

CITY OF SUBIACO
LOCAL PLANNING POLICY 1.3

Sustainable Development

ADMINISTRATIVE

Version	Date	Comment
0.1	25 July 2023	Draft for public advertising
1.0	31 October 2023	Final for publishing

AUTHORITY

- Planning and Development (Local Planning Scheme) Regulations 2015
- City of Subiaco Local Planning Scheme No. 5 (**Scheme**)
- State Planning Policy 7.3 – Residential Design Codes Volume 1 (**R-Codes Volume 1**)

STATUTORY BACKGROUND

This Local Planning Policy (**the Policy**) is made pursuant to Schedule 2, Part 2, Division 2 of the *Planning and Development (Local Planning Schemes) Regulations 2015* relating to local planning policies.

This policy applies in conjunction with the Scheme, R-Codes Volume 1, and any other relevant local planning policies.

PURPOSE

The Policy ensures the future development of single and grouped dwellings in the City of Subiaco is done in an environmentally sensitive manner to protect the natural environment for current and future generations.

The Policy provides a framework to achieve sustainable development, while giving proponents the flexibility to integrate the most appropriate sustainability measures to suit the context of their site.

Whilst sustainable development can often incur a greater cost up front, the resultant utility cost savings from energy and water efficiencies compensate this over time. Many new dwellings already provide some or many of the sustainability measures provided by this Policy, however this Policy provides additional guidance on sustainability outcomes for applicants to consider and implement. There are a variety of options to comply with the Policy provided in **Table 1**, which accommodate a range of site contexts and budgets.

APPLICATION

The Policy applies to Single Houses, Grouped Dwellings and Significant Additions and/or Alterations to which R-Codes Volume 1 applies, on all land within the Scheme area.

The Policy does not apply to:

- Additions and/or alterations resulting in an additional floor area below 50 per cent of the existing building footprint; and

- Change of use applications.

POLICY

1.0 Objectives

- To realise the City's sustainable built form strategic objectives as identified in the Strategic Community Plan, Local Planning Strategy and Scheme.
- To provide a framework of sustainability measures to be integrated into residential development to achieve sustainable built form, in perpetuity.
- To protect the natural environment by minimising energy and water use, and the generation of greenhouse gases.
- To provide flexible design options for residents to develop sustainable buildings that are fit for purpose and appropriate for their specific site context.
- To build environmental sustainability in the City.

2.0 Definitions

- The following terms are defined for the purpose of this Policy.

Additions and/or Alterations: Means any addition and/or alteration to an existing dwelling.

Building Footprint: Means the total area of a dwelling as enclosed by the exterior walls, including all enclosed attached and detached structures (excluding outbuildings).

Enclosed: Means Enclosed as defined in R-Codes Volume 1.

Floor Area: Means the total floor area enclosed by the exterior walls of any proposed additions and/or alterations.

Grouped Dwellings: Means Grouped Dwelling development as defined in R-Codes Volume 1.

NatHERS: Means the Nationwide House Energy Rating Scheme.

On-site Means contained within the lot boundaries as per the Lot Diagram of Survey (i.e. Deposited Plan or Strata Plan).

Outbuilding: Means Outbuilding as defined in R-Codes Volume 1.

Passive House: Means a design standard that achieves thermal comfort with minimal heating and cooling by using insulation, airtightness, appropriate window and door design, ventilation systems with heat recovery, and