ACT Planning System Review and Reform Project

ACT Government

DRAFT

Technical Specifications
November 2022

Table of Contents

TECHNICAL SPECIFICATION TS1: RESIDENTIAL

Technical specifications are used as a possible solution or to provide certainty for identified aspects of a development proposal. Technical specifications may also be used as a reference or benchmark for technical matters in the preparation and assessment of development proposals.

Where a proposed development complies with a relevant provision in the technical specifications and the Technical Specification comprehensively addresses the Outcome, further assessment regarding those specific provisions will not be required.

The Territory Planning Authority may consider endorsement or written support from an entity or utility service provider to demonstrate compliance with an Outcome that relates to services or utilities.

This Technical Specification comprises specifications under seven categories:

- Development and site controls
- Height, bulk and scale
- Environment & heritage
- Amenity, safety and accessibility
- Transport, parking and movement
- Services and utilities
- Miscellaneous

Each Technical Specification comprises a *control* and a *specification*.

- ***Control*** refers to the general issue that the specification deals with.
- ***Specification*** suggests a possible solution that supports compliance with respect to the particular issue or provision

The following technical specifications could be referred to demonstrate compliance with the Territory Plan.

These specifications will primarily be for development within residential zones. However, these specifications may be used in other circumstances e.g., residential development in a proposed mixed-use development in other zones, or stand-alone residential developments where permissible in other zones.

1.1 Development and site controls

The following specifications provide possible solutions that should be considered in planning, placing and designing buildings and structures for a proposed development:

Applicable to single dwelling proposals

Control: Front boundary setbacks for **single dwelling** development proposals on **large blocks**

Specification:

1. The minimum boundary setbacks for corner blocks apply only to one street frontage nominated by the applicant or nominated in a district policy as a *secondary street frontage*.
   Chamfers may be included in the *secondary street frontage*, but only if the length of the chamfer is less than the length of the front boundary. Note: Chamfers are ordinarily found at the corner of a block at the junction of streets.

Front boundary setbacks – large blocks (single dwelling)				
	minimum *front boundary* setback	**exception: minimum *front boundary* setback to *secondary street frontage***	**exception: minimum *front boundary* setback to open space or pedestrian paths wider than 6m**	**exception: minimum *front boundary* setback to rear lane *front boundary* or pedestrian paths less than 6m wide**
lower floor level	6m	4m	4m	Nil
upper floor level	6m	4m	4m	Nil
garage	5.5m, minimum of 1.5m behind the front *building line* except where there is a courtyard wall in the *front zone*		4m	nil

Control: Front boundary setbacks for **single dwelling** development proposals on **mid-size blocks**

Specification:

2. The minimum boundary setbacks for corner blocks apply only to one street frontage nominated by the applicant or nominated in a district policy as a *secondary street frontage*.
3. Chamfers may be included in the *secondary street frontage*, but only if the length of the chamfer is less than the length of the front boundary. Note: Chamfers are ordinarily found at the corner of a block at the junction of streets.

Front boundary setbacks – mid-sized blocks (single dwelling)				
	minimum *front boundary* setback	**exception: minimum *front boundary* setback to *secondary street frontage***	**exception: minimum *front boundary* setback to open space or pedestrian paths wider than 6m**	**exception: minimum *front boundary* setback to rear lane *front boundary* or pedestrian paths less than 6m wide**
lower floor level	4m	3m	3m	nil
articulation elements* **– all floor levels**	3m	n/a	n/a	n/a
garage	5.5m, minimum of 1.5m behind the front *building line* except where there is a courtyard wall in the *front zone*		3m	nil

*Articulation elements can include verandahs, porches, awnings, shade devices, pergolas and the like (a carport is not considered an articulation element)

Control: Front boundary setbacks for **single dwelling** development proposals on **compact blocks**

Specification:

4. The minimum boundary setbacks for corner blocks apply only to one street frontage nominated by the applicant or nominated in a district policy as a *secondary street frontage*.
5. Chamfers may be included in the *secondary street frontage*, but only if the length of the chamfer is less than the length of the front boundary. Note: Chamfers are ordinarily found at the corner of a block at the junction of streets.

Front boundary setbacks – *compact blocks* (single dwelling)				
	minimum *front boundary* setback	**exception: minimum *front boundary* setback to *secondary street frontage***	**exception: minimum *front boundary* setback to open space or pedestrian paths wider than 6m**	**exception: minimum *front boundary* setback to rear lane *front boundary* or pedestrian paths less than 6m wide**
all floor levels	3m	3m	3m	nil
garage	5.5m, minimum of 1.5m behind the front *building line* except where there is a courtyard wall in the *front zone*		3m	nil

Control: Side and rear boundary setbacks for **single dwellings** on **large blocks**

Specification:

Large blocks			
	minimum side boundary setback within the *primary building zone*	**minimum side boundary setback within the *rear zone***	**minimum rear boundary setback**
lower floor level – external wall	1.5m	3m	3m
upper floor level – external wall	3m	6m	6m
upper floor level – unscreened element	6m	6m	6m
garage or carport	1.5m	1.5m	3m

Control: Side and rear boundary setbacks for **single dwellings** on **mid-sized blocks**

Specification:

Mid-size blocks			
	minimum side boundary setback within the *primary building zone*	**minimum side boundary setback within the *rear zone***	**minimum rear boundary setback**
lower floor level	1.5m	3m	3m
upper floor level – external wall	3m	6m	6m
upper floor level – unscreened element	6m	6m	6m
garage or carport	1.5m	1.5m	3m

Control: Side and rear boundary setbacks for **single dwellings** on **compact blocks**

Specification:

Compact blocks			
	minimum side boundary setback		Minimum rear boundary setback
	side boundary or longer side boundary of a corner block	shorter side boundary of a corner block (if applicable)	
lower floor level – *unscreened element*	1.5m	3m	3m
upper floor level – *unscreened element*	1.5m	3m	4m
garage or carport	nil^	nil^	3m nil* ^

^ does not apply to that part of a wall with a window of any sort

Control: Private open space for **single dwellings**

Specification:

6. For *large blocks*:
   i. Have a minimum area equal to 60% of the block area
   ii. At least 40% of the minimum private open space area is *planting area*
   iii. Have a minimum dimension of 6m for an area not less than 10% of the block area.
7. For *mid-sized blocks*:
   i. Have a minimum area equal to 40% of the block area
   ii. At least 50% of the minimum private open space area is *planting area*
   iii. Have minimum dimensions as follows:
      - For blocks identified in a District policy as an alternate boundary setback block – 4m for an area not less than 20% of the block area
      - For blocks less than 360m^2 – 5m for an area not less than 10% of the block area
      - In all other cases – 6m for an area not less than 10% of the block area.
8. For *compact blocks*:
   i. Have a minimum area of not less than 30% of the block area
   ii. At least 15% of the block area is *planting area* with a minimum dimension of 2.5m.

