the basement. As it would cause heat buildup and additional unbearable noise within the basement when one consider that there are habitable rooms at the rear of each individual garage.

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20160405 CA V2 Page 1 of 1