

The background of the slide features three large, overlapping teal triangles that point towards the left. They are arranged in a row, with each triangle slightly offset and overlapping the one to its right.

4.0

BUILT FORM TESTING

4.0 Built Form Testing

The case studies are drawn from applications received and permits issued within the Study Areas over the last 5 years. The case studies were selected by Council officers to demonstrate the range of higher density applications received, with some determined by Council and some through a VCAT process. The case studies were tested against the proposed standards and demonstrates the alternative outcome should the proposed standards have been applied to the site.

The testing assumed floor to floor heights of 4 metres for ground floor and 3 metres for upper levels.

The testing includes details regarding:

- Total site area
- Gross floor area
- Site coverage (%)
- Overall building height
- Side setbacks
- Rear setbacks
- Upper level setbacks
- Open Space

- Large Tree Planting Areas
- Building Depth
- Internal Amenity
- Tree pit depths

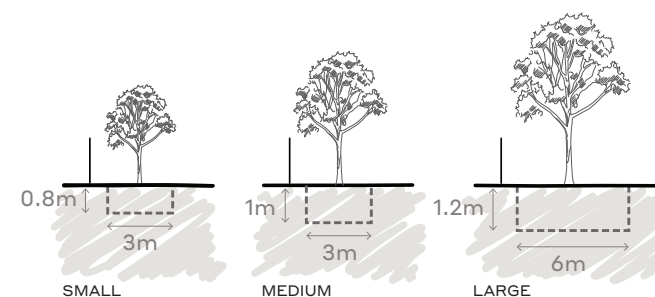
Within the four study areas, six existing permits were selected with varying site sizes, orientation and street context (main road, service road and a local court). The permit application outcomes in terms of site coverage, open space, small to medium tree planting area, and gross floor area are compared with those achieved by a combination of the Proposed Built Form Standards and Clause 58 Apartment Development requirements. By this comparison it is possible to determine whether the proposed standards are achieving a better built form outcome, while not overly restricting the housing objectives of the zone.

Comparisons were drawn between site occupation and greening and internal amenity. This included site coverage, provision of open space, provision of large tree planting area, building depth and building entry and circulation as required under Clause 58.03-5.

Clause 58, Standard D10 (Clause 58.03-5) refers to deep soil areas, but does not give a measure of the minimum required depth of a 'deep soil' area.

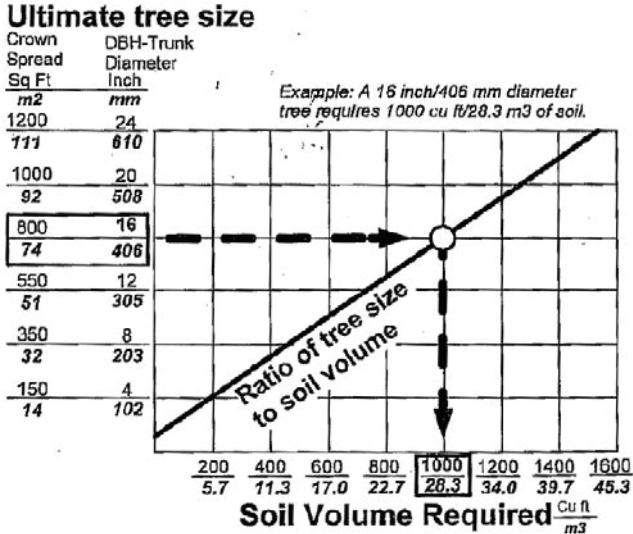
Depths have been sourced from the *Sydney Landscape Code, 2016* and the *Bartlett Tree Research Laboratories Technical Report*, to ensure trees of small, medium and large heights are provided with adequate deep soil area.

The table on the following page applies the minimum required depths to the minimum deep soil areas of Clause 58.



21 Minimum deep soil area requirements diagram

Table 2.4.1. Tree size to soil volume relationships (Urban 1992).