Applicable to multi-unit housing development proposals

Control: Front boundary setbacks for **multi-unit** housing development proposals

Specification:

9. *Minimum* boundary setbacks for corner blocks apply only to the street frontage nominated as a *secondary street frontage*. If street frontages on corner blocks are of equal length, the minimum setbacks apply only to one *secondary street frontage*. Chamfers may be included in the *secondary street frontage*.

All Residential Zones - Front Boundary Setbacks					
Minimum front boundary setbacks					
floor level	**blocks in subdivisions approved on or after 18 October 1993**	**blocks in subdivisions approved before 18 October 1993**	**exceptions**		
			corner blocks		**public open space or pedestrian paths wider than 6m**
			secondary street frontage - mid-sized blocks	***secondary street frontage- large blocks***	
lower floor level	4m	6m	3m	4m	4m
upper floor levels	6m	6m	3m	6m	4m
garage	5.5 m with a minimum of 1.5 m behind the front building line	6m	5.5m	5.5m	4m

Note: A new subdivision does not reset the date in regard to these tables. It is based on the original block/estate creation.

Control: Side and rear boundary setbacks for **multi-unit** housing development proposals in **RZ1 and RZ2**

Specification:

RZ1 and RZ2 - Side and Rear Boundary Setbacks			
	Minimum side boundary setback within the *primary building zone*	**Minimum side boundary setback within the *rear zone***	**Minimum rear boundary setback**
Lower floor level – external wall, unscreened element* and *basement	3m	3m	3m
Upper floor level – external wall	3m	6m	6m
Upper floor level – unscreened element	6m	6m	6m

Control: Side and rear boundary setbacks for **multi-unit** housing development proposals in **RZ3, RZ4 and RZ5**

Specification:

RZ3, RZ4, RZ5 - Side and Rear Boundary Setbacks			
	Minimum side boundary setback within the *primary building zone*	**Minimum side boundary setback within the *rear zone***	**Minimum rear boundary setback**
lower floor level – external wall	nil^	3m	3m
lower floor level – unscreened element	1m	3m	3m
first *upper floor level – external wall*	nil^	3m	6m
first *upper floor level – unscreened element*	6m	6m	6m
second *upper floor level – external wall*	nil^	6m	6m
second upper floor level – unscreened element	6m	6m	6m

^ does not apply to that part of a wall with a window of any sort

---

Control: Side and rear boundary setbacks for **multi-unit** housing development proposals **all zones – 4 or more storeys**

Specification:

Side and Rear Boundary Setbacks - buildings with 4 or more storeys		
parts of buildings	**minimum side boundary setback**	**minimum rear boundary setback**
first 4 *storeys - external wall*	3m	3m
first 4 *storeys - unscreened element*	6m	6m
between 5 and 8 *storeys - external wall*	4.5m	4.5m
between 5 and 8 *storeys - unscreened element*	6m	6m
9 *storeys* or more - *external wall or unscreened element*	6m	6m

---

Control: Setbacks within a Block or development for **multi-unit** housing on standard blocks in **RZ2**

Specification:

10. *Buildings* achieve a minimum horizontal separation of 4m between a building containing 2 or more *dwellings* and any other building on the site.
    Note: basements are not part of a building for this specification.

Control: Setbacks within a Block or development for **multi-unit** housing in **all zones**

Specification:

11. Unscreened elements and an external wall on the same block or an adjoining block are separated by 3m or more.
12. External walls at the lower floor level on the same block or an adjoining block are separated by 1m or more.

Control: Private and communal open space for **multi-unit** housing proposals in **RZ3, RZ4, RZ5** and commercial zones

Specification:

13. Developments for fewer than 20 dwellings that include apartments – no less than 20% of the total site area allocated to communal open space (that have a minimum dimension of 2.5m and are directly accessible from common entries and pathways).
14. Developments for fewer than 20 dwellings that do not include apartments – no less than 20% of the total site area is allocated to one or more of the following:
    a) *communal open space* that has a minimum dimension of 2.5m and is directly accessible from common entries and pathways
    b) *private open space* that has a minimum dimension of 2.5m and is associated with dwellings at the lower floor level
    c) Not less than 10% of the total site area is planting area.

Control: Dwelling unit configuration for **multi-unit** housing

Specification:

15. For developments with 40 or more dwellings, a combination of studios or 1-bedroom dwellings, 2-bedroom dwellings and dwellings with 3 or more bedrooms are provided at a minimum rate of:
    a) Studio or 1-bedroom – 20%
    b) 2-bedroom – 30%
    c) 3 or more bedrooms – 20%

1.2 Height, bulk and scale

The following specifications provide possible solutions that should be considered in relation to height, bulk and scale of buildings and structures associated with a proposed development:

Control: Building height and storeys

Specification:

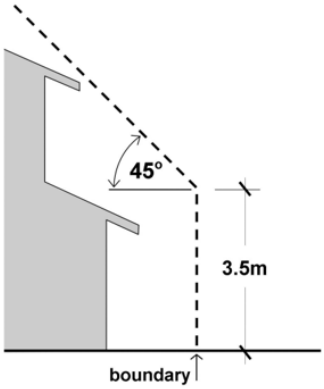
16. For RZ1 and RZ2, height of buildings do not exceed 8.5m above datum ground level
17. For RZ3, RZ4 and RZ5, the number of storeys is limited to:
    a) RZ3: 2 storeys
    b) RZ4: 3 storeys
    c) RZ5:
        i) for that part of the building within 50m of the boundaries of blocks in RZ1, RZ2 or RZ3: 3 storeys
        ii) for that part of the building within 40m of the boundaries of blocks in CFZ, PRZ1 or PRZ2: 3 storeys
        iii) for that part of the building within 30m of the boundaries of blocks in RZ4: 4 storeys
        iv) in all other cases: 6 storeys

Note: There are additional building height and storey provisions in the Territory Plan.

Control: Building envelope for **single dwelling** housing proposals on large blocks and mid-sized blocks approved under an estate development plan on or **after 5 July 2013**:

Specification:

18. Buildings are sited wholly within the building envelope formed by planes projected over the subject *block* at 45° to the horizontal from a height of 3.5m above each side and rear boundary, except for side or rear boundaries where solar building envelope requirements apply.



