

29<sup>th</sup> November 2024

City of Joondalup  
PO Box 21  
JOONDALUP, WA 6919

Dear Sir/Madam,

Please find attached the plans for 12 Parkway, Warwick, and the justification as required.

- **Clause 5.1.3 Lot Boundary setbacks (R-Codes)**
- **Clause 18 Natural Ventilation (HOALPP)**
- **Clause 5.1.4 Open Space (R Codes)**
- **Clause 5.2.1 Setback of garages and carports (R-Codes)**
- **Clause 5.2.3 Street Surveillance (R-Codes)**
- **Clause 5.3.2 Landscaping (R-Codes)**
- **Clause 5.3.5 Vehicular Access (R-Codes)**
- **Clause 5.3.7 Site Works (R-Codes)**
- **Clause 5.4.1 Visual privacy (R-Codes)**
- **Clause 5.4.4 External fixtures, utilities, and facilities (R-Codes)**

**Clause 5.1.3 Lot Boundary setbacks (R-Codes)**

**6 side and rear setbacks (HOALP)**

DTC Requirement *Clause 6 - 1m set back from Boundary*  
Proposed *0.6m to rear (Southern Boundary)*

We seek consideration on a reduced setback for within 1m from the southern boundary on 12 Parkway Warwick. This site has multiple angled boundary lines, and as such, in designing the development to maximize solar passive design and cross-flow ventilation within the development, the overall design is stepped along the southern boundary to capture the cooling breezes from the Southwest. The circulation areas required by the residence within and throughout the development require larger than normal-sized rooms.

The overall design is oriented to the northern frontage, with the south/southeastern walls stepping with the angle of the boundary line. Due to the overall sizing requirements of circulation within these rooms, the corner wall of the study is within the 1m setback.

As the walls are perpendicular to the northern boundary, the corner is the only section of the wall within the 1m setback. The opening within the Study wall is setback further from the south boundary and faces the Eastern side of the property and not directly into the adjoining property.

**Clause 18 Natural ventilation (HOALP)**

DTC Requirement *Clause 18.1: - All rooms to have operable windows*  
Proposed *Unit A: bed 1 ensuite no openings*  
*Unit B: bed 3 ensuite and laundry/pdr have no openings*

Natural ventilation to Unit A Ensuite and Unit B Laundry and Powder room

Within the development and overall design, layouts have been designed to provide privacy and noise separation between each of the bedrooms, along with access to private courtyards and flexible living areas. As such, due to the shape of the site, some of the amenities are within a central location within the house.

Ensuites are all open by way of a full-height opening (FHO) to the bedrooms to permit safe egress with mobility aids from beds to bathrooms, allowing circulation within the rooms and bathrooms. Each bathroom will be fitted with an extraction system and solar tubes to the ensuites and laundries without external openings.

All openings are fitted with window coverings to block out the sun and allow resting during the day when required. Residence within this development will require longer resting periods, may have sensory issues, and require aid for daily tasks. As such, safe egress and wall-mounted supportive aids are a priority within the rooms.

DTC Requirement

*Clause 18.2:*

*Habitable rooms having a window in an external wall which:*

- *Minimum glass of floor area of room*
- *50% clear glazing*

*Openable for 50% of window size*

Proposed

Unit A

- Bed 1: 10.7% glazed area
- Study: 12.8% glazed area, 41.9% openable.

Unit B

- Bed 1: 13.8% glazed area.
- Bed 3: 13.5% glazed area.
- Study: 8.2% glazed area, 26.8% openable.
- Living: 10.7% glazed area.

Please also confirm if the doors to bedrooms are clear glazed areas as they have been considered to be, and should they not be, this will impact the City's assessment/percentages.

Please note that wall-mounted opening mechanisms are provided for all window automations that are designed for accessibility as standard window treatment do not provide suitable grips or opening for someone with additional needs, these mechanisms need to be placed at set heights and clearances from adjoining walls or furniture these also cannot be mounted on to the windows or glass, which requires areas of solid wall to support the mechanism away from corners or fixed furniture.

The Bedrooms within this development require circulation areas for wheelchairs and hoists; these circulation areas must be clear of all furniture fixed or movable, and as such, the rooms are wider and longer than standard. Walls include storage or clearance for supportive services and aids requiring secure areas for fixing, reducing the overall area for windows. As such, all bedrooms have glazed doors with access to private courtyards and gardens.

Living areas are communal spaces for residents to socialize with families and carers; this requires larger circulation areas and storage needs within the living zones.

