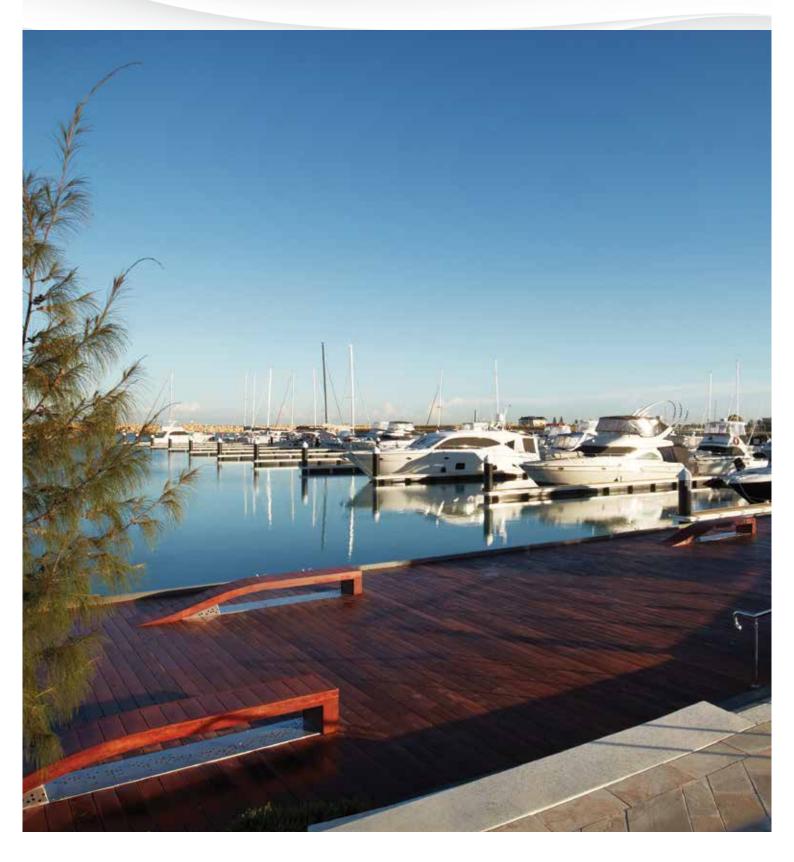
# Design Guidelines



December 2018



# PortCoogee

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# Introduction

# About Port Coogee

Port Coogee is an award-winning development unique across Australia in its scale, history, nature and location - a development that is significant for Frasers Property Australia nationally, with region-defining implications.

Located within the City of Cockburn on the coast of Cockburn Sound, approximately 23km south-west of the Perth CBD and 5km south of Fremantle, Port Coogee will become a home for more than 2,000 people and a thriving, modern community set within a coastal playground.

Port Coogee will be a high quality development with landscape and built-form architecture to match the best in Australia - from the streetscapes and landscaping - to the quality and design of the built form. All buildings will contribute positively to the character of Port Coogee.

Perth's temperate climate and Port Coogee's elevated lots, which enjoy fantastic views over the Marina and Indian Ocean, provide the key elements for a contemporary lifestyle of spacious, open-plan housing and outdoor living.

Port Coogee is a unique development opportunity that will create its own distinct identity, while becoming an iconic coastal node within the Perth Metropolitan Area.

Home designers are strongly encouraged to produce innovative, contemporary designs that will have minimal impact on neighbours and incorporate Environmentally Sustainable Design principles.





# Vision

Port Coogee presents a unique opportunity to create a new, vibrant, modern, water based coastal development that will be a place for the local community to live, work and play.

A contemporary coastal architectural character will be actively encouraged with modern sophisticated homes responding to a relaxed seaside lifestyle. The contemporary architecture will be strongly influenced by the special qualities of the site. These include the colours of the landscape, the topography of the development and the micro-climate, with the need for adjustable indoor/outdoor spaces to create a balance between privacy and transparency.

Frasers Property Australia will be creating a sustainable, new-built environment where each dwelling is to be designed and constructed in accordance with WaterWise and EnergySmart principles to ensure that water consumption and energy usage are minimised.

It is Frasers Property Australia's vision that the design advice outlined in these guidelines will create an integrated community that showcases contemporary housing with a distinctive 'coastal' character.

Not only will Port Coogee offer a lifestyle like no other, but also, a wise and profitable investment for the future.



# About Design Guidelines

These guidelines cover the single residential lots in Port Coogee. They are intended to provide a framework for design decisions by each new homeowner in order to create quality architectural outcomes that satisfy the Port Coogee vision. Prior to purchasing your land it is important to familiarise yourself with these guidelines, the Port Coogee 'vision' and the implications on the type and cost of the home you build.

These guidelines have been prepared to ensure that your house and garden complement those of your neighbours, thereby producing a cohesive community with a distinct sense of place. As part of the Port Coogee community, it is essential that each dwelling contributes to the high standard of design expected throughout Port Coogee.

These design guidelines include some mandatory sustainable design provisions which must be addressed in the design and construction of each dwelling. Recommendations are also included for residents who wish to achieve an even higher level of environmental sustainability.

The Design Guidelines are to be read in conjunction with the Residential Design Codes 2002 (the R-Codes), the Building Code of Australia (BCA), all relevant Australian Standards, with the restrictive Covenants conveyed with the title of the land and the Detailed Area Plans (DAPs) which are adopted via City of Cockburn Town Planning Scheme No. 3.



# Approval Process

# Design Assessment

The following information is to be submitted with your application. Any application that does not contain all the required information will not be assessed.

- a) **Site plan**, 1:200 minimum showing dimensions, setbacks to all boundaries, original and proposed finished ground levels including retaining walls, lot boundaries, north point, location of all ancillary structures including bin stores, rainwater tank, AC units, drying courts, free standing storage enclosures, areas and open space calculations;
- b) **Floor plans**, 1:100 showing internal layouts including rooms, balconies, verandas, decks, windows and openings;
- c) **Elevations of all sides**, 1:100 indicating proposed building height from natural ground level and fencing details and the location of any solar panels and AC units;
- d) Roof Plan, 1:100 minimum;
- e) Section(s), 1:100 minimum where level change occurs across the site;
- f) Landscape Plan, 1:100 minimum;
- g) **Colour and Material Schedule**, including building materials and finishes proposed, external walls, roofing, pathways, driveways, crossover and fencing;
- h) Contact Details of nominated point of contact for the duration of the assessment;
- i) **Purchase date** of Port Coogee land;
- j) Checklists 1 and 2; mandatory criteria and recommended options.

It is strongly recommended that any prospective landowners liaise with the Design Approval Coordinator at the earliest opportunity of the development process to discuss the proposals and to facilitate compliance with the guidelines and approval of the house design.

## Design Approval Coordinator - Design Committee

In order to achieve the Port Coogee vision, a Design Approval Coordinator (DAC) has been appointed to assess and approve the house designs for compliance prior to submission to the City of Cockburn for Building Licence.



The DAC may allow (but is not required to allow) variations to these guidelines on the basis of architectural and urban design merit at the discretion of the DAC. In the event of a variation approved by the DAC, the approved variations will not set a precedent nor imply that the approval will be repeated.

A Design Committee will be appointed by Frasers Property Australia to monitor the implementation of the Design Guidelines, hear appeals against the decision of the DAC and act as an arbitrator in the resolution of disputes.

# Application Fee

There is no assessment fee for the original application. Should the application not contain sufficient information or require alterations a \$550 fee (includes GST) will be required for the reassessment.

# City of Cockburn

Upon receiving approval from the DAC, an application for Building Licence can be made to the City of Cockburn.

It should be noted that meeting these Design Guidelines and securing an endorsement from the DAC does not constitute an approval by City of Cockburn and shall not prejudice its consideration of the application. Applicants should ensure that their plans meet all of the City's requirements and that sufficient documentation is provided to allow the City to properly consider each application.

# Restrictive Covenants

These guidelines include a number of mandatory requirements that will be incorporated into restrictive covenants conveyed with the Certificate of Title for each lot.

# Detailed Area Plans

Detailed Area Plans have been prepared for all lots within Port Coogee to ensure appropriate development on these lots and to facilitate variations to the R-Codes. The City of Cockburn will adopt the DAP's under the provisions of Town Planning Scheme No. 3.

The DAP's will control such elements as building envelopes, parking and access, fencing, site services, private open space, orientation of dwellings, landscaping, noise-buffering, ancillary dwellings, encroachments and variations from the R-Codes.