22 Minimum soil volume required.
Source: Bartlett Tree Research Laboratories

SITE AREA	DEEP SOIL AREAS	MINIMUM TREE PROVISION	MINIMUM DEPTH
750 - 1000 square metres	5% of site area (minimum dimension of 3 metres)	1 small tree (5-8 metres) per 30 square metres of deep soil	800mm
1001 - 1500 square metres	7.5% of site area (minimum dimension of 3 metres)	1 medium tree (8-12 metres) per 50 square metres of deep soil or 1 large tree per 90 square metres of deep soil	1000mm 1200mm
1501 - 2500 square metres	10% of site area (minimum dimension of 6 metres)	1 large tree (at least 12 metres) per 90 square metres of deep soil or 2 medium trees per 90 square metres of deep soil	1200mm 1000mm
>2500 square metres	15% of site area (minimum dimension of 6 metres)	1 large tree (at least 12 metres) per 90 square metres of deep soil or 2 medium trees per 90 square metres of deep soil	1200mm 1000mm

NOTE: Where an existing canopy tree over 8 metres can be retained on a lot greater than 1000 square metres without damage during the construction period, the minimum deep soil requirement is 7% of the site area.



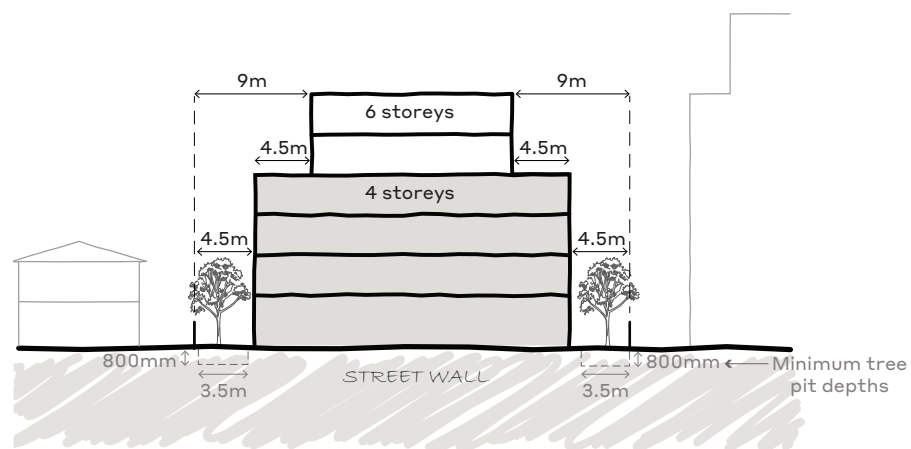
23 Apartment Development showing minimal setback

Built Form Standards for Testing - 6 storeys

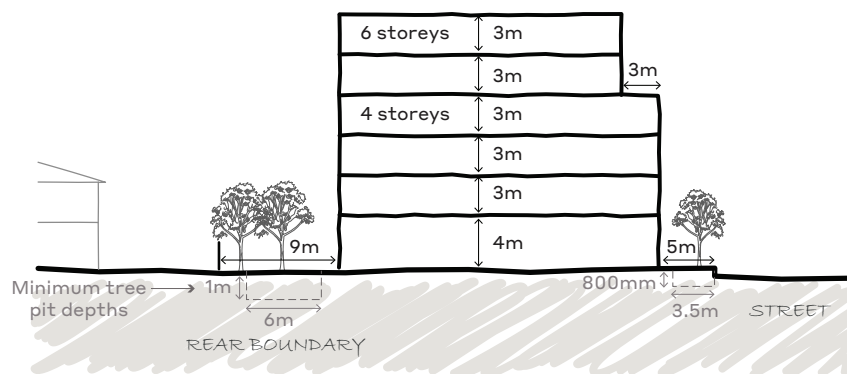
Height	6 storeys (19 metres)
Street Setbacks	5 metres (3m upper level setback above 4 storeys)
Side Setbacks	4.5 metres (to enable 9 metre separation) (4.5m upper level setback above 4 storeys)
Rear Setbacks	9 metres (to ensure adequate area for deep soil and large tree planting and landscaping) and avoid overlooking/screening

The results of the following Built Form Testing informed the subsequent Draft Built Form Guidelines and Controls in Section 5.0.