Note: This does not apply to any part of a building that is required to be built to a boundary of the block by a precinct code

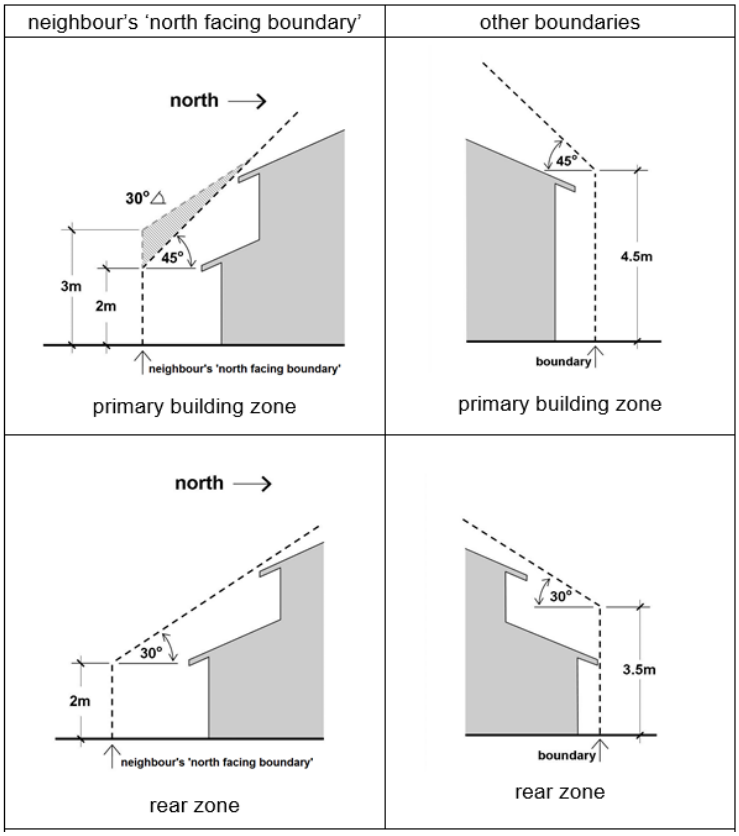
Note: North facing boundary means a boundary of a block where a line drawn perpendicular to the boundary outwards is orientated between 30° east of north and 20° west of north.

Note: For the purposes of this rule all height measurements are taken from datum ground level.

Control: Building envelope **single dwelling** housing proposals on mid-sized blocks approved under an estate development plan before 5 July 2013, or for which a lease was granted **before 5 July 2013**:

Specification:

19. *Buildings* are sited wholly within the building envelope comprising:
    a) for 'north facing boundaries' of adjoining *residential blocks*:
        i) within the *primary building zone* –
            A) planes projected at 45° from a height of 2m above the boundary
            B) where a nil setback is permitted, building elements may encroach beyond the building envelope provided they do not encroach beyond a plane projected at 30° from a height of 3m above the boundary
        ii) within the *rear zone* – planes projected at 30° from a height of 2m above each side and rear boundary
    b) for boundaries other than 'north facing boundaries' of adjoining residential blocks:
        i) within the *primary building zone* – planes projected at 45° from a height of 4.5m above each side boundary
        ii) within the *rear zone* – planes projected at 30° from a height of 3.5m above each side and rear boundary



EDIT: A simplified sun angle of 31 degrees has been used for this specification (above diagram to be updated)

Note: This does not apply to any part of a building that is required to be built to a boundary of the block by a precinct code

Note: North facing boundary means a boundary of a block where a line drawn perpendicular to the boundary outwards is orientated between 30° east of north and 20° west of north.

Note: For the purposes of this rule all height measurements are taken from datum ground level.

Control: Solar building envelope – for **single dwellings**

Specification:

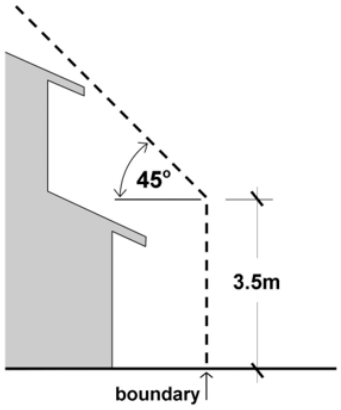
20. For all single dwelling housing proposals, buildings are sited wholly within the solar building envelope formed by planes projected over the subject block at 31° to the horizontal from the height of the 'solar fence' on any northern boundary of an adjoining residential block.
    The height of the solar fence is:
    a) For *large blocks*:
        i. In the *primary building zone* – 2.4m
        ii. All other parts of the boundary – 1.8m
    b) For *mid-sized* and *compact blocks*:
        i. In the *primary building zone* – 3m
        ii. All other parts of the boundary – 2.3m

Note: This does not apply to those parts of a boundary where the adjacent part of the adjoining residential block comprises only an access driveway (i.e., a "battle-axe handle").

Control: Building envelope for **multi-unit** housing proposals (excluding buildings exceeding 3 storeys in RZ5)

Specification:

21. *Buildings* are sited wholly within the building envelope formed by planes projected over the subject *block* at 45° to the horizontal from a height of 3.5m above each side and rear boundary except for side or rear boundaries that where solar building envelope requirements apply.



Notes:

- This specification does not apply to buildings with more than 3 storeys in RZ5
- The reference to a building with more than 3 storeys is a reference to the whole building, not just that part of the building over 3 storeys.
- North facing boundary means a boundary of a block where a line drawn perpendicular to the boundary outwards is orientated between 30° east of north and 20° west of north.
- All height measurements are taken from datum ground level.

Control: Solar building envelope – for **multi-unit** housing

Specification:

22. For all multi-unit housing development in RZ1, RZ2, RZ3 and RZ4 zones, and multi-unit housing developments up to 3 storeys in RZ5 and commercial zones, buildings are sited wholly within the solar building envelope formed by planes projected over the subject block at 31° to the horizontal from the height of the 'solar fence' on any northern boundary of an adjoining residential block.
    The height of the solar fence is:
    a) In the *primary building zone* – 3m
    b) All other parts of the boundary – 2.3m

Note: This does not apply to those parts of a boundary where the adjacent part of the adjoining residential block comprises only an access driveway (i.e. a "battle-axe handle").

1.3 Environment and heritage

The following specifications provide possible solutions that should be considered in relation to the environmental and heritage outcomes associates with a proposed development:

Control: Heritage - places or objects registered or provisionally registered on the **ACT Heritage Register**

Specification:

23. Where a development proposed on land containing places or objects registered or provisionally registered on the ACT Heritage Register, endorsement from the ACT Heritage Council be obtained.

Control: Planting area and tree canopy cover - for multi-unit housing in RZ1 and RZ2 zones

Specification:

24. Planting area is a minimum of 35% of the block area.
25. The minimum dimension of any area included in the planting area calculation is 2.5 metres.
26. All new and existing trees provide at least 15% canopy cover to the block at maturity.
27. All new trees are in deep soil zones.