# General Guidelines

# Architectural Character

The Port Coogee vision is of a vibrant and modern development that borrows from traditional Western Australian coastal outdoor living and the relaxed contemporary lifestyle to be associated with Port Coogee.

The contemporary coastal architectural character of the residential development that will become characteristic of Port Coogee should:

- Have a strong sense of local identity related to the coastal edge through the appropriate use of materials, texture, colour and built form;
- Design, orientate and arrange the built form to take advantage of the outstanding views of the Indian Ocean, Woodman Point and the Port Coogee Marina;
- Be orientated towards public streets and open space to ensure casual surveillance over the public realm and perceived security for the community;
- Be designed to respond to the local coastal environment and incorporate the principles of environmentally sustainable design with strong emphasis placed on the correct orientation, location and zoning of private living and outdoor spaces;
- Be environmentally sustainable, with specific focus on energy and water efficiency.

Port Coogee provides a unique opportunity to establish a distinct architectural character and individual dwellings should reflect the character of coastal living with oversized balconies linked directly to internal living areas with large openings detailed with flexible screens, fixed shades or shutters to control the wind and sun. As such each dwelling shall strongly express the following key elements:

- Generous outdoor living areas, including significant courtyard and balcony spaces;
- Shade and Shelter elements for sun control and weather protection, including screens, shutters, blinds, louvres and pergolas.

Architectural styles, such as Federation, Georgian, Tuscan, Mediterranean and Santa Fe, are not considered appropriate for Port Coogee.



# Built Form, Heights and Setbacks

Building heights and setbacks for residential dwellings are defined in the Detailed Area Plans.

Roof terraces and loft spaces are permissible where contained within the height limit.

Height limits are:

For two storey dwellings:

- Top of wall (roof over) 7m
- Top of wall (parapet) 8m
- Top of pitched roof 10m

For multi storey dwellings:

- Top of pitched roof 13.6m
- Overall height is measured from finished ground floor level.
- The finished ground floor level of the dwelling must be within 0.5m of the finished level of the lot.

#### Elevations

Elevations are to be articulated with clearly defined architectural elements and should express the following characteristics:

- All dwellings must address the Primary and Secondary Streets and Public Open Spaces by way of articulation, design, fenestration and main entrance to promote a positive relationship to the street. This may include the design and placement of large windows to actively used spaces and presenting the dwelling to the street in lieu of the garage as a dominant element;
- All dwellings are required to present two storeys to the Primary and Secondary Streets, rear Laneways and Public Open Spaces;
- Single storey developments may be considered due to architectural merit upon application to DAC;



- Dwellings on corner lots (and to a lesser extent those with a side exposed to a laneway) must address both Primary and Secondary streets, with the Secondary street elevation to be articulated in a manner that is consistent with that of the primary elevation. The design of the dwelling should acknowledge the corner by way of design with elements such as balconies that wrap the building corner, windows, internal room layouts and roof design to respond to the corner location;
- Roof design, materials, colour and finish are to be consistent to all elevations, including the laneway elevation;
- Clearly defined entrances, which are identifiable from the street through expressed elements;
- At least one indoor living area (not a bedroom) is to provide natural surveillance of the Primary Street (or Public Open Space for battle-axe lots);
- Dwellings shall also appear to offer surveillance when viewed from adjacent public space.

# Wall Materials

The location of Port Coogee results in a high exposure to salt, wind and sun leading to degradation of materials. Extra care should be taken to ensure materials and finishes are selected that are resistant to these elements or are easily maintained to ensure longevity.

Street appeal will be generated by the clever use and composition of exterior materials, colours and finishes with the following principles:

- A mix of materials is advisable, however depending on the design, the use of contrasting render colours is acceptable;
- Ground floor materials should give the appearance of strong, solid and heavier construction;
- The mass of buildings is to be minimised by variations in walls and roof lines.

Acceptable wall materials include:

- Painted rendered masonry, stonework, rammed earth, painted or clear timber weather boards, eco-ply, corrugated metal cladding and painted fibre cement sheeting;
- Whilst face brick is permitted, it is not a preferred material;



- Alternative wall materials may be permitted subject to their design merit;
- Dwellings that express 100% of a single material and colour composition will not be approved.

A minimum of two wall materials shall be used to the dwelling with no one material constituting more than 80% of the front elevation (not including windows).

# Roof Forms

Roofs must be of a scale, form and material construction that are representative of contemporary coastal living, including pitch, form and design innovation. Roof forms should express the following characteristics:

- Pitched roofs generally shall be 25 degrees minimum and 42 degrees maximum in order to promote a consistency of development;
- Low pitched skillion roofs, flat roofs and curved roof forms may be allowed subject to design merit and providing no adverse impact on neighbouring properties;
- All eaves, except where nil lot boundaries, should have a minimum overhang of 450mm to protect walls from the summer sun. Exceptions may be permitted subject to their design merit;
- Gutter and downpipe treatments are to compliment and be integrated into the dwelling design;
- Roof forms should be articulated to provide solutions to natural light, summer shade, winter sun, cooling and ventilation;
- Deep overhanging roofs are encouraged for weather protection and sun shading purposes to terraces, verandahs and other outdoor living spaces;
- Paved roof terraces are strongly encouraged and should incorporate pergolas/sunshading devices and planting.



# Roof Materials

Generally Colorbond metal roof sheeting, however, can include clay tiles, copper or concrete (to flat roofs with protective paved, pebble, gravel or turf surfaces). It is encouraged that any roofing product used is suitable for the coastal location of Port Coogee, be light in colour and non-reflective to minimise any glare impact on surrounding properties.

Gutter and downpipe placement should be integrated with the dwelling design. It is preferable that no downpipe be visible to the street elevations except where a rainwater head and downpipe are used as an architectural element.

# Doors and Windows

- Windows and doors should be arranged to maximise winter solar gain and cross ventilation, while minimising heat gain in summer;
- Large windows should be located on the northern walls of living areas to maximise solar gain. Small windows should be located on the east and west facing walls to minimise solar gain;
- Flyscreens are to match window frame colours and to have dark coloured mesh;
- Security doors where required are to be simple and unobtrusive;
- External roller security shutters are prohibited;
- Careful placement of bathroom windows to avoid obscure and patterned windows facing the primary street.

## Open Space - Courtyards

The open space requirements are to be in accordance with R-Codes except where defined in the Detailed Area Plans.

Each dwelling shall be provided with a useable and functional courtyard or open space.

This area should be:

- A minimum area of 20sqm, with a minimum dimension of 4m;
- Accessed directly from a living room (a living area other than a bedroom);



- Orientated to gain maximum exposure to the northern winter sunlight;
- 50% of this courtyard area may be roofed providing that the courtyard is still generally open to the elements.

Functional balconies may be included in the Open Space calculations, as defined in the Detailed Area Plans.

A functional Balcony shall be:

- A minimum area of 10sqm with a minimum dimension of 2m;
- Located addressing the Primary Street/Public Open Space and accessible directly from a living area (other than a bedroom);
- Balconies may be enclosed on up to three sides providing at least one side has a moveable/operable screening device.

### Balustrades

- Balustrade design is to be integrated into the overall architectural form of the dwelling;
- Balustrades are to reflect a coastal character and could include horizontal bars, stainless steel wires, timber battens, glass or a combination of these.

# Vehicular Access, Garages and Car Ports

On-site car parking provisions are to be in accordance with the R-Codes and may be varied via the Detailed Area Plan applicable to the lot.

The location and treatment of garages and garage doors shall contribute positively to the streetscape. Garages are to be designed as an integral component of the home and the materials used in the garage should match those of the house.

Where Laneways are provided, vehicle access and parking shall be via the Laneway. On corner lots, vehicle access and parking shall be via the Secondary Street.

Triple garages are only permitted in a tandem format.

Parking for additional vehicles such as boats, caravans and additional cars should be considered during the design phase of the dwelling to ensure they are adequately housed and not visible from the primary street.



# Activation of Laneways

Rear laneways are to be addressed in a similar manner as the Primary Street elevations in order to promote a sense of neighbourliness and vitality. As security is also an issue, consideration should be given to providing passive surveillance over the laneway and security lighting.

This can be achieved in a number of ways, including:

- Development of an active use above garages eg: ancillary accommodation;
- Balconies, terraces or windows to provide passive surveillance;
- As a guide, the upper level of the dwelling should be within 10m of the laneway to ensure casual surveillance from the dwelling;
- Landscaping abutting the laneway to soften the appearance of the Laneway, while also minimising 'hiding places';
- Distinctive and clearly visible entrances to the lot from the laneway.