Standards for Testing - Proposed Typology



24 Front Elevation - Proposed Side Setback Standards



25 Side Elevation - Proposed Front and Rear Setback Standards

4.1 Built Form Testing

801 WHITEHORSE ROAD, MONT ALBERT

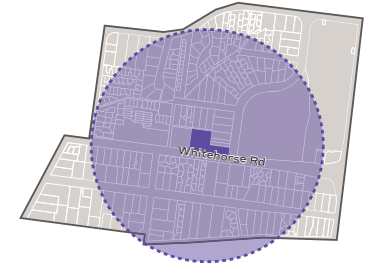
WH/2016/718

5 STOREYS

27 APARTMENTS

REAR ZONE INTERFACE: GRZ4 and RGZ2

SITE AREA: 3,254M²



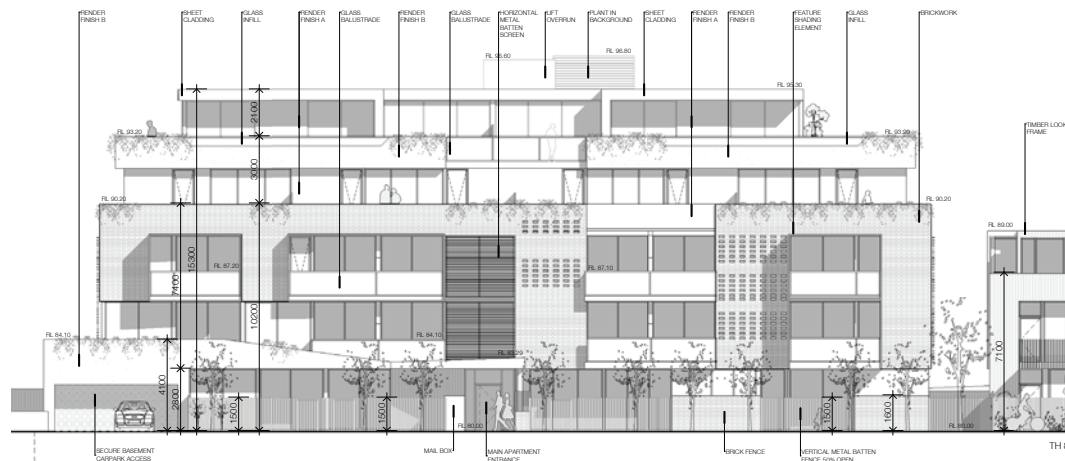
Existing Site Conditions



SITE DIMENSIONS

Frontage - 94.3m

Depth - 50.7m & 17m



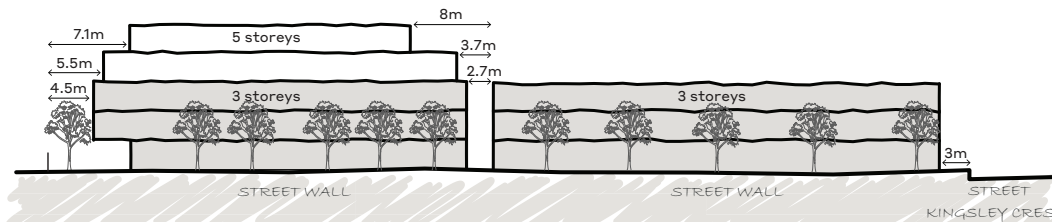
South Elevation - Clarke Hopkins Clarke Architects (Permit Application)



Ground Floor Plan - Clarke Hopkins Clarke Architects (Permit Application)

PROPOSED SETBACKS STANDARDS

PERMIT APPLICATION



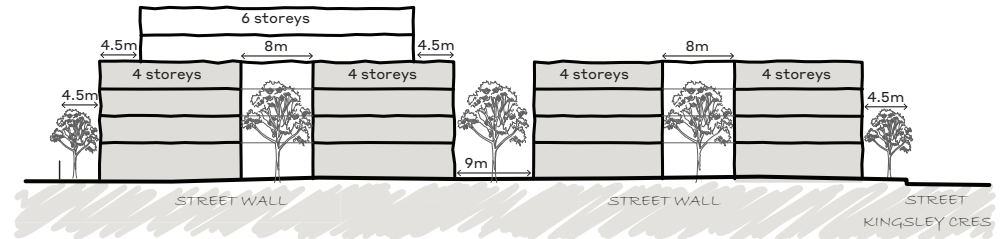
Front Elevation - Diagrammatic Representation - 801 Whitehorse Road Permit Application



Side Elevation - Diagrammatic Representation - 801 Whitehorse Road Permit Application

PROPOSED BUILT FORM STANDARDS

(with Cl. 58 requirements)



