

# HABIT8

Landscape Architecture & Urbanism

1<sup>st</sup> June 2022

Frasers Property and Altis Property  
Mr Roland Martin  
Mr Stephen O'Connor

Dear Roland and Stephen,

**RE: Ardex Warehouse  
The Yards  
Mamre rd, Kemps Creek NSW**

The below clause in the DCP is almost impossible to achieve from a site planning perspective on logistics and manufacturing projects.

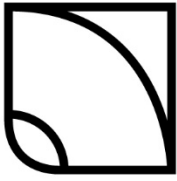
**Mamre Road Precinct DCP clause 4.2.3 Landscaping**

*4) A minimum 15% of the site area is to be pervious surfaces, achieved through landscaping and/or the use of permeable paving materials. Perviousness is to be calculated in accordance with the following index:*

- *Deep soil (one metre or more in depth, connected subsoil)–100%*
- *Shallow soil (less than one metre in depth, not connected to subsoil)–75%*
- *Permeable pavement–50%*
- *Hardstand–0%*

The following points outline the reasons why this clause cannot be achieved:

- a. Due to the nature and size of industrial logistics facilities 15% permeable landscape is very difficult without severely compromising the form and function of logistics warehouses.
- b. Even if we were to comply with the other landscape objectives regarding setbacks and planting islands in car parks, it is still difficult to achieve 15% without making all hard pavement permeable.
- c. Increasing landscape setbacks to reach the 15% of site area calculation severely restricts the development functionality on industrial estates which need certain m2 of level pavement and warehouse to be feasible.
- d. The code says that only 50% of permeable paving can be counted as “pervious”. Most pavement areas on the average industrial site would have to be specified as permeable.



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- e. The costs for supply and install are extremely high for commercial grade vehicular permeable pavement.
- f. Construction staging with preparation of the site as one pad is such that it is very hard to split the base preparation works on site into pad for building and permeable pad for the car parks.
- g. Taking into consideration the weight and size of trucks and delivery vehicles, permeable paving would need to be installed on heavily compacted FCR with pavers at 100mm thick. The vehicle compliant compaction levels under the pavers significantly reduces the performance of the pavers percolation rate.
- h. In addition to point e. the soil profile for most sites in the Mamre Rd precinct is heavy clay. Clay has very poor percolation rates so any benefit from the installation of permeable pavers would be negated by the clay soil below the compacted material.
- i. There is no benefit to permeable paving for planting in car parks to help with root growth. We do not plant large trees in car parks due to dangerous limb drop (especially in drought periods). Our research has shown that planting islands are sufficient in providing soil volume for small to medium trees specified in those areas.
- j. We advise that the local environment, community and potential tenants would be better off with selected trees specified on the project upsized to 200L pot sizes. (Over 3m in height). This shall help form tree canopy earlier and ameliorate the urban heat island effect early in the developments lifespan.

I am an appropriately experienced, qualified and competent person being listed on the Australian Institute of Landscape Architects (AILA) Register. I possess indemnity Insurance to the satisfaction of the building owner. I have 25 years experience as a landscape architect and we are considered industry experts in the industrial logistics sector.

Yours Faithfully

HABIT8 PTY LTD

DAVID.VAGO Blarch(hons)RLA  
DIRECTOR