## Privacy

The protection of privacy to dwellings is to be in accordance with the R-Codes. Each resident of Port Coogee is entitled to privacy within their own home. Building designs will be required to demonstrate appropriate window and balcony placement to safeguard overlooking neighbour's internal and external living spaces. The use of screens, shutters and louvres are encouraged as elements to protect residents' privacy, especially to balconies and outdoor living areas. External roller security shutters are prohibited.

## Noise - Sound Attenuation

Mechanical services equipment, including air-conditioning units, pool filtration equipment, motors, pumps, etc. should be suitably located in areas that minimise the impact on neighbours and comply with the provisions of the Environmental Protection (Noise) Regulations 1997.

Certain dwellings fronting the existing railway line and Cockburn Road are required to comply with the Quiet House Design Guidelines.



# Planning Guidelines

# Site Responsive

In order to ensure a high standard of design and amenity, it is important that each dwelling is site responsive and addresses the issues of climate and orientation, relationship to the public realm and neighbourly issues such as overlooking, privacy and noise attenuation.

The desirability of northern orientation for the courtyard and living rooms may need to be balanced against providing passive surveillance of the street and ocean views.

Primary and secondary living spaces and/or flow-through living plans should maximise the opportunity for dual aspect.

# Passive Design Strategy

The Port Coogee vision is of an environmentally sustainable development that enshrines best practice in energy efficiency and water sensitive design, matched with an environmentally responsible use of materials.

The Sustainable Energy Development Office (SEDO) has established that the main features of energy efficiency housing relate to:

- Building Orientation
- Internal Room layout
- Window placement, sizing and shading
- Use of Insulation
- Ventilation
- Draught proofing
- Landscaping
- Use of energy efficient appliances
- Lighting



Space heating and cooling accounts for nearly 40% of household energy use and, by adopting passive design principles to minimise the need for artificial summer cooling and winter warming, this can be significantly reduced or eliminated to create an energy efficient home.

Dwellings should be designed to suit the local temperate climate and simple measures such as correct building orientation, appropriate shading, cross ventilation and building insulation are strongly encouraged to help reduce energy consumption and the production of greenhouse gases.

The majority of these features, including orientation, room layout, window placement, ventilation and garden design make little difference to the initial building cost. Other features such as insulation, draught proofing and energy efficient appliances may add to the cost of the dwelling but will produce savings in reduced energy bills each year and should improve the resale value of the home.

To find out more information about creating an energy efficient home, visit the Sustainable Energy Development Office's website: www.sedo.energy.wa.gov.au



# Sustainability Guidelines

The Port Coogee vision is of an environmentally sustainable development that enshrines best practice in environmental design, energy efficiency and conservation, water efficiency and conservation, waste reduction and safe and accessible homes.

Building performance standards with regard to thermal performance, energy and water efficiency and accessibility have improved much over time and will continue in the coming years. For example, as of May 2012 the Building Codes of Australia increased the required energy efficiency thermal rating from 5 to 6 star.

Building a high performance home now will ensure it is future proofed for further regulatory changes and will therefore hold its value into the future.

The following design criteria, which are a requirement for all development at Port Coogee, will ensure you have a sustainable home that will be efficient in energy and water and cheaper to run.

# Energy Efficiency and Conservation

#### Climate Responsive Design

Dwellings are required be designed to suit the local climate through smart design.

The key design features such as orientation, internal design and room zoning, window placement, sizing and shading, cross ventilation, and building insulation will go a long way to ensure you have an energy efficient home that is also naturally comfortable all year round.

The following criteria (as a minimum) are MANDATED to be achieved:

North facing living:

• Minimum one main living area with a major opening to have a northern aspect.

Shading:

• West facing rooms to be protected from summer sun, e.g. through use of fixed shading devices such as deep balconies, awning, and/or performance rated glazing.



Cross-flow ventilation:

• Openings – windows and doors – to allow for breezes to flow through main habitable areas.

Room zoning

Ability to zone (close-off) separate uses areas for more efficient cooling and heating.
 Main use areas include – living, individual bedrooms, service areas such laundry, lobby and passages.

#### **Renewable Energy**

Renewable Energy takes advantage of natural systems, most commonly solar radiation and wind, for the production of electrical energy and water heating, thereby greatly reducing greenhouse gas emissions and household energy costs. A 1.5kW photovoltaic (PV) system produces approximately 6-8kWh/day over a 12 month cycle, which can reduce average household energy use by up to 50%. A solar hot water system will further reduce costs.

The following criteria (as a minimum) are RECOMMENDED to be installed:

- Photovoltaic system (a min 1.5kW array is recommended)
- Solar water heater with in-line gas booster

#### Energy Efficient Fixtures and Appliances

Home energy use is a significant contributor to greenhouse gas emissions and with the increasing price of electricity, costs the homeowner money. Emissions can be reduced through more efficient energy use in the home and, while improving the environmental performance of your home, it can also significantly reduce your energy bills.

The following features are RECOMMENDED to be installed to ensure you have an even more energy efficient home:

Air-conditioners

• For optimal efficiency install a 5 star 'Energy Rating' (for heating and cooling) (or min 2.9 energy efficiency ratio for cooling) with inverter and ability to zone by use areas



#### Ceiling fans

• Installed in main living areas and bedrooms.

#### Lighting:

- Compact fluorescent globes (CFG) or LED lighting installed throughout.
- Install motion sensors to outdoor lights and low-use rooms such as toilets, garage, storage rooms, pantry, robes.

#### Appliances:

• Installation of high 'Energy Rating' rated appliances including: fridge, dish-washer, washing machine, dryer, fridge, television.

#### Cooking

• Install gas or electric ceramic, halogen or induction cook top.

#### Peak Load Management

Peak load refers to the increased demand for electricity mainly during peak summer hours between 3 – 8pm, which is when families are at home using multiple appliances, including air-conditioning and TVs.

This 'peak' demand adds significantly to greenhouse gas output and places a high demand on the electricity grid.

Strategies for peak load reduction in residential homes include implementing demand management through direct load control devices fitted to fixtures and appliances such as air conditioners and pool pumps.

The following are RECOMMENDED to be installed to reduce peak load demand:

- Direct Load Control Devices installed on air-conditioners.
- Electronic 'off-peak' pump timer on swimming pool and water features.



#### Green Power

Green Power refers to voluntary purchasing of electricity produced from renewable sources. Synergy currently offers a number of accredited Green Power renewable energy products. Through these programs, customers can specify that a certain percentage of their electricity consumption is supplied by Synergy from an accredited Green Power source.

The following is RECOMMENDED for anyone wanting to further reduce their greenhouse gas emissions

• Purchase Synergy Green Energy Solutions or Smart Power

## Water Efficiency and Conservation

Perth is situated in a dry climate zone with limited rainfall and limited supplies of fresh water. Average annual rainfall in the south west of WA is decreasing while population is increasing. To address this, the government has imposed watering days to reduce garden water use.

There are also many other things you can do such as install rainwater tanks, establish waterwise gardens and install high efficiency fixtures and appliances such as showerheads and washing machines.

Port Coogee has a range of water efficiency and conservation measures that build on these existing initiatives to help reduce your water consumption in and outside the home.

#### Water Re-use

Frasers Property Australia have installed non-potable 'third pipe' water supply system to all lots at Port Coogee, which provides water for garden irrigation purposes. Connecting your garden irrigation to the third pipe supply can help to reduce your potable water use and reduce you annual water bills. A non potable water aggreement will be required to be entered into in order to receive the non potable water supply, and is available from the developer.

The 'third-pipe' system includes a meter and connection point at the lot boundary. All components – pipes and meters - are coloured lilac and identified as non-potable. In addition to the third-pipe irrigation system, rainwater harvesting can be used to achieve greater water efficiencies. The best use of rainwater is to have the tank plumbed directly to toilet flushing and for cold water to the washing machine. Rainwater can also be used to supplement water heating and shower water.



#### Water Efficiency

The following criteria (as a minimum) are MANDATED to be achieved:

Swimming Pools

• Install a fixed retractable pool cover

In addition to the irrigation connected to the third-pipe irrigation system, the following are RECOMMENDED to be installed to ensure you have an even more water efficient home:

Waterwise Fixtures and Appliances:

- 5 star (WELS Rated) toilets
- 4 star (WELS Rated) shower roses
- Efficient high WELS Rated appliances: washing machines and dishwashers

#### Waterwise Landscaping

As part of Frasers Property Australia's contribution to reducing water use and responsible environmental design, all gardens in Port Coogee are required to be sustainably landscaped and conform to waterwise garden principles. Sustainable landscaping will require the planting of indigenous plants which are specifically native to the local area.