Front Elevation - Proposed Side Setback Standards

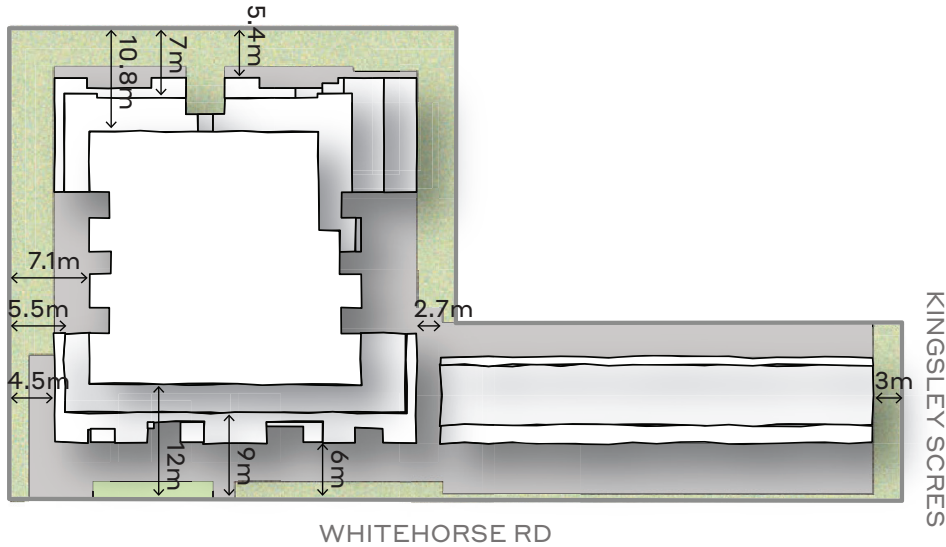


Side Elevation - Proposed Front and Rear Setback Standards

N.B. Only large and medium trees are depicted in the diagrammatic representations

SITE COVERAGE AND GREENING

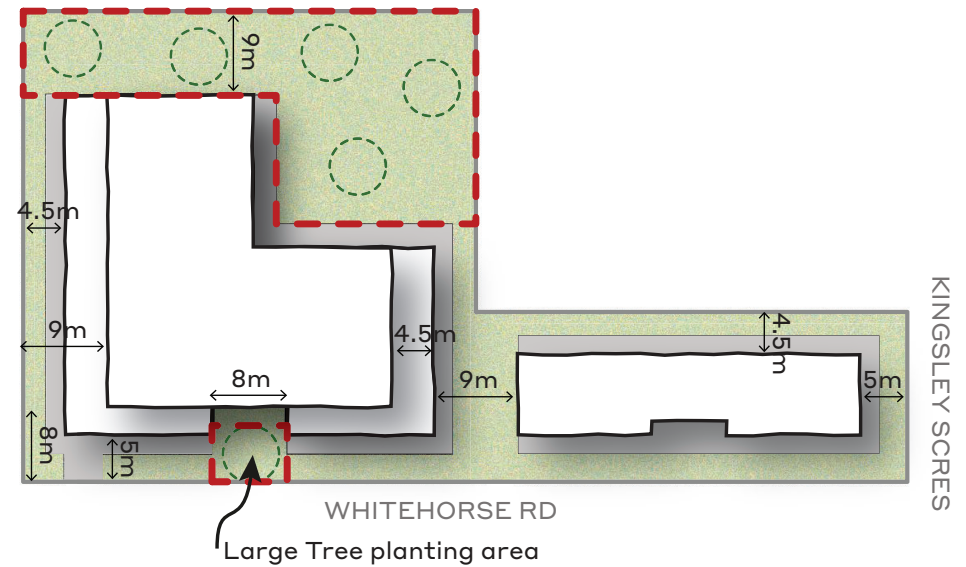
PERMIT APPLICATION



Plan (Diagrammatic Representation) - 801 Whitehorse Road Permit Application

PROPOSED BUILT FORM STANDARDS

(with Cl. 58 requirements)