In regards to Unit A, there are two bedrooms and a large open-plan living area. This area provides flexible movement and circulation for the residents with special needs. The living area has a 2.4m wide sliding door as well as the glazed entry door to the residence, which adds additional light to the living spaces along with the kitchen windows. The design of each room within this development has been carefully considered to provide independence and flexibility for the residents, which is vitally important. Within Unit B, there are three bedrooms and two living areas. One of the living areas is separated from the main open plan living to accommodate three residences, which will have additional families and carers. The secondary living space allows for the catering of sensory issues, which may include light sensitivity. This has been designed specifically with smaller windows and block-out blinds. Clause 18.2 requiring 50% glazing to the total floor area will impact the well-being of residents' mental and sensory needs if larger windows are required.

It is to be noted that the main open-plan living area provides a brighter environment with windows on multiple walls to the Kitchen, Dining, and Family areas. This larger living space provides a social zone and also includes clearance for window mechanisms for access by residents.

Carers will use studies for charting and overnight care, requiring desks, a bed, and wall-mounted storage. As such, a larger amount of space is required for functional use, and carers will be in and out most of the day with the door to always remain open for safety.

**Clause 5.1.4 Open Space (R Codes)**

DTC Requirement

*40% Open Space*

Proposed

39.9%

We seek consideration of the required open space within this development. Due to the residents' requirement for wheelchairs and mobility aids, the space required within the development for egress and safe movement is larger. Refer to the A201 circulation plan.

Clear areas of 1540mm are required around the beds, and 2250mm circulation areas are required in the living spaces. As such, the overall size of the building has increased for the circulation requirements.

Open plan living areas provide circulation and socialization of residents, families, and carers as each resident has different requirements and cannot be assumed to be a direct connection of any of the additional residents and, as such, has the right to privacy, egress, and independent access into and around the property they will be residing within.

See point 18.2 for further information about living areas.

**Clause 5.2.1 Setback of garages and carports (R-Codes) / 7 Resident Parking – Location (HOALPP)**

DTC Requirement	<i>Clause 7.1: 5.5m setback from carport/handstand to primary street</i>
Proposed	Unit A 3.5m Unit B 3.4m

12 Parkway is a large angular site with a 26m street frontage at the end of a cul-de-sac next to a local park. Two dwellings are designed within the site, accessing the cul-de-sac from two crossovers.

Of the 42m northern-facing boundary line, only 26m is accessible to the cul-de-sac. The remaining 16m is adjoining the neighbouring lot. This means the carports and driveways are restricted in their placement. The depth of the site is 28m long with different angles of boundary lines, making this a complex site that is longer in length than in depth.

Due to the depth and restricted access of the cul-de-sac, 'deemed to comply' placement of Carports or Garages with a setback of 5.5m will render the site unusable, and as such, a reduced setback is sought for the proposed carports and hardstands. This is in conjunction with the larger sizing requirements of the homes due to the intended residence.

For the above reasons, we seek consideration and variation to section 7- residential parking within the Housing Opportunity Areas policy. In place of a 5.5m setback, we are seeking consideration of 2.7m to Covered parking bays with vertical landscaping to the rear walls of the parking areas. The allocated space intends to permit an assistance vehicle to access the site. All residents within the home will require transport assistance to leave the property and will not leave the facility without help from a carer/ family member to assist with appointments and shops.

**Clause 5.2.3 Street Surveillance (R-Codes) / 1. Urban Design – Public Domain Interface (HOALPP)**

DTC Requirement	<i>Clause 3.6.8: Bins located outside of primary street setback and not visible from the primary street</i>
Proposed	Please indicate bin store locations.

For unit A, the Bins are proposed to be stored behind the front fence next to the storeroom for access by carers/ cleaners when emptying the household bins.

For unit B, the bins will be stored behind the front fence near the kitchen wall or within the storeroom for carers/ cleaners to empty the household bins.

Bins for both units will be moved by cleaners to the front of the property on the day of pickup and returned to the locations for the residence.

**Clause 5.3.2 Landscaping (R-Codes) / 11-14 Tree canopy and deep soil areas (HOALPP)**

DTC Requirement	<i>Clause 11.1: 20% of site area to be landscaped (151.6m<sup>2</sup>)</i>
Proposed	Areas where 1.5m dimension = 60.86m <sup>2</sup> /8%

We seek the council's consideration for a variation on the total landscaped site area with a dimension greater than 1.5m. This property has been carefully designed for people requiring wheelchairs and electric chairs; access to these properties requires additional circulation areas internally and externally. Due to the intended residences' needs and the irregular shape of the property, increasing the total m<sup>2</sup> of gardens with a greater width than 1.5m will reduce the residents' ability to move independently around the property.