The following criteria (as a minimum) are MANDATED to be achieved:

Waterwise landscaping

- Waterwise native indigenous plants
  - 80% of residential landscaping is to utilise waterwise species; and
  - 60% of plants are to be indigenous species to the Perth Coastal Plain



A schedule identifying suitable species for landscaping that may be implemented by individual homeowners is provided in the Appendix B. Alternatively, the City of Cockburn provides recommended plants for coastal locations. Refer http://www.cockburn.wa.gov.au/Council\_Services/Environment/ Fertilise\_Wise\_-\_Local\_Plant\_Guides/

In addition, the following are RECOMMENDED:

Productive gardens:

- Drought tolerant fruiting trees
- Vegetable gardens

Reduction of ground level hard paving area:

Soft landscape is RECOMMENDED. Soft landscaping includes native gardens, vegetable gardens and living lawn, it does not include pools or artificial turf.

The following are RECOMMENDED as a minimum percentage of the total site area:

- R20: 20%
- R30 to R50: 15%
- R80 and above: 10%

## Waste Management

Household waste to landfill is a major environment concern impacting on the ground, water and air quality and native fauna.

The more waste you can divert from landfill and into recycling will be of benefit to the environment.

To support greater recycling and reduce landfill the following criteria (as a minimum) are MANDATED to be achieved:

Waste separation bins

• Install waste separation bins in kitchen for recyclables, compost and general waste

In addition the following are RECOMMENDED:

• Compost bins and/or worm farm



# Safe and Accessible Housing

Australia has an aging population which means more people with mobility issues. Universal design refers to buildings that are designed and fitted-out to allow ease of access to all people of all mobility's and ages.

To support appropriate ease of access and use for people with physical disabilities, mobility issues, the aged and children, the following criteria (as a minimum) are MANDATED to be achieved:

Level entry:

• One level entry in the home from road way – may be front door or via garage or other

Bicycle Storage:

• Inclusion of secure bicycle storage for min two bikes, as such hooks in garage or store

In addition the following are RECOMMENDED:

- A ground level bathroom and toilet with easy access and min 820mm door opening
- Hobless (step-free) shower recess
- Semi-recess basins
- All door handles and light switches positioned in a consistent location between 900–1100mm above the floor; and
- Powerpoints installed not lower than 300mm above the floor.



# Service Guidelines

# **Retaining Walls**

Due to the natural contour of the land, a substantial number of retaining walls will be constructed throughout Port Coogee. The constraints and opportunities presented by these elements should be carefully considered in the design of the dwelling.

Any development proposed on, or adjacent to, an existing retaining wall is to be certified by a Structural Engineer to ensure that the retaining wall can support the additional loads of the development.

Existing wall details are available from the City of Cockburn upon request.

# **Recycling Bins**

The Home Builder is to organise the provision of waste separation bins to the dwelling. A separate storage area for the Recycling Bins should also be created at the site planning stage and must not be visible from the street. A hose cock should be located within, or close to, the bin storage area to enable bins to be easily washed down.

## Solar Collectors

Solar collector panels (photovoltaic and water heaters) may be located on roof aligned with the roof slope and not on a separate frame. Water heater storage tanks can be detached and concealed from view by locating them within the roof space/house or at ground level. Storage tanks located at ground level must be screened from public view.

## TV/Radio Antennas

TV antennas, satellite dishes and similar roof mounted structures should be located at the rear of the dwelling where they are not easily seen from the primary and secondary streets.



# Air-Conditioning Units

External air-conditioning units are to be located towards the rear of the dwelling, preferably on the ground where they are not easily seen from the public realm and, where appropriate fitted with noise baffles.

Roof, wall and window mounted air-conditioning units will not be permitted where they are visible from the street or public areas. Air-Conditioners located on the roof should be colour matched with the roof and located below the ridge line.

# External Lighting

All external lighting is to be provided at the lowest level to meet amenity and security requirements but minimise light spill and disturbance to neighbours at night time.

External lights should not be directed beyond the lot boundary and the lighting of external surfaces should be used for the explicit purpose of illuminating that surface.

# Site Services

All piped and wired services entering/within the site, are to be concealed from public view so as not to detract from the appearance of the dwelling.

All meters should be considered during the dwelling design phase and shall be located discreetly.

## Verges, Driveways and Crossovers

Homeowners are responsible for the maintenance of verges and Estate fencing.

- Driveway crossovers must be constructed from insitu concrete;
- Driveway materials shall match Estate paving or complement the house. Where footpaths occur they must be retained as the priority movement and reinstated if damaged.
- Residents are required to water street trees. Maintenance and pruning of street tree to be undertaken by the City of Cockburn.



# **Residential Fences**

- The front and side fences form an important part of the visual character of Port Coogee and its different precincts. It is recognised that in some locations higher fences are required for security and privacy. To achieve a consistent visual effect the following options for fencing have been proposed;
- The preferred treatment for the front boundary is for there to be no wall or fence.

However, a low masonry wall (0.5m high) can be used to define the front boundary.

It should return along the side Boundary to the building setback. The letterbox and house number should be incorporated into the low wall.

• Due to natural landform some blocks require a retaining wall along the front boundary.

A 1.1m high open decorative steel fence with balustrades should be used above retaining walls greater than 0.9m.

- Lot boundaries adjoining a side street may have a 1.8m high semi permeable screen fence. The fence must be at least 70% permeable using timber or aluminium battens/louvers. Sections of solid fence should be used to screen service areas and bin store.
- Lot boundaries adjoining a laneway may have a 1.8m high semi permeable screen fence. The fence must be at least 50% permeable using timber or aluminium battens/louvers.
- Side boundaries (behind building line) and rear boundaries adjoining another lot must be 1.8 metres high of masonry or rendered finish.





# Appendices



# Appendix A

# Key Objectives/Mandatory Requirements Checklist

| CHECKLIST 1: GENERAL GUIDELINES AND EXTERNAL WORKS |   |   |        |  |
|--|---|---|--------|--|
| Core Guidelines                                    | Objectives  | Mandatory Requirements  | Yes/No |  |
| Architectural<br>Character                         | To achieve a high standard of architectural design<br>that is of a modern aesthetic and responds to the<br>environment in which it is built.<br>Core Guidelines Objectives Mandatory<br>Requirements Checked. | <ul> <li>The design reflects a contemporary coastal character<br/>by incorporating generous outdoor living areas and a<br/>responding to the local setting by incorporating shade<br/>and shelter elements such as screens, shutters, blinds,<br/>louvers and pergolas.</li> <li>Architectural styles, such as Federation, Georgian,</li> </ul> |        |  |
|  |   | Tuscan, Mediterranean and Santa Fe shall not<br>be permitted.   |        |  |
| Elevations   | To ensure all dwellings address, respond to and activate all streets to provide real and perceived levels of security.  | • All dwellings must address the Primary Street,<br>Secondary Street and Public Open Space by way of<br>articulation, fenestration and entrance.  |        |  |
|  |   | • All dwellings are required to present two storeys to the<br>Primary and secondary Streets, rear Laneways and<br>Public Open Spaces.   |        |  |
|  |   | • All dwellings shall provide at least one living area to provide natural surveillance to the Primary Street, Secondary Street and Public Open Space.   |        |  |
| Wall Materials                                     | Street appeal will be generated by the clever use and composition of exterior materials, colours and  | • 2 Wall Materials or two contrasting colours to front elevation shall be used.   |        |  |
|  | finishes.   | • A single wall material or colour shall constitute<br>a maximum 80% of the front elevation<br>(not including windows).   |        |  |
|  |   | • Any exposed parapet wall on a common boundary shall be suitably finished to match the external walls of the dwelling, unless otherwise agreed with the adjoining property owner.  |        |  |
| Roof Form &<br>Materials                           | To provide roofs of a scale, form and material construction that are representative of contemporary coastal living and to provide   | <ul> <li>All eaves, except where nil lot boundaries, shall have a minimum 450mm overhang</li> <li>Pitched roofs shall be 25 minimum and 42 maximum.</li> </ul>  |        |  |
|  | protection of walls from summer sun.  |   |        |  |
| Open Space   | To encourage an outdoor lifestyle and all seasons living within Port Coogee.  | • All dwellings are to provide a functional Courtyard<br>orientated to gain maximum northern winter sunlight,<br>which shall have a minimum dimension of 4m and a<br>minimum area of 20sqm.   |        |  |