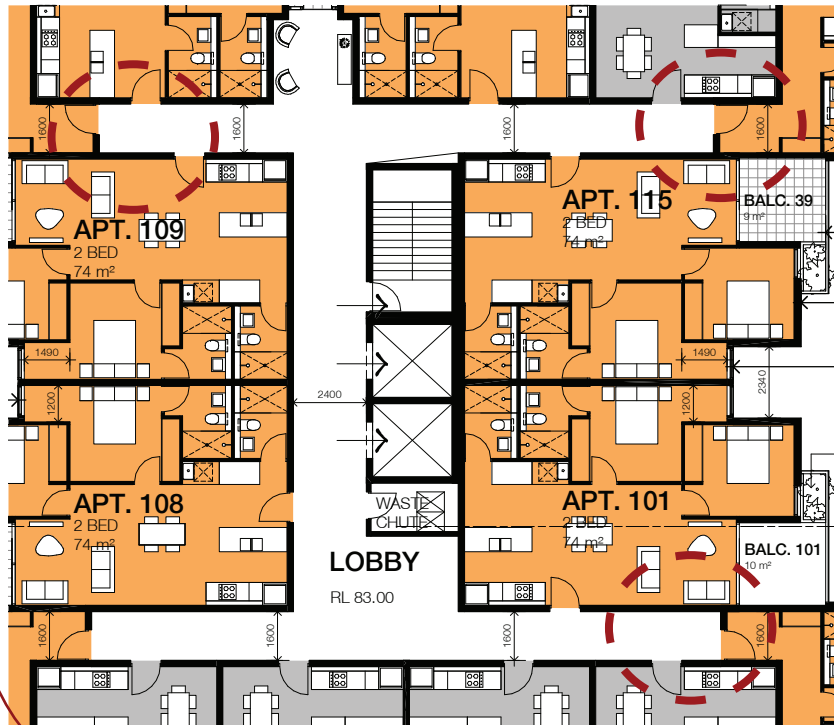
Plan (Proposed Standards for Testing Diagram) - 801 Whitehorse Road

N.B. Only large trees are depicted in the diagrammatic representations

Site Coverage -	1,522m ² (47%)	Site Coverage -	1,400m ² (43%)
Open Space -	1,614m ² (49%)	Open Space -	1,675m ² (52%)
Large Tree Area -	0m ² (0%) of the total site area can be used for large tree planting (non-compliant with cl. 58.03-5)	Large Tree Area -	774m ² (24%) of the total site area can be used for large tree planting (Provides 14% additional large tree area than what is required under cl. 58.03-5)

INTERNAL AMENITY

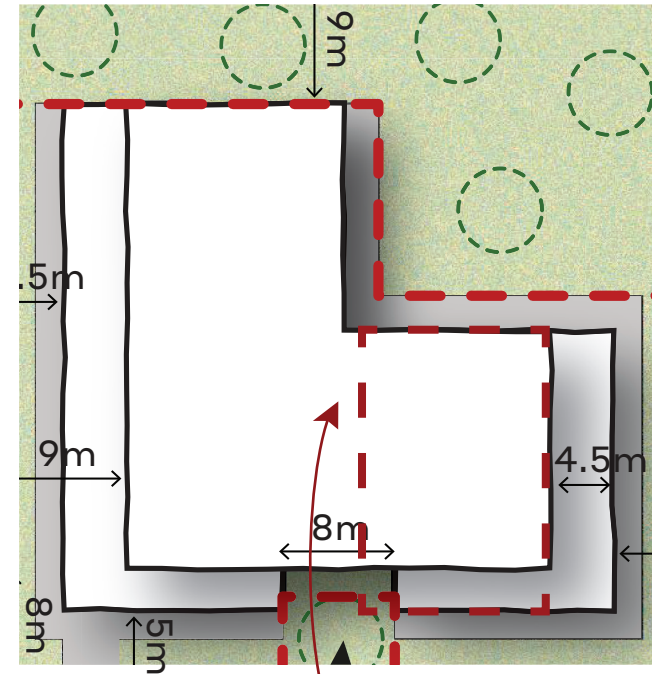
PERMIT APPLICATION



Cl. 58.05-2 Building Entry and Circulation Objectives- Due to excessive building depth the design does not comply with Standard D18 - Provide corridors with at least one source of natural light and natural ventilation

PROPOSED BUILT FORM STANDARDS

(with Cl. 58 requirements)



Building Depth of a maximum of 20m ensures compliance with Clause 58 Internal Amenity

GROSS FLOOR AREA (GFA)

GFA - 6,321m²

GFA - 7,134m²