Wheelchairs and electric chairs require a circulation area of 2m and trafficable pathways of at least 1.3m wide to move freely around the property. The requirement of trafficable solid paving reduces the overall landscaping areas.

As such, the current design includes various raised and terrace gardens for sensory interaction at a height that residents can touch and use.

DTC Requirement	<i>Clause 11.6:</i>
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*Collective Design Agency*

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*50% of area between dwelling and street boundary (front setback = 52.24m<sup>2</sup>) to be landscape area)*

Proposed 20.6m<sup>2</sup> / 39.4%

12 Parkway is a large, unusual site, complex in its design, with a 26m street frontage at the end of a cul-de-sac next to a local park. Two dwellings are designed within the site, accessing the cul-de-sac from two crossovers.

The proposed development is designed to allow independent living, requiring wheelchair and hazard-free access around the property where possible.

Due to the shape of this site, which is at the end of a curved cul-de-sac and storm drain. The access to the property is restricted for the available entrance points and crossovers. Along with the irregular shape, longer than it is in-depth has reduced the setback for parking and entry to the dwellings.

When considering the residence of the dwellings, hardscaping is designed to provide access onto and around the site that reduces the overall m<sup>2</sup> of landscaping within the front step back and around the site to allow safe and independent wheelchair access to the residents.

The landscaping has been designed in consideration with the driveways which are wider in size to allow safe egress from the street to carport, entry, and fenced yards with ease.

DTC Requirement *Clause 12.1:*  
*Small trees require 9m<sup>2</sup> of deep soil area*  
Proposed Insufficient deep soil areas (DSA) provided

The proposed trees for 12 Parkway are selected for their aesthetics, durability, and deciduous nature. A regular gardener on site will easily maintain the ornamental pear and crepe myrtles. These deciduous trees are utilized regularly within developments for their beautiful leaves, flowers, and non-invasive root systems that make them ideal plants for driveways, gardens, and tighter spaces. These trees are planted in many suburbs within minimal soil depth and paved areas. Within this development, the irregularly shaped site has larger garden beds that are not circular or square but provide ample space and clearance for the plants. There will be no detrimental impact on the home or the proposed retaining walls, and with regular maintenance, they will survive and thrive. See the attached Landscape architects report.

DTC Requirement *Clause 13.1*  
*One large tree required*  
Proposed

- 3 small trees proposed (based on DSA)

Further detail on trees is required including if the species can survive in the area provided. An arborist report is recommended.

See the attached Landscape architect's report regarding the overall size and suitability of the plant selections for this property.

Ornamental Pear between 8 to 12m when unmaintained  
Crepe myrtle between 3 to 6m when unmaintained.

This property will be maintained with a regular gardener that will trim and sculpt plants and ensure regular watering and fertilization is completed. The trees will not stress with correct maintenance and care that will permit growth within the designed spaces as shown on plans.

**Clause 5.3.5 Vehicular Access (R-Codes) / 10 Access and parking – crossovers ( HOALPP)**  
DTC Requirement *Clause 10.1*

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Proposed *4.5m maximum crossover width*  
 Unit A: 5.9m  
 Unit B: 5.5m  
 Justification provided is noted

12 Parkway is a large, unusual site, complex in its design, with a 26m street frontage at the end of a cul-de-sac next to a local park. Two dwellings are designed within the site, accessing the cul-de-sac from two crossovers.

The proposed development is designed to allow independent living, requiring wheelchair and hazard-free access around the property where possible.

Due to the shape of this site, which is at the end of a curved cul-de-sac and storm drain. The access to the property is restricted to the available entrance points and crossovers. Along with the irregular shape, longer than in-depth has reduced the setback for parking and entry to the dwellings.

With a reduced step back and the shape of the cul-de-sac, the driveways are wider in nature to permit the reversing egress of cars and movement on the driveway to reverse from the bay/ carport to the driveway and incorporate access to the Porch for easy transition.