| Core Guidelines                             | Objectives  | Mandatory Requirements   | Compliance<br>Yes/No |
|---|---|--|----------------------|
| Activation of<br>Laneways                   | Rear laneways shall be addressed in a manner<br>similar to the Primary Street elevation to promote<br>a sense of neighbourliness and vitality and provide | Garages to rear laneways shall be designed     using materials and details consistent with the     main dwelling.  |                      |
| p   | passive surveillance over the laneway.  | • A distinct and clearly visible entry shall be provided from the laneway to each lot.   |                      |
| Privacy                                     | Neighbourly issues such as overlooking and noise attenuation are addressed.   | Submission of plans that demonstrate appropriate window placement and screening to comply with the R-Codes.  |                      |
|   |   | <ul> <li>Screening devices shall be used to prevent casual<br/>surveillance of the adjoining lot.</li> </ul>   |                      |
| Noise, Sound<br>Attenuation                 | To address potential adverse impact of noise intrusion and emissions from Cockburn Road and the existing Railway Line.                                    | • Dwellings located adjacent to Cockburn Road and the existing railway line are required to comply with the 'Quiet House' design guidelines.   |                      |
|   |   | • An Acoustic Report shall be submitted when applying<br>for a Building Licence by a qualified Acoustic Engineer<br>stating that the design and construction of the dwelling<br>adequately attenuates noise emissions from Cockburn<br>Road and the existing Railway Line. |                      |
| Retaining Walls                             | To protect the structural integrity of your and your neighbours development.  | • Any development proposed on, or adjacent to, an<br>existing retaining wall is to be certified by a Structural<br>Engineer to ensure that the retaining wall can support<br>the additional loads of the development.  |                      |
| Air-conditioning Units<br>and Site Services | To protect the amenity of the neighbourhood so as not to detract from the appearance of the dwelling.   | • AC units must not be visible from the street and must not be located above the roof line.  |                      |
|   |   | • All piped and wired services are to be concealed from public view.   |                      |
| External Lighting                           | To protect the amenity of the neighbourhood by minimising light spill and disturbance to  | • All external lighting shall be provided at the lowest level to provide amenity and security requirements.  |                      |
|   | neighbours at night time.   | • All external lighting to the front and rear entrances shall be on motion sensor and time delay.  |                      |
| Garages and<br>On-site Parking              | To ensure that garages are designed and detailed<br>to enhance the quality of the neighbourhood<br>by visually contributing to the character of           | Access to garages shall be provided from Laneways<br>first, Secondary Streets second and Primary<br>Streets last.  |                      |
|   | the streetscape.  | • Garages shall be designed as an integral component of the dwelling.  |                      |
|   |   | • Triple garages are only permitted in tandem format.  |                      |



| Core Guidelines                     | Objectives  | Mandatory Requirements   | Compliance<br>Yes/No |
|-------------------------------------|---|--|----------------------|
| Verge, Driveways,<br>and Crossovers | To create a consistent streetscape aesthetic<br>driveways and crossovers are to be finished in<br>materials to match the Estate landscape design. | <ul> <li>Driveway crossovers must be constructed from<br/>insitu concrete.</li> <li>Driveway materials are to match the Estate paving<br/>or complement the house. Where footpaths occur<br/>they must be retained with the driveway and<br/>crossover terminating to allow continuous<br/>pedestrian movement.</li> </ul> |                      |
| Residential Fences                  | To provide consistent fencing to all boundaries   | PRIMARY STREET SETBACK AREA  |                      |
|                                     | within the Estate.  | • The preferred treatment for the front boundary is for there to be no wall or fence.  |                      |
|                                     |   | However, a low masonry wall (0.5m high) can be used to define the front boundary   |                      |
|                                     |   | It should return along the side Boundary to the building setback. The letterbox and house number should be incorporated into the low wall.   |                      |
|                                     |   | • Due to natural landform some blocks require a retaining wall along the front boundary. A 1.1m high open decorative steel fence with balustrades should be used above retaining walls greater than 0.9m.  |                      |
|                                     |   | SECONDARY STREET BOUNDARIES  |                      |
|                                     |   | • Lot boundaries adjoining a side street may have a 1.8m<br>high semi permeable screen fence. The fence must be<br>at least 70% permeable using timber or aluminium<br>battens/louvers. Sections of solid fence should be used<br>to screen service areas and bin store.   |                      |
|                                     |   | LANEWAY BOUNDARY   |                      |
|                                     |   | • Lot boundaries adjoining a laneway may have a 1.8m<br>high semi permeable screen fence. The fence must be<br>at least 50% permeable using timber or aluminium<br>battens/louvers.  |                      |
|                                     |   | SIDE AND REAR BOUNDARIES   |                      |
|                                     |   | • Side boundaries (behind building line) and rear<br>boundaries adjoining another lot must be 1.8 metres<br>high of masonry or rendered finish.  |                      |



| CHECKLIST 2: SUSTAINABLE DESIGN C  | RITERIA        |   |                      |
|--|----------------|---|----------------------|
| Initiative   | Classification | Evidence Required   | Compliance<br>Yes/No |
| ENERGY EFFICIENCY AND CONSERVAT  | ION            |   |                      |
| Climate Responsive Design  |                |   |                      |
| North facing living:<br>Minimum one main living area with a major opening to<br>have northern aspect   | Mandatory      | House plans – site, floor, elevation and section<br>through north facing living areas |                      |
| Shading:<br>West facing rooms to be protected from summer sun,<br>e.g. through use of fixed shading devises such as deep<br>balconies, awning, performance rated glazing   | Mandatory      | House plans and building specifications   |                      |
| Cross-flow ventilation:<br>Openings – windows and doors – to allow for breezes to<br>flow through main habitable areas   | Mandatory      | Breeze-way flow diagram to be included with house plans                               |                      |
| Room zoning:<br>Ability to zone (close-off) separate uses areas for more<br>efficient cooling and heating. Main use areas include<br>– living, individual bedrooms, service areas such as<br>laundry, lobby and passages                 | Mandatory      | Floor plans   |                      |
| Renewable Energy   |                |   |                      |
| Photovoltaic system – e.g. 1.5kW array   | Recommended    |   |                      |
| Solar water heater with in-line gas booster  | Recommended    | NA  |                      |
| Energy Efficient Fixtures and Appliances   | 1              |   | I                    |
| Air-conditioner:<br>A high efficiency rating.<br>(It is recommended a 5 star 'Energy Rating' rating<br>(for heating and cooling) (or min 2.9 energy efficiency<br>ratio for cooling) with inverter and ability to zone by<br>use areas.) | Recommended    | House roof and electrical plans and building specifications                           |                      |
| Ceiling fans:<br>• Installed in main living areas and bedrooms   | Recommended    |   |                      |
| Lighting:<br>• Compact fluorescent globes (CFG) or LED lighting<br>installed throughout<br>• Install motion sensors to outdoor lights and<br>low-use rooms such as toilets, garage, storage rooms,<br>pantry, robes                      | Recommended    | NA  |                      |



| CHECKLIST 2: SUSTAINABLE DESIGN C  | RITERIA                     |   |                      |  |  |  |
|--|-----------------------------|---|----------------------|--|--|--|
| Initiative   | Classification              | Evidence Required   | Compliance<br>Yes/No |  |  |  |
| ENERGY EFFICIENCY AND CONSERVATI   | ON                          |   |                      |  |  |  |
| Energy Efficient Fixtures and Appliances   |                             |   |                      |  |  |  |
| Appliances:<br>• Installation of high 'Energy Rating' rated appliances<br>including: fridge, dish-washer, washing machine, dryer,<br>fridge, television  | Recommended                 | NA  |                      |  |  |  |
| Cooking:<br>• Install gas or electric ceramic, halogen or induction<br>cook top  | Recommended                 |   |                      |  |  |  |
| Peak Load Management   |                             |   |                      |  |  |  |
| Direct Load Control Devices installed on air-conditioners  | Recommended                 |   |                      |  |  |  |
| Electronic 'off-peak' pump timer on swimming pool and water features   | Recommended                 | NA  |                      |  |  |  |
| Green Power  |                             |   |                      |  |  |  |
| Purchase Synergy Green Energy Solutions or<br>Smart Power  | Recommended                 | House roof and electrical plans and building specifications |                      |  |  |  |
| WATER EFFICIENCY AND CONSERVATION  | )<br>N                      |   |                      |  |  |  |
| Water Reuse  |                             |   |                      |  |  |  |
| <ul> <li>Third Pipe Irrigation:</li> <li>Connect all garden irrigation to the third pipe water supply.</li> <li>The system is supplied by Frasers Property Australia and requires a non potable water agreement to be</li> </ul> | Optional and<br>Recommended |   |                      |  |  |  |
| entered into   |                             |   |                      |  |  |  |
| Rain tank plumbed to toilet and laundry  | Recommended                 |   |                      |  |  |  |
| Grey-water system  | Recommended                 |   |                      |  |  |  |
| Water Efficient Fixtures and Appliances  |                             |   |                      |  |  |  |
| Swimming Pools:<br>Install a fixed retractable pool cover  | Mandatory                   | House landscape plans                                       |                      |  |  |  |
| Waterwise Fixtures and Appliances:<br>5 star (WELS Rated) toilets<br>4 star (WELS Rated) shower roses  | Recommended                 |   |                      |  |  |  |
| Efficient (WELS Rated) appliances: washing machines and dishwashers  |                             |   |                      |  |  |  |