Control: Planting area and tree canopy cover - for multi-unit housing in RZ3, RZ4 and RZ5 zones

Specification:

28. Planting area is a minimum of 25% of the block area.
29. The minimum dimension of any area included in the planting area calculation is 2.5 metres.
30. All new and existing trees provide at least 20% canopy cover to the block at maturity.
31. All new trees are in deep soil zones in communal areas.

Control: Landscaping - general specifications for all residential development proposals

Specification:

32. Where a development requires groundwork within the tree protection zone of a protected tree and/or is likely to cause damage to or the removal of any protected trees, endorsement from the Conservator of Flora and Fauna is achieved.
33. Any proposed street trees will, at maturity, shade not less than 30% of footpaths and surrounding paths at noon on the summer solstice.
34. Trees proposed to be planted are at least semi-mature stock (1.5m height) and have a minimum mature height of 4m.

Control: Landscaping - for **single dwellings**

Specification:

35. Provides a minimum level of tree planting in *deep soil zones* associated with the requirements in table 7a, consistent with the following:
    a) For *compact blocks*, at least one small tree
    b) For *mid-sized blocks*, at least two small trees
    c) For *large blocks* less than or equal to 800m^2, at least one small tree and one medium tree
    d) For *large blocks* more than 800m^2, at least one medium tree and one large tree; and one additional large tree or two additional medium trees for each additional 800m^2 block area.

Table 7a: Tree sizes and associated planting requirements

Tree size	Mature height	Minimum canopy diameter	Minimum soil surface area dimension	Minimum pot size (litres)*	Minimum soil volume
Small Tree	5-8m	4m	3m	45**	$18m^3$
Medium Tree	8-12m	6m	5m	75**	$42m^3$
Large Tree	>12m	8m	7m	75**	$85m^3$

Notes:

For the purposes of this table, a tree is defined as a woody perennial plant suitable for the Canberra climate. Any new trees cannot be a plant described in schedule 1 of the Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1) or any subsequent declaration made under section 7 of the Pest Plants and Animals Act 2005, unless the tree is included on the ACT tree register.

*Minimum pot size refers to the container size of new trees prior to planting.

**The maximum pot size for small, medium and large *eucalyptus sp.* trees if selected is 45 litres, with maximum height at planting of 2.5m and maximum trunk caliper of 3cm.

36. At least one area of principal private open space complies with all of the following:
    a) Located at ground level
    b) Has a minimum area and dimensions specified under *1.1. Development and site controls* of this Technical Specification
    c) Is directly adjacent to and accessible from a *habitable room*, other than a bedroom
    d) Is screened from adjoining public streets and public open spaces
    e) Is located behind the building line, except where enclosed by a courtyard wall
    f) Is not located to the south, south-east or south-west of the dwelling, unless the open space achieves the relevant solar access specifications.

Control: Landscaping - for **multi-unit** housing proposals in **RZ1 and RZ2** zones

Specification:

37. Developments provides a minimum level of tree planting associated with the requirements in table A7a, consistent with the following:
    a) For *large blocks* less than or equal to 800m^2, at least one small tree and one medium tree
    b) For *large blocks* more than 800m^2, at least one medium tree and one large tree; and one additional large tree or two additional medium trees for each additional 800m^2 block area.

Table A7a: Tree sizes and associated planting requirements

Tree size	Mature height	Minimum canopy diameter	Minimum soil surface area dimension	Minimum pot size (litres)*	Minimum soil volume
Small Tree	5-8m	4m	3m	45**	18m^3
Medium Tree	8-12m	6m	5m	75**	42m^3
Large Tree	>12m	8m	7m	75**	85m^3

Notes:

For the purposes of this table, a tree is defined as a woody perennial plant suitable for the Canberra climate. Any new trees cannot be a plant described in schedule 1 of the Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1) or any subsequent declaration made under section 7 of the Pest Plants and Animals Act 2005, unless the tree is included on the ACT tree register.

*Minimum pot size refers to the container size of new trees prior to planting.

**The maximum pot size for small, medium and large *eucalyptus sp*. trees if selected is 45 litres, with maximum height at planting of 2.5m and maximum trunk caliper of 3cm.

Control: Landscaping - for multi-unit housing proposals in **RZ3, RZ4 and RZ5** zones

Specification:

38. Developments provides a minimum level of tree planting associated with the requirements in table A7b, consistent with the following:
    a) For blocks less than or equal to 800m², at least one small tree and one medium tree
    b) For blocks more than 800m², at least one medium tree and one large tree; and one additional large tree or two additional medium trees for each additional 800m² block area.

Table A7b*: Tree sizes and associated planting requirements

Tree size	Mature height	Minimum canopy diameter	Minimum soil depth (deep soil zone)	Minimum soil surface area dimension	Minimum pot size (litres)	Minimum soil volume
Small Tree	5-8m	4m	0.8m	3m	45**	18m³
Medium Tree	8-12m	6m	1m	5m	75**	42m³
Large Tree	>12m	8m	1.2m	7m	75**	85m³

Notes:

For the purposes of this table, a tree is defined as a woody perennial plant suitable for the Canberra climate. It does not include any plant described in schedule 1 of the Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1) or any subsequent declaration made under section 7 of the Pest Plants and Animals Act 2005, unless the tree is included on the ACT tree register.

*This table applies to new trees only, not existing trees that are to be retained as part of the development.

** The maximum pot size for small, medium and large *eucalyptus sp.* trees if selected is 45 litres, with maximum height at planting of 2.5m and maximum trunk caliper of 3cm.

Control: Water Sensitive Urban Design (WSUD) and water use minimisation - for **single dwellings**

Specification:

39. All new single *dwellings*, *secondary residences* and extensions and alterations (except *extensions* of a size 50% or less of existing floor area, or development where no new plumbing is proposed), meet one of the following options:

Option A:

a) on *compact blocks* -
   i) no minimum water storage requirement
   ii) minimum ★★★ WELS rated plumbing fixtures

b) on *mid-sized blocks* -
   i) minimum on-site water storage of water from roof harvesting is 2,000 litres
   ii) 50% or 75m^2 of roof plan area, whichever is the lesser, is connected to the tank
   iii) the tank is connected to at least a toilet, laundry cold water and external taps that are attached to the house. The connection will require a pump where it cannot be elevated sufficiently to give adequate pressure.

c) on *large blocks* up to 800m^2 -
   i) minimum on-site water storage of water from roof harvesting is 4,000 litres
   ii) 50% or 100m^2 of roof plan area, whichever is the lesser, is connected to the tank
   iii) the tank is connected to at least a toilet, laundry cold water and external taps that are attached to the house. The connection will require a pump where it cannot be elevated sufficiently to give adequate pressure.

d) on *large blocks* 800m^2 or greater -
   i) minimum on site water storage of water from roof harvesting is 5,000 litres
   ii) 50% or 125m^2 of roof plan area, whichever is the lesser, is connected to the tank
   iii) the tank is connected to at least a toilet, laundry cold water and external taps that are attached to the house. The connection will require a pump where it cannot be elevated sufficiently to give adequate pressure.