**Clause 5.3.7 Site Works (R-Codes)**

DTC Requirement *Retaining walls, fill and excavation behind the street setback:*

<i>Height of site works* (above NGL)</i>	<i>Required setback</i>
<i>0.5m or less</i>	<i>0m</i>
<i>1m</i>	<i>1m</i>
<i>1.5m</i>	<i>1.5m</i>
<i>2m</i>	<i>2m</i>
<i>2.5m</i>	<i>2.5m</i>
<i>3m</i>	<i>3m</i>

Proposed **Boundary: South (rear)**  
 TOW: 27.29, NGL: 25.97  
 Height: 1.32m, S/back: nil  
  
 TOW: 27.34, NGL: 26.07  
 Height: 1.27m, S/back: nil  
  
**Boundary: West**  
 TOW: 27.29, NGL: 25.97  
 Height: 1.32m, S/back: nil

12 Parkway site slopes from the cul-de-sac and the northern property boundary line down to the southern boundary by 1m over the total distance of 28m

Based on the access requirements of the residents with wheelchairs, this development needs to provide safe, step-free access.

For this reason, the development has been set to R.L.27.27 & R.L 27.22 to allow for safe access into the site and then up into the dwellings without any steps, making it safe for wheelchair users. This is also the case for access from the bedrooms and living areas to the outdoor paved areas and courtyards.

To achieve the required R.L levels, 1.3m high retaining walls are required to lift the site levels to permit safe egress throughout the site and into the dwellings.

Due to the overall circulation requirements within rooms as addressed in the points above, the overall sizing of bedrooms, living areas, and outdoor circulation areas requires the entire site for safe and equitable access for the residence, hence requiring councils' consideration for a variation to setbacks on retaining walls.

**Clause 5.4.1 Visual privacy (R-Codes)**

DTC Requirements *Bedroom/Study setback 4.5m from adjoining properties.*  
*Living rooms require 6m setback*

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Proposal

**Outdoor living areas required 7.5m setback.**

Unit B:

- Study (facing East) setback 3.8m
- Living (facing North) setback 2m
- Bed 1 (facing North) setback 2.7m
- OLA (facing East and North) setback 0m

The above has been considered based on the FFL  
Being >0.5m above NGL

Thank you for your time discussing the landscaping and overlooking for 12 Parkway, Warwick

This property is designed for people requiring wheelchairs and electric chairs; access to these properties requires additional circulation areas internally and externally.  
Due to the intended residences' needs, the 1.5m garden beds will reduce the residents' ability to move around the property.

As noted below and on the attached highlighted plan, the vertical gardens have increased to address the additional landscaping requirements.  
Information is included below for consideration regarding a variation from policy 5.3.2

Due to concerns regarding the percentage of landscaping, we seek councils' consideration to consider pots and vertical space

Raised garden beds will allow residents to interact with the gardens by way of touch, whereas ground-level gardens will reduce the resident's ability to interact with the plants.

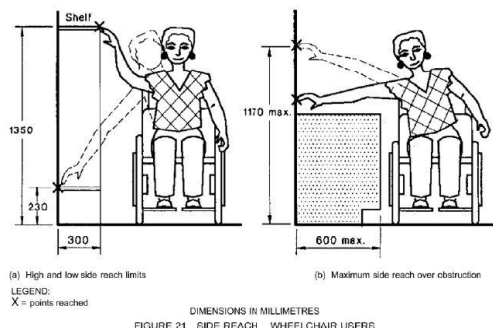
As our senses are based on sight, hearing, smell, and touch, being able to access the plants within the garden will be an important part of the residence's well-being when relaxing outside.

We seek to retain access around the site by increasing vertical garden space and considering a smaller depth to the garden beds to be included in the calculations.

Please look at the highlighted plan attached.

1 - Vertical gardens - A vertical garden wall is fixed to the brick wall of the open-air carport facing the street, uplifting street appeal.  
Mounted 900AFL to be clear of car bonnets

2 - Raised garden - Raised garden beds 600 to 800 high and a depth of no more than 350 mm will permit residents to have side approach access to the gardens to enjoy interacting with the plants  
reference Figure 21 from AS 1428.2 reach range for wheelchair users



3 Privacy overlooking - visual screenings by way of Slat fence extension panels on top of 1.8m Colorbond fence to provide additional privacy for the neighbouring property = total length 22m in total  
The new proposed development site and floor levels are raised to allow step-free access into the residences. This has raised the property levels along the adjoining boundary of the south boundary.

There is no overlooking as the existing neighbouring property is 600 - 1000m below the new proposed level. Any view of the neighbouring property will be of the roof line and not into the winds of outdoor living areas.