| CHECKLIST 2: SUSTAINABLE DESIGN C   | RITERIA        |   |                      |
|---|----------------|---|----------------------|
| Initiative  | Classification | Evidence Required                       | Compliance<br>Yes/No |
| WATER EFFICIENCY AND CONSERVATION   | ON N           |   |                      |
| Waterwise Landscaping   |                |   |                      |
| Waterwise landscaping:<br>Waterwise native indigenous plants<br>• 80% of residential landscaping is to utilise waterwise<br>species; and  | Mandatory      | House landscape plans                   |                      |
| <ul> <li>60% of plants are to be indigenous species<br/>to the Perth Coastal Plain</li> <li>Refer Appendix for plant species list</li> </ul>  |                |   |                      |
| Vegetable gardens and fruit trees   | Mandatory      | House plans and building specifications |                      |
| Reduction of ground level hard paving area<br>A soft landscape garden such as native gardens,<br>vegetable gardens and living lawn. (It does not include<br>pools or artificial turf) | Recommended    |   |                      |
| WASTE MANAGEMENT  |                |   |                      |
| Waste separation bins:<br>• Installed in kitchen  | Mandatory      | House plan and building specifications  |                      |
| Compost bins and/or worm farm   | Recommended    |   |                      |
| SAFE AND ACCESSIBLE HOUSING   | ·              |   |                      |
| One level entry in the home from road way – may be<br>front door or via garage or other   | Mandatory      | House plans and building specifications |                      |
| A ground level bathroom and toilet or en-suite with easy access and min 820mm door opening  | Recommended    |   |                      |
| Hobless (step-free) shower recess   | Recommended    |   |                      |
| Semi-recessed basins  | Recommended    |   |                      |
| All door handles and light switches positioned in a consistent location between 900–1100mm above the floor  | Recommended    |   |                      |
| Powerpoints should be installed not lower than 300mm above the floor.   | Recommended    |   |                      |
| Bicycle Storage:<br>Inclusion of secure and accessible bicycle storage for<br>min two bikes, as such hooks in garage or store   | Mandatory      | House plans and building specifications |                      |



# Appendix B

# Applicant Checklist

- a) **Site plan**, 1:200 minimum showing dimensions, setbacks to all boundaries, original and proposed finished ground levels including retaining walls, lot boundaries, north point, location of all ancillary structures including bin stores, rainwater tank, AC units, drying courts, free standing storage enclosures, areas and open space calculations;
- b) **Floor plans**, 1:100 showing internal layouts including rooms, balconies, verandas, decks, windows and openings;
- c) **Elevations of all sides**, 1:100 indicating proposed building height from natural ground level and fencing details and the location of any solar panels and AC units;
- d) Ro**of Plan**, 1:100 minimum;
- e) Section(s), 1:100 minimum where level change occurs across the site;
- f) Landscape Plan, 1:100 minimum;
- g) **Colour and Material Schedule**, including building materials and finishes proposed external walls, roofing, pathways, driveways, crossover and fencing;
- h) Contact Details of nominated point of contact for the duration of the assessment.
- i) Checklists 1 and 2; mandatory criteria and recommended options
- j) Key Objectives and Mandatory Criteria Checklist
- k) Acoustic Report (if required)



# Appendix C

# Residential Landscape Guidelines

Frasers Property Australia is committed to responsible environmental design. As part of their contribution to sustainable development and reducing water use, gardens within the Port Coogee Development are required to conform to WaterWise Garden Guidelines. Landscape plans for residential gardens will need to be submitted to the Design Approval Coordinator (DAC) for approval.

The DAC has specified three mandatory provisions for residential landscapes:

- 80% of residential landscaping is to utilise drought tolerant species
- 60% of plants are to be native species
- All residential dwellings must be provided with composting bins.

The following document provides resources and information to assist homeowners in the compilation of a landscape plan that will conform to the DAC requirements. Included are some example garden designs that conform to guidelines that residents can choose to adopt or modify.

## WaterWise Guidelines

The Water Corporation have developed an extensive set of guidelines regarding the design, construction and maintenance of water wise gardens. The full text of these guidelines can be accessed at www. watercorporation.com.au Below is a summary of appropriate water conservation measures based on the information on the Water Corporation website.

# General Design of WaterWise Gardens

Maximise the use of non-planting treatments such as paving and mulches, at the same time be aware of excessive use of unshaded paving which can be hot and glaring.

If lawn is to be used, choose a lawn type that is water efficient and best suited to our climate. Warm season grasses which include cultivars and hybrids of couch have a relatively low water demand and high drought tolerance. A guide to lawn selection is included below.

Lawn areas will command a major proportion of your total water use, thus lawn areas should minimised, and should be located and designed to serve a practical function rather than as a 'fill in' material.

To maximise the efficiency of watering systems garden planting areas need to be divided into watering zones i.e. groups of plants and trees with similar watering requirements. Specially labelled plant selections for each watering zone are available from most plant nurseries.

Consider the prevailing dry, hot summer winds and summer sun, and plan-in permeable windbreaks and shade plants accordingly.



Addition of organic matter such as compost into the soil, or purchasing an appropriate soil blend dramatically improves both water and nutrient holding capacity.

Use of mulches on the surface of garden beds reduce evaporative losses from the soil and discourage weeds, decreasing maintenance and water use.

## Improving Your Soil

The imported soil fill used for construction of the residential lots in the Port Coogee development will be 'clean fill sand'. This sand is ideal for construction purposes, but as it comes from the sub-surface layers of the soil it has little or no organic material and thereby limited water holding and nutrient supply capacity.

The addition of compost to the soil will improve the chemical, physical and biological characteristics of the soil. It improves water retention in sandy soils and promotes soil structure. The break down of organic material releases nutrients into the soil reducing the reliance on chemical fertilisers. Further the soil become biologically active and can suppress root pathogens. Compost can be purchased or made at home. If purchasing, ensure the product complies with Australian Standards 4454 for compost. If composting at home, websites such as the following are useful sources of information:

#### http://permaculture.org.au

#### http://www.epa.qld.gov.au/environmental\_management/waste/waste\_minimisation/composting

Mulches may be organic (such as bark or chipped tree waste), or inorganic (gravel, pebbles, glass or crushed brick). As long as they protect the soil surface and do not retain water within the mulch layer they will be effective at reducing evaporative losses from the soil. However, some inorganic mulches may absorb and then radiate heat, increasing the heat stress on plant material. They may also present a maintenance problem in situations where plants drop leaves/flowers/fruit onto the mulch.

## Planting Designs

Following in appendix D is a list of native and exotic suitable for inclusion in residential gardens. Many of these plants will be utilised in the development landscaping and use of these species within residential gardens will help create a cohesive style for the development.

Planting designs may include some or none of these species but they will need to demonstrate compliance with the required levels of native and drought tolerant species. Drought tolerant and shade tolerant species are indicated on the left of the species list to help homeowners to group plants for different locations within the garden.

The plant list is divided into functional groups including trees, groundcovers, shrubs, hedging plants, climbers, strappy leaved/grassy plants and accent plants. This structure should assist residents choose plants that will achieve different functions within the garden.



# Lawn Selection Guide

(Reproduced from the Water Corporation website)

#### Irrigation

Modern automated irrigation systems are both cheap and adaptable. When properly designed and operated, they provide effortless and efficient watering. Your planning should incorporate these elements:

#### Choice of equipment

- Use sprinklers that produce coarse sprays of large droplets. These are less prone to wind drift
- Use good quality sprinklers which have matching precipitation rates. Cheap sprinklers will vary enormously in their output
- Use a good quality controller which has the ability to run separate programs for lawn areas and garden
- Gutter mounted rain sensors can be used to disable watering after summer rain storms.