Option B:

A greywater system capturing all bathroom and laundry greywater and treating it to Class A standard. The treated greywater is connected to all laundry cold water, toilet flushing and all external taps.

Option C:

Evidence is provided that the development achieves a minimum 40% reduction in mains water consumption compared to an equivalent development constructed in 2003, using the on-line assessment tool or another tool. The 40% target is met without any reliance on landscaping measures to reduce consumption.

Note: The online Single Residential Waterways Calculator can be found at: https://www.planning.act.gov.au/topics/design_build/design-and-siting/water_efficiency/residential_calculator

---

Control: Site disturbance: minimisation of unnecessary cut and fill - for **all residential development** proposals

Specification:

40. The total change in ground level resulting from cut or fill does not exceed 1.5m within 1.5m of a side or rear boundary.
    Note: The change in ground level is the cumulative total of all level changes within 1.5m of the boundary taken from the Datum Ground Level (DGL) to the new Finished Ground Level (FGL).
41. For sites less than 3,000m², the development complies with the Environment Protection Authority, *Environment Protection Guidelines for Construction and Land Development in the ACT*.
42. For sites 3,000m² or greater, the development prepares an erosion and sediment control plan and obtains endorsed by the ACT Environment Protection Authority.

Control: Erosion and sediment control

Specification:

43. For sites greater than 3000m², development complies with an erosion and sediment control concept plan endorsed by the Environment Protection Authority.
44. For sites equal or less than 3,000m², the development complies with the Environment Protection Authority, Environment Protection Guidelines for Construction and Land Development in the ACT.

Control: Stormwater detention

Specification:

45. For development on sites greater than 2,000m² (other than major roads) involving works that have the potential to alter the stormwater regime of the site, a report from a suitably qualified person is provided demonstrating that the development complies with at least one of the following:

a) stormwater retention management measures are provided and achieve all of the following:
   i. Stormwater storage capacity of 1.4kL per 100m² of the total impervious area of the site is provided specifically to retain and reuse stormwater generated on site as a whole
   ii. Retained stormwater is used on site

b) development captures, stores and uses the first 15mm of rainfall falling on the site.
Note: on-site stormwater retention is defined as the storage and use of stormwater on site.

c) stormwater detention measures are provided and achieve all of the following:
   i. capture and direct runoff from the entire site
   ii. Stormwater storage capacity of 1kL per 100m² of impervious area is provided to specifically detain stormwater generated on site
   iii. The detained stormwater is designed to be released over a period of 6 hours after the storm event. For this rule on-site stormwater detention is defined as the short-term storage and release downstream of stormwater runoff.

Note: Calculating on-site detention can include 50% of the volume of rainwater tanks where stormwater is used on-site

---

Control: Stormwater management (flooding) – for **roads for developments greater than 2000m²**

Specification:

46. For development of roads involving developments greater than 2000m², development meets all of the following:
    a) The capacity of existing pipe (minor) stormwater connection to the site is not exceeded in the 1 in 10-year storm event
    b) The capacity of the existing overland (major) stormwater system to the site is not exceeded in the 1 in 100-year storm event.

Control: Stormwater quality - **sites greater than 2,000m²**

Specification:

47. For development on sites greater than 2,000m² (other than major roads) involving works that have the potential to alter the stormwater regime of the site, a MUSIC model prepared by a suitably qualified person is provided demonstrating the average annual stormwater pollutant export is reduced when compared with an urban catchment of the same area with no water quality management controls for all of the following:
    a) gross pollutants by at least 90%
    b) suspended solids by at least 60%
    c) total phosphorous by at least 45%
    d) total nitrogen by at least 40%.

Notes:

- If a tool other than the MUSIC model is used then a report by an independent suitably qualified person must be submitted demonstrating and confirming compliance.

- If parameters that are non-compliant are used then a report must also be submitted by an independent suitably qualified person stating how and why the parameters are appropriate.

Control: Stormwater quality (**major roads** associated with residential development)

Specification:

48. For development of major roads, including the duplication of an existing major road in full or in part a MUSIC model prepared by a suitably qualified person is provided demonstrating the average annual stormwater pollutant export is reduced when compared with a road catchment of the same area with no water quality management controls for all of the following:
    a) gross pollutants by at least 90%
    b) suspended solids by at least 60%
    c) total phosphorous by at least 45%
    d) total nitrogen by at least 40%.

Notes:

- If a tool other than the MUSIC model is used then a report by an independent suitably qualified person must be submitted demonstrating and confirming compliance.
- If parameters that are non-compliant are used, then a report must also be submitted by an independent suitably qualified person stating how and why the parameters are appropriate

---

Control: Site constraints: **Flood risk**

Specification:

49. Where a development is located in a flood prone area, adjacent to a creek or waterway or where there are overland flows through the site, the development is to be designed and constructed to address flood risk in accordance with best practice with the focus being on the protection of life and property. Best practice is provided in AIDR Handbook 7 – Managing the floodplain and, ARR 2019 – A guide to flood estimation. The 1% AEP flood is the basic flood planning level (FPL) for most urban development in the ACT and sensitive development should be subject to a risk assessment to determine the appropriate level of flood immunity. Endorsement of the development from the ESA, TCCS and EPSDD will demonstrate compliance with this specification.

Control: Natural Environment – sites greater than 1000 **m²**

Specification:

50. This Specification applies where developments are located on sites that

- currently contain native species or ecosystems or are intended for rehabilitation or revegetation with native species or ecosystems; or
- contain non-native flora on sites that are part of the urban forest, urban open space, transport or services zones, and waterway corridors.

This Specification does not apply to the following

- site with single dwellings and secondary residences;
- national parks, nature reserves and any other reserved area established under the *Nature Conservation Act 2014*.

When applying this Specification, reference should be made to protected matters, weeds, pests and invasive species as listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 and associated legislation and the ACT *Nature Conservation Act 2014* and regulations, and other ACT environmental strategies and polices.

Development is consistent with the ACT Practice Guidelines for Ecologically Sensitive Urban Design (Consultation Note: these guidelines are to be developed to provide detailed guidance and options for compliance with this Specification).

Control: Permeability - **sites greater than 2,000m²**

Specification:

51. For development on sites greater than 2,000m² involving works that have the potential to alter the stormwater regime of the site; or development within existing urban areas which increases impervious area by 100m², development achieves a minimum of 20% of the site area to be permeable.