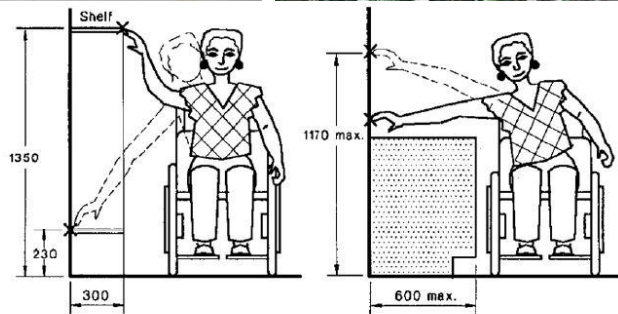
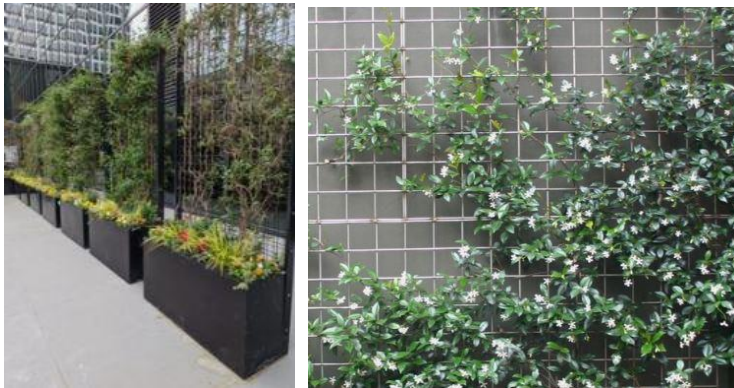
Visibility will be to a roofline.



Refer to site plan A101 - elevation a - South fence line.

4 Raised garden beds with frame and wires - 1500h screening + 600 H raised garden beds - 15 m in length  
Climbing plants will provide a visually pleasing wall and screen the neighbouring site from any overlooking.

Raised garden beds and vertical wires or screens will allow residents to interact and enjoy the gardens along with restricting overlooking into the neighbouring property.



(a) High and low side reach limits

(b) Maximum side reach over obstruction

LEGEND:  
X = points reached

DIMENSIONS IN MILLIMETRES  
FIGURE 21 SIDE REACH WHEELCHAIR USERS

#### Clause 5.4.4 External fixtures, utilities and facilities (R-Codes)

DTC Requirements

*4m<sup>2</sup> storage area with 105m dimension*

*Collective Design Agency*

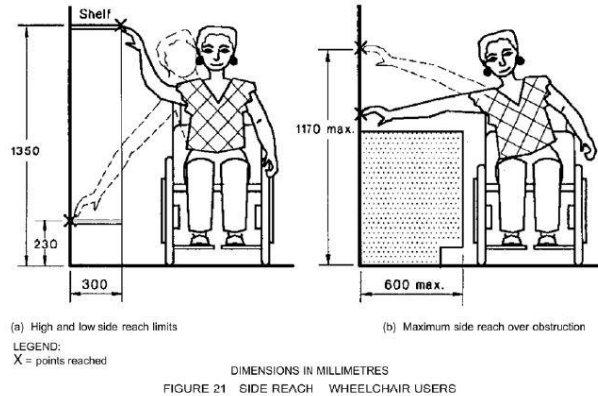
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Proposal Unit A: 3.5m<sup>2</sup>  
Unit B: 1.37m dimension

The residents of this property have external and internal storage areas within the building. External storage areas are accessed by carers for storage of emergency power supply and medical services.

Additionally, to the external areas, there is storage within Unit A by way of built-in cabinets accessible for the residents with wheelchairs. Providing linen and additional storage with drawers and adjustable shelves allows for items to remain within reach of someone with a wheelchair.

See below Figure 21 from AS1428.2.



See the updated set with the external storage area for Unit A, which is 4m<sup>2</sup>

Unit B storage is directly attached to the covered carport. Carers and family members access this storage area, providing assistance to the residents. Additional storage has been included within the dwelling by way of built-in cabinets accessible for the residents with wheelchairs. Providing linen and additional storage with drawers and adjustable shelves allows items to remain within reach of someone with a wheelchair.

For the above reasons, we feel the proposal provided for 12 Parkway Warwick will not have a negative impact on the surrounding areas by way of setbacks, landscaping, or with the overall built form/ style proposed and will allow residents the ability to integrate with the community for safe, independent living.

Should you require any additional information, please don't hesitate to contact myself, Keira, directly on 0422 649 0840 or via email.

Kindest Regards,

Keira Nicholson  
Director