## Lawn Watering

- Sprinklers should be placed so that the spray from one sprinkler touches the next sprinkler
- Sprinklers should be staggered
- Use good quality part circle sprinklers on the edges to prevent watering of hard surfaces
- Do not mix different types of emitters on the same line
- Water your lawn area separately from garden areas.

## Garden Bed Watering

- The most important principle for saving water when irrigation garden beds are to water directly onto the root zone rather than leaves and areas between plants
- Choose the most appropriate sprinkler/dripper system for different plant types that will deliver the water onto the root zone.

# Verge Reticulation

The irrigation infrastructure supplying water to verges will be designed to enable straightforward disconnection from the communal irrigation water supply and connection to the reticulation system for individual residential lots at the appropriate time.





DT Drought Tolerant ST Shade Tolerant

# Recommended Plant Species

| TREES        |    | The choice of tree and its location within the garden is crucial to the aesthetics and functioning of the garden.<br>Trees provide shade, wind protection, privacy as well as being dominant aesthetic elements in a garden.              |                        |  |  |  |
|--------------|----|---|------------------------|--|--|--|
|              |    | BOTANICAL NAME  | COMMON NAME            | -  |  |  |
| Evergreen    |    | Native Species  |                        |  |  |  |
|              | DT | Agonis flexuosa   | WA Peppermint          | Mid sized tree with pendulous open habit                                 |  |  |
|              |    | Agonis flexuosa 'After Dark'  |                        | Purple coloured foliage with pendulous open habit                        |  |  |
|              | DT | Eucalyptus decipiens  |                        |  |  |  |
|              | DT | Eucalyptus platypus var. heterophylla   | Coastal Moort          | Bushy/dense crown; showy cream flowers; smooth pink bark                 |  |  |
|              |    | Eucalyptus todtiana   | Coastal Blackbutt      |  |  |  |
|              |    | Eucalyptus torquata   | Coral Gum              | Small tree with spreading form, masses of large red flowers              |  |  |
|              | DT | Melaleuca lanceolata  | Rottnest Is Tea Tree   | Small tree with dark green foliage with a small cream flower             |  |  |
|              |    | Exotic Species  |                        |  |  |  |
|              | DT | Hibiscus tiliaceus rubra  | Cottonwood             | Large heart shaped mid-green leaves with white undersides                |  |  |
|              | DT | Metrosideros excelsa  | NZ Christmas Tree      | Showy crimson flowers; umbrella canopy or use as hedge                   |  |  |
|              | DT | Olea europa   | European Olive         | Grey-leaved; fruit bearing (sterile varieties); picturesque habit        |  |  |
| Deciduous    |    | Exotic Species  |                        |  |  |  |
|              |    | Plumeria obtusa   | Frangipani             | Small deciduous tree, scented white flowers with yellow centre           |  |  |
|              |    | Ficus carica  | Common Fig             | Small deciduous tree, distictive 3- lobed leaf, edible fruit             |  |  |
|              | DT | Sapium sebiferum  | Chinese Tallow         | Small deciduous tree, leaves colour to shades of yellow-red              |  |  |
|              |    | Ulmus parvifolia  | Chinese Elm            | Upright habit; rounded crown; fine branches clothed in leaves            |  |  |
| GROUNDCOVERS |    | Groundcovers mass planted provide a subtle groundplane texture that can be used as foreground to more<br>plants. They are an excellent alternative to lawn in circumtances where you want to achieve an 'open' spac<br>to be trafficable. |                        |  |  |  |
|              |    | BOTANICAL NAME  | COMMON NAME            | DESCRIPTION  |  |  |
|              |    | Native Species  |                        |  |  |  |
|              | DT | Carpobrotus virescens   | Pig Face               | Mat forming; pink and green succulent foliage; bright pink flowers       |  |  |
|              | DT | Calothamnus 'Emerald Carpet'  | One-Sided Bottle brush | Narrow, needle-like deep green leaves, flowers resemble<br>a bottlebrush |  |  |
|              | DT | Grevillea crithmifolia  | Prostrate Grevillea    | Compact evergreen; perfumed white flowers                                |  |  |
|              | DT | Grevillea obtusifolia 'Gin Gin Gem'   | Prostrate Grevillea    |  |  |  |



- DT Drought Tolerant
- ST Shade Tolerant

|        |                            | BOTANICAL NAME   | COMMON NAME  | DESCRIPTION   |  |
|--------|----------------------------|--|--|---|--|
|        | DT                         | Eremophila 'Kalbarri Carpet'   | Emu bush (prostrate form)  | Prostrate from, grey-green leaves   |  |
|        | DT                         | Myoporum parvifolium   | Creeping Boobialla   | Vigorous spreading; starry flowers; fine leafed form is the most attractive   |  |
|        | DT ST                      | Scaevola 'White Carpet'  | Fan Flower   | Mat forming grondcover, white fan-like flower for an extended period  |  |
|        | DT                         | Tetragonia decumbens   | Coastal Spinach  | Spreading shrub; dark green, glistening leaves; small, yellow flowers   |  |
|        | DT                         | Westringia 'White Rambler'   | Australian Rosemary  | Prostrate native rosemary   |  |
|        | ST                         | Viola hederacea  | Native Violet  | Small mauve and white flowers; can be used in containers  |  |
|        |                            | Exotic Species   |  |   |  |
|        | DT                         | Arctotis varieties   | African Daisy  | Grey-green or silvery leaves with showy flowers   |  |
|        | DT                         | Dymondia margaretae 'Silver Carpet'  | Dymondia   | Narrow green foliage (silver underneath), yellow daisies, use<br>between paving stones or as a lawn, takes light foot traffic   |  |
|        |                            | Juniper conferta   | Shore Juniper  | Sculptural groundcover conifers, berry-like fruits  |  |
|        | DT                         | Gazania varieties  | Gazania  | Green or grey leaved varieties grown for their showy flowers  |  |
|        |                            | Osteospermum fruticosum alba   | White Prostrate African<br>Daisy   | Irregularly toothed leaves and a profusion of large daisy-like flowers  |  |
|        |                            | Trachelospermum asiaticum  | Yellow Star Jasmine  | Oval, glossy and dark green leaves, creamy scented flowers  |  |
|        |                            | Trachelospermum jasminoides  | Star Jasmine   | Oval, glossy and dark green leaves, star shaped white flowers   |  |
| SHRUBS |                            | These shrubs are small to medium sized suitable for small gardens and provide different leaf or flower features. While these are not showy 'accent' plants they will provide subtle features when planted in groups that can fill spaces between more dramatic planting. |  |   |  |
|        |                            | BOTANICAL NAME   | COMMON NAME  | DESCRIPTION   |  |
|        | DT ST                      | Agonis flexuosa var. nana  | Dwarf Willow<br>Peppermint   | Hardy, dense shrub with broadly lanceshaped copper foliage  |  |
|        |                            |  |  |   |  |
|        | DT                         | Calothamnus quadrifidus  | One-Sided Bottlebrush  | Red claw-like one-sided flowering spikes; ideal for screening/<br>pruning; needle-like leaves   |  |
|        | DT<br>DT                   | Calothamnus quadrifidus<br>Correa reflexa var. nummularifolia  | One-Sided Bottlebrush<br>Common Correa   |   |  |
|        |                            |  |  | pruning; needle-like leaves   |  |
|        | DT                         | Correa reflexa var. nummularifolia   | Common Correa  | pruning; needle-like leaves<br>Round leathery leaves; green-white bell shaped flowers   |  |
|        | DT<br>DT                   | Correa reflexa var. nummularifolia<br>Eremophila nivea 'Spring Mist'   | Common Correa<br>Emu Bush  | pruning; needle-like leaves<br>Round leathery leaves; green-white bell shaped flowers<br>Soft silver grey foliage with mauve flowers  |  |
|        | DT<br>DT<br>DT             | Correa reflexa var. nummularifolia<br>Eremophila nivea 'Spring Mist'<br>Leucophyta brownii   | Common Correa<br>Emu Bush<br>Cushion Bush  | pruning; needle-like leaves<br>Round leathery leaves; green-white bell shaped flowers<br>Soft silver grey foliage with mauve flowers<br>Silver ball of twiggy stems; minute foliage   |  |
|        | DT<br>DT<br>DT<br>DT       | Correa reflexa var. nummularifolia<br>Eremophila nivea 'Spring Mist'<br>Leucophyta brownii<br>Leucophyta 'Silver Nugget'   | Common Correa<br>Emu Bush<br>Cushion Bush<br>Cushion Bush                            | pruning; needle-like leaves<br>Round leathery leaves; green-white bell shaped flowers<br>Soft silver grey foliage with mauve flowers<br>Silver ball of twiggy stems; minute foliage<br>Dwarf form of cushion bush   |  |
|        | DT<br>DT<br>DT<br>DT<br>DT | Correa reflexa var. nummularifolia<br>Eremophila nivea 'Spring Mist'<br>Leucophyta brownii<br>Leucophyta 'Silver Nugget'<br>Melaleuca incana var. nana   | Common Correa<br>Emu Bush<br>Cushion Bush<br>Cushion Bush<br>Dwarf Grey Honey Myrtle | pruning; needle-like leaves<br>Round leathery leaves; green-white bell shaped flowers<br>Soft silver grey foliage with mauve flowers<br>Silver ball of twiggy stems; minute foliage<br>Dwarf form of cushion bush<br>Soft, weeping, grey-blue to grey-green foliage |  |