1.4 Amenity, safety, and accessibility

The following specifications provide possible solutions that should be considered in to enhance the amenity, safety and accessibility for users of a proposed development:

Control: Privacy

Specification:

52. A person with an eye height of 1.5m standing at any point on the extremity of an *unscreened element* of one dwelling does not have a direct line of sight into a *primary window* of any other dwelling on the same block or an adjacent block. The direct line of sight is a minimum distance of 12m.
53. A person with an eye height of 1.5m standing at any point on the extremity of an *unscreened element* of one dwelling does not have a direct line to more than half of the minimum *principal private open space* of any other dwelling the same block or an adjacent block. The direct line of sight is a minimum distance of 12m.
54. Upper floor windows, upper floor balconies and other upper floor elements that allow for potential privacy impacts to adjoining or nearby properties are set back 6.0m from the relevant boundary or greater. *Upper floor* is defined

Control: (CPTED) Passive surveillance to public spaces - for **single dwelling** development proposals

Specification:

55. Where identified in a precinct code as a surveillance block, habitable room(s) above the garage have windows that face and overlooking the rear lane.

Control: (CPTED) Passive surveillance to public spaces - for **multi-unit** housing proposals

Specification:

Building facades facing a public street or public open space have both of the following:

56. at least one window to a habitable room that is not screened by a courtyard wall
57. at least one door with roofed element such as a verandah or balcony.

Control: Noise management and acoustic treatment

Specification:

58. Where a block is:
    a) located adjacent to a road carrying or forecast to carry traffic volumes greater than 12,000 vehicles per day;
    b) is identified as being potentially noise affected in a District Policy;

c) located in a commercial zone, or;
d) adjacent to a commercial or industrial zone:

59. dwellings are designed and constructed to comply with the relevant sections of *AS/NZS 2107:2000 - Acoustics – Recommended design sound levels and reverberation times for building interiors*;
60. dwellings are designed and constructed to comply with the relevant sections of *AS/NZS 3671 - Acoustics – Road Traffic Noise Intrusion Building Siting and Design;* and
61. a noise management plan, prepared by a suitably qualified person, is endorsed by TCCS.

Control: Site constraints: **Bushfire prone areas**

Specification:

62. Where a development is located in a bushfire prone area, buildings are designed and constructed in accordance with the relevant Building Code of Australia bushfire provisions including nomination of the relevant BAL response. Endorsement of the development from the ESA will demonstrate compliance with this specification.

Control: Site constraints: **Site contamination or hazardous materials**

Specification:

63. Where development is proposed on a site impacted by contamination or hazardous materials the development and proposed methods of responding to the contamination or hazardous materials is endorsed by the ACT Environment Protection Authority.

Control: Accessible and/or adaptable standards - for **all residential development** proposals

Specification:

64. The following development types meet *Australian Standard AS4299 Adaptable housing (Class C)*:
    - *Supportive housing*
    - *Retirement village*
    - *Secondary residences*
    - *Residential care accommodation*

    a) Parking spaces for people with disabilities in public car parks of more than 10 spaces comprise a minimum of 3% (rounded up to the nearest whole number) of the total number of parking spaces required for the development. Note other legislation/standards may have different rates

    b) For common and/or public spaces, the proposed development meets AS 1428, AS2890, AS4586 as applicable

---

Control: Accessible and/or adaptable standards - for **multi-unit housing** development proposals

Specification:

65. For developments comprising of 10 or more dwellings, at least the minimum number of dwellings designed to meet Australian Standard *AS4299 Adaptable housing (Class C)* as outlined in Table A8 is provided. These shall be constructed in the adapted form.

Table A8 – Minimum number of dwellings designed to meet Australian Standard AS4299 – Adaptable Housing (Class C)

total number of dwellings	minimum number of dwellings designed to meet Australian Standard *AS4299 – Adaptable Housing* (Class C)
less than 10	nil
10	1
11 to 20	2
21 to 30	3
31 to 40	4
41 or more	5 + 1 for every 10 additional dwellings over 41

1.5 Transport, parking, and movement

The following specifications provide possible solutions that should be considered in relation to transport, travel modes, vehicle parking, access and manoeuvring for a proposed development:

Control: Number of and location of car parking spaces

Specification:

For single dwellings:

66. The minimum number of car parking spaces provided on a block is 2 unless the development is for a single dwelling house on compact blocks containing not more than 1 bedroom, in which case the minimum number of car parking spaces provided on the block is 1.

For multi-unit housing:

67. Parking rates and location for the provision of parking in the residential zones is in Schedule 1.
68. At least one EV ready car parking space is provided for each unit in a new multi-unit housing development.

Control: Dimensions and access for car parking spaces

Specification:

69. Dimensions of car parking spaces, layout and vehicle manoeuvring meet:
    - *AS 2890.1:2004, the Australian Standard for Parking Facilities, Part 1: Off-street Car Parking* including manoeuvring to and from and within the development. The B99 vehicle template shall be used for all multi-unit housing developments.
    - *Australian Standard AS/NZS 2890.6:2009 Parking Facilities – Part 6: Off-street parking for people with disabilities*
70. Ramps comply with the relevant requirements in *Australian Standard AS2890.1- Parking facilities*.
71. Driveway verge crossings are endorsed by Transport Canberra and City Services.
72. In RZ1 and RZ2, where the block is less than 30 m wide as measured at the street frontage on standard blocks, ramps accessing basement car parking are located behind the building line.

Control: Additional specifications relevant to **single dwellings**

Specification:

73. Car parking spaces are required wholly on site and
    - not located in the front zone, except on compact blocks
    - at least one car parking space is roofed and is behind the front zone
    - comply with sightlines for off-street car-parking facilities and other relevant requirements in *Australian Standard AS2890.1- Parking facilities*
    - a single verge crossing per block is provided
74. The maximum total width of garage door openings and external width of carports facing a street is either 6m or 50% of the total length of the building façade facing that street, whichever is lesser.

Note: this does not apply to frontages to laneways (rear loading blocks).

Control: Additional specifications relevant to **multi-unit housing**

Specification:

75. For previously undeveloped blocks, no more than one driveway verge crossing is provided.
76. For previously developed blocks, or the consolidation of previously developed blocks, no additional driveway verge crossings are permitted and redundant driveway verge crossings are removed, and the verge and kerb restored.
77. Internal driveways comply with all of the following:
    - are set back from external block boundaries by not less than 1m
    - are set back from the external walls of buildings on the site by not less than 1m
    - the setbacks referred to in items a) and b) are planted to a width of not less than 1m
    - windows to habitable rooms and exterior doors within 1.5 of an internal driveway have at least one of the following -
    - an intervening fence or wall not less than 1.5m high
    - for windows, a sill height not less than 1.5m above the driveway
    - the relevant requirements in Australian Standard AS2890.1 - Off Street Parking for sightlines and gradients
    - provide internal radius of at least 4m at changes in direction and intersections
    - have a surface treatment that is distinct from car parking spaces.
78. Internal driveways that serve 4 or more car parking spaces provide turning spaces on the block to allow vehicles to leave in a forward direction.
79. Internal driveways that serve more than 10 car parking spaces and connect to a public road are not less than 5m wide for not less than the first 7m of its length measured from the relevant block boundary.
80. Car-parking spaces on the site for residents achieve all of the following:
    - are located behind the front zone
    - can be in tandem only where they belong to the same dwelling
    - do not encroach any property boundaries
    - one car space per dwelling is roofed
    - are separated by not less than 1.5m from windows or doors to habitable rooms of dwellings that are not associated with the parking space.
81. The maximum total width of garage door openings and external width of carports facing a street for up to 3 dwellings is either the lesser 6m or 50% of the total length of the building façade facing that street, whichever is lesser.
82. For more than 3 dwellings, the maximum width is 50% of the total length of the building façade facing that street.
83. The maximum total width of an entry and/or exit to basement car parking facing the street is 8m.
84. For developments containing 10 or more dwellings with approaches to basements containing car parking that is less than 6m wide, the development includes sufficient areas for vehicles to wait to allow for an entering or leaving vehicle to pass or at least one waiting area and traffic signals.
85. For basements and *undercroft parking*, exposed external walls comply with all of the following:
    - except for ventilation openings, are finished in the same manner as the building
    - where ventilation openings are provided, they are treated as part of the façade with grilles and screens.
    - Visitor car-parking spaces on the site comply with all of the following:

- located behind the front zone
- do not encroach any property boundaries
- are separated by not less than 1.5m from windows and doors to habitable rooms of dwellings
- are not more than 50m walking distance from any common building entry
- clearly identified and visible from driveways
- is located outside of any security barriers; or an intercom and remote barrier release system allows access to visitor parking located behind security barriers.

86. In RZ2 on standard blocks, for co-located car parking spaces on the site, the maximum number of car parking spaces (including spaces in garages but excluding those in basements) is 4; and the minimum separation between groups of co-located car parking spaces (including spaces in garages but excluding those in basements) is 4m.
87. For developments with 40 or more dwellings, at least one short stay parking space and associated access is provided for delivery trucks such as furniture delivery and removalist vans.

Control: Bicycle parking rates – **all residential housing** development types

Specification:

Bicycle parking for residents, employees and visitors are provided on site at the relevant rate outlined below:

Development type	**Bicycle parking spaces required for residents**	**Bicycle parking spaces required for visitors**
Multi-unit housing – apartments	1 per dwelling	1 per 12 dwellings after the first 12 dwellings
Multi-unit housing - Student accommodation	1 per 3 beds	1 per 12 beds
Multi-unit housing – All other developments or parts of developments	Nil	Nil
Boarding house	1 per 80 beds after the first 50 beds	1 per 4 beds after the first 4 beds
Community activity centre	Individual Assessment	Individual Assessment
Early childhood education and care	Individual Assessment	Individual Assessment
Guest house	1 per 80 guest bedrooms after the first 50 bedrooms	1 per 30 guest bedrooms after the first 30 bedrooms
Health facility	1 per 8 practitioners after the first 8 practitioners	1 per 4 practitioners
Residential care accommodation - Independent living units	1 per 2 independent living unit	1 per 12 independent living units after the first 12 independent living unit
Residential care accommodation – Student accommodation	1 per 3 beds	1 per 12 beds
Residential care accommodation – all other developments or parts of developments	1 per 10 beds after the first 10 beds	1 per 15 beds after the first 15 beds
Retirement village – Independent living units	1 per 2 independent living unit	1 per 12 independent living units after the first 12 independent living unit
Retirement village – all other developments or parts of developments	1 per 10 beds after the first 10 beds	1 per 15 beds after the first 15 beds
Special care establishment – Independent living units	1 per 10 beds after the first 10 beds	1 per 15 beds after the first 15 beds

Special care establishment – all other developments or parts of developments	1 per 2 independent living unit	1 per 12 independent living units after the first 12 independent living unit
Special dwelling – Student accommodation	1 per 3 beds	1 per 12 beds
Special dwelling – all other developments or parts of developments	1 per 10 beds after the first 10 beds	1 per 15 beds after the first 15 beds
Supportive housing – Student accommodation	1 per 3 beds	1 per 12 beds
Supportive housing – Independent living units	1 per 10 beds after the first 10 beds	1 per 15 beds after the first 15 beds
Supportive housing – all other developments or parts of developments	1 per 10 beds after the first 10 beds	1 per 15 beds after the first 15 beds

Individual assessments are required for any other development type not listed above.

Control: Bicycle parking dimensions and design – **all residential housing** development types

Specification:

88. Bicycle parking is provided in one or more of the following ways:
    - storage spaces that are a minimum of 1.8m long, 0.7m wide and 1.1m high, accessible only to the relevant resident
    - secure general purpose storage spaces for residents that are a minimum of 1.8m long, 0.7m wide and 1.1m high
    - bicycle rails in communal open space areas
89. Bicycle parking facilities are designed in accordance with Australian Standard 2890.3 – Bicycle Parking Facilities.

Control: Bicycle parking - **End-of-trip facilities (development with 5 or more employees)**

Specification:

90. For new buildings and refurbishment of existing buildings, showers and change rooms are provided at a rate of:

Number of employee bicycle parking spaces required	**Number of showers**
0 to 4	0
5 to 9	1
10 to 24	2
25 and above	2 PLUS 2 showers per 20 employee bicycle parking spaces after the first 24 spaces, rounded up to the nearest even number*

*That is, 4 showers for 25-44 employee spaces, 6 showers for 45-64 employee spaces, 8 showers for 65-84 spaces, etc.

91. Shower and change-rooms are provided either as a combined shower and change cubicle; or as one communal change room for each gender, directly accessible from the showers without passing through a public space.
92. Where more than one shower is required, separate shower and change facilities are to be provided for males and females.
93. To count towards minimum shower numbers, it is to dispense both hot and cold water.

1.6 Services and utilities

The following specifications provide possible solutions that should be considered in relation to site servicing, including possible requirements by utility service providers, for a proposed development:

Control: Servicing and infrastructure

Specification:

94. Proposed development can be sufficiently serviced in terms of infrastructure and utility services.

Endorsement is achieved from relevant utility providers (electricity, water, gas, sewerage and stormwater) to confirm that the location and nature of earthworks, utility connections, proposed buildings, pavements and landscape features comply with utility standards, access provisions and asset clearance zones.

1.7 Miscellaneous

The following specifications provide possible solutions in addition to the preceding categories that should be considered in relation to a proposed development:

Control: Ancillary structures - for **all residential** development proposals

Specification:

95. Developments that propose post occupancy waste management facilities achieve endorsement from Transport Canberra and City Services (TCCS).
96. The following external facilities or equipment are screened or separated from public areas:
    - external storage areas
    - water tanks
    - waste storage enclosures
    - mechanical services (including air conditioners and hot water storage units)
    - clothes drying areas.
97. For dwellings without an associated garage, an enclosed storage area is provided that is:
    - at least 2m in height and has at least one 0.6m internal dimension.
    - has an area of at least:
        - in RZ1 and RZ2 zones – 4m^2
        - in all other zones – 1.5m^2
    - accessible externally from the dwelling or is adjacent to a dedicated car space.
98. Mailboxes are located within 5m front boundary, meets Australia Post requirements for location and are unimpeded.

Control: Ancillary structures - walls and fences on **large and mid-sized blocks**

Specification:

Walls or fencing forward of the building line achieves one or more of the following:

99. has been previously approved under an estate development plan
100. is permitted in a relevant District Policy
101. satisfies the courtyard wall provisions below
102. is exempt under the *Planning Act 2022* or *Planning Regulation*

Control: Ancillary structures - courtyard walls for **single dwellings**

Specification:

103. *Courtyard walls* forward of the *building line* comply with all of the following:

a) total length complies with one of the following:
   i) not more than 50% of the width of the *block*
   ii) not more than 70% where the width of the *block* at the line of the wall is less than 12m

b) setback from the front boundary not less than 50% of the minimum front setback applying to the *block* (under the specification or District Policy)

c) height does not exceed 1.8m

d) constructed only of brick, block or stonework, any of which may be combined with feature panels which clearly distinguishes itself from a panel or timber fence

e) incorporate shrub planting between the wall and the front boundary

f) do not obstruct sight lines for vehicles and pedestrians on public paths on driveways in accordance with Australian Standard *AS2890.1- Off-Street Parking*.

Control: Ancillary structures - courtyard walls for multi-unit housing

Specification:

104. Courtyard *walls* forward of the *building line* achieve all of the following:

a) a total length not exceeding 60% of the width of the block at the line of the wall

b) for RZ1 and RZ2, a minimum setback from the front boundary of not less than 2m

c) For RZ3, RZ4 and RZ5, a minimum setback from the front boundary of not less than of 0.7m.

d) trees and/or shrubs between the wall and the front boundary, in accordance with an approved landscape plan

e) a maximum height not exceeding 1.8m above datum ground level

f) constructed of brick, block or stonework, any of which may be combined with timber or metal panels that include openings not less than 25% of the surface area of the panel and clearly distinguishes itself from a panel or timber fence

g) do not obstruct sight lines for vehicles and pedestrians on public paths or driveways in accordance with Australian Standard AS2890.1- Off-Street Parking.

Control: Signage: for **all residential** development proposals

Specification:

105. Signs related to a residential component of a development are:

- limited to one per frontage
- are no higher than the first storey
- setback a minimum of 1200mm from the kerb
- no larger than $6m^2$
- not illuminated.
- not commercial-based or for advertising

Schedule 1

Parking provision rates and locational requirements for residential development

Parking rates

Development	Parking provision rates for residential zones
Apartment Attached house Detached house Supportive Housing	**Resident:** • One parking space per single bedroom dwelling; and • A minimum average provision of 1.5 spaces per two bedroom dwelling, provided that each two bedroom dwelling is allocated a minimum of one parking space and a maximum of two parking spaces; or • Two parking spaces per two bedroom dwelling; and • Two parking spaces for each dwelling with three or more bedrooms; plus **Visitor:** One visitor space per four dwellings or part thereof where a complex comprises four or more dwellings. Accessible Visitor car parking is to compromise a minimum of 3% (rounded up) of the total number of required visitor parking spaces. Note: to clarify, the minimum average provision is across the development. Individual dwellings are not to be allocated 1.5 spaces.
Boarding house	**Employee:** 0.5 spaces / employee; plus **Resident:** 0.5 spaces / bedroom
Co-housing	0.5 spaces / bedroom; plus 0.25 visitor spaces per bedroom.
Community activity centre	4 spaces / 100m^2 gross floor area (GFA)
Early childhood education and care	**Employee**: 1 space / centre plus 2 spaces per 15 child care places; plus **Visitor:** 2 spaces: < 30 child care places and 1 additional space for every 30 additional child care places or part thereof; plus **Drop-off**: 1 pick-up/set-down bay per 10 child care places
Guest house	**Employee**: 0.5 spaces/employee; plus **Guest**: 1 space/guestroom
Health facility	4 spaces / practitioner
Home business	Subject to individual assessment
Parkland	Subject to individual assessment
Residential care accommodation	0.25 spaces / bed or accommodation unit for visitor parking; plus 1 space / staff residential unit plus 1 space / non-resident peak shift employee
Retirement village	1 space / self-care unit; plus 0.5 spaces / hostel or nursing home unit or bed plus 1 space / staff residential unit plus 0.5 spaces/non-resident peak shift employee Note: the above rates for include visitor car parking requirements.
Special dwelling	1 space per resident employee; plus 1 space per peak shift non-resident employee; plus 1 space per operational vehicle; plus 1 visitor space

Locational requirements

Location or use[1]	Long stay parking	Short stay / Visitor parking	Operational parking[2]
Residential use	On-site	On-site or within 100m	On-site
Early childhood education centre and care	On-site or adjacent	On-site or within 100m	On-site
Residential care accommodation, special dwelling.	On-site	On-site or within 100m	On-site
All other uses excluding those listed above.	On-site or within 200 metres	On-site or within 100m	On-site
Commercial Zones			
City centre	On–site or in publicly available car parks up to 1km distant	On site or within 400m	On-site or adjacent
Town centres	Residential use – on site Non-residential use – on-site or within 1km within the boundaries of the Town centre	On site or within 200m	On-site or adjacent
Group centres	Residential use – on site Non-residential use – on site or within 400m	On site or within 200m	On-site or adjacent
Local centres	Residential use – on site Non-residential use – on site or within 200m	On-site or within 100m	On-site or adjacent
CZ2 & CZ5 zones outside centres and Northbourne Avenue precinct	Residential use – on site Non-residential use – on site or within 400m	On site or within 200m	On-site or adjacent
CZ6 zone	On site or within 200m	On site or within 200m	On-site or within 200m

Note

[1] Distances are **walking** distance in metres, rather than radius.

[2] Operational parking is for vehicles used directly as part of the operation within the development.