ST Shade Tolerant

|                | DT    | BOTANICAL NAME   | COMMON NAME                |  |
|----------------|-------|--|----------------------------|--|
|                | DT    | Westringia fruticosa 'Smokie'  | Australian Rosemary        | Grey variegation   |
|                | DT    | Westringia 'Jervis Gem'  | Australian Rosemary        | Compact form   |
|                |       | Exotic Species   |                            |  |
|                |       | Abelia grandiflora   | Abelia                     | Tall shrub with dark green leaves & arching reddish<br>brown canes   |
|                | DT    | Rosmarinus officinalis   | Rosemary                   | Narrow needle-like leaves that are dark green and aromati  |
|                | DT    | Rhaphiolepis indica  | Indian Hawthorn            | White to pink flowers; use for hedging/clipping; glossy dark<br>leathery leaves                                    |
| HEDGING PLANTS |       | These plants are suitable for clippin<br>for defining spaces within a garden a |                            | al/structural elements for the garden. Hedges can be also use  |
|                |       | BOTANICAL NAME   | COMMON NAME                | DESCRIPTION  |
|                |       | Native Species   |                            |  |
|                | DT ST | Agonis flexuosa var. nana  | Dwarf Willow<br>Peppermint | Hardy, dense shrub with broadly lanceshaped copper folia   |
|                | DT    | Westringia fruticosa   | Australian Rosemary        | Rosemary like foliage, can be pruned in more compact for   |
|                |       | Exotic Species   |                            |  |
|                | DT    | Coprosma repens  | New Zealand Mirror<br>Bush | Neat round shiny green leaves; fast growing; can be clippe   |
|                |       | Ficus pumila   | Creeping Fig               | Has attractive small, bright green juvenile leaves that turn bronze  |
|                |       | Meterosideros collina 'Tahiti'<br>Pittosporum tobira                           | NZ Christmas Bush          | Compact evergreen shrub, silver grey new growth  |
|                | DT    | Plumbago   | Plumbago                   | Clusters of blue or white flowers; lax shape responds to pruning   |
|                | DT    | Rosmarinus officinalis   | Rosemary                   | Narrow needle-like leaves that are dark green and aromati  |
|                | DT    | Rhaphiolepis indica  | Indian Hawthorn            | White to pink flowers; use for hedging/clipping; glossy dark<br>leathery leaves                                    |
| CLIMBERS       |       |  | -                          | all walled gardens. They take up very little space but can softe<br>d planting climbers onto a south facing walls. |
|                |       | BOTANICAL NAME   | COMMON NAME                | DESCRIPTION  |
|                |       | Native Species   |                            |  |
|                | ST    | Hardenbergia comptoniana   | Coral Pea                  | Native climber, clusters of small purple or pink pea-flowers   |
|                |       | Exotic Species   |                            |  |
|                |       | Bougainvillea  | Bougainvillea              | Colourful bracts in shrubs or can be used as climber   |
|                | ST    | Trachelospermum asiaticum  |                            | Oval, glossy and dark green leaves, creamy scented flowers   |
|                | ST    | Trachelospermum jasminoides  | Star Jasmine               | Glossy and dark green leaves, hanging clusters of white flowers  |
|                |       |  |                            |  |



- DT Drought Tolerant
- ST Shade Tolerant

# STRAPPY LEAVED & GRASS

Strappy leaved and grassy plants offer a point of interest through there texture and sometime colour contrast with other foliage types. Unlike plants with feature flowers, grass like plants offer interest and accent in the garden all year round.

|                      |       | typ === = p.tanto menteatente  | planto oriennia        |   |  |  |
|----------------------|-------|--|------------------------|---|--|--|
|                      |       | BOTANICAL NAME   | COMMON NAME            | DESCRIPTION   |  |  |
|                      |       | Native Species   |                        |   |  |  |
|                      | DT    | Anigozanthos various hybrids   | Kangaroo Paws          | Strap like leaves; flowering stems; flowers on mass   |  |  |
|                      | DT ST | Conostylis candicans   | Grey Cottonhead        | Narrow clumps of greyish foliage; yellow flowers in clusters on stems                       |  |  |
|                      | DT ST | Dianella revoluta 'Little Rev'   | Black Anther Flax-lily | Starry blue flowers; blue berries; colonies of flax-like foliage                            |  |  |
|                      |       | Ficinia nodosa   | Knotted Club Rush      | Wiry rush with knob of brown flower spikes on the stem                                      |  |  |
|                      |       | Juncus kraussii  | Sea Rush               | Tough, round, spine-tipped leaves; purplish brown flowers are topped by spine-tipped bracts |  |  |
|                      |       | Lepidosperma gladiatum   | Coastal Sword-sedge    | Sharp sword-like leaves; hard shiny nuts; pale brown flowers                                |  |  |
|                      | ST    | Lomandra 'Tanika'  | Spiny-headed Mat-rush  | Fine leaf form, bright green foliage  |  |  |
|                      | DT ST | Lomandra longifolia 'Cassica'  | Spiny-headed Mat-rush  | Arching, clumping, strappy perennial with grey/green foliage                                |  |  |
|                      | DT    | Orthrosanthus multiflorus  | Morning Flag           | Numerous spikes of blue flowers; clump of strappy leaves                                    |  |  |
|                      |       | Exotic Species   |                        |   |  |  |
|                      | ST    | Liriope spicata  | Lilyturf               | Dark green clumping stapply plant, flowers white to pale purple                             |  |  |
|                      | ST    | Ophipogon japonicus  | Mondo Grass            | Fine dark green leaves, spreading to form dense soft mats.                                  |  |  |
|                      | ST    | Phormium tenax   | New Zealand Flax       | Giant sword-like leaves and towering flower stalks  |  |  |
|                      | ST    | Zephyranthes candida   | Rain Lily              | Small reedy evergreen; white flowers; clumpforming and bulbous; best when crowded           |  |  |
| ACCENT PLANTS        |       | The list of accent plants includes some of the strappy leaved varieties along with some dramatic looking succulents. |                        |   |  |  |
|                      |       | This type of plants should be used in relatively small groupings.  |                        |   |  |  |
|                      |       | BOTANICAL NAME   | COMMON NAME            | DESCRIPTION   |  |  |
|                      |       | Native Species   |                        |   |  |  |
|                      | ST    | Anigozanthos various hybrids   | Kangaroo Paws          | Strap like leaves; flowering stems; flowers on mass   |  |  |
|                      |       | Ficinia nodosa   | Knotted Club Rush      | Wiry rush with knob of brown flower spikes on the stem                                      |  |  |
|                      |       | Juncus kraussii  | Sea Rush               | Tough, round, spine-tipped leaves; purplish brown flowers are topped by spine-tipped bracts |  |  |
|                      | ST    | Exotic Species   |                        |   |  |  |
|                      | ST    | Agave attenuata  | Agave                  | Large 'strappy' succulent   |  |  |
|                      |       | Aeonium aboreum  | Aeonium                | Succulent with green/purple leaves depending on season                                      |  |  |
|                      |       | Phormium tenax<br>(purple and red leaved   |                        | New Zealand Flax Red/puple leaved varieties of large strappy plant                          |  |  |
|                      |       | Strelitzia reginae   | Bird of Paradise       | Grey foliage; purple & orange flowers; striking accent plant                                |  |  |
| PROHIBITED<br>PLANTS |       | Palm Trees   |                        |   |  |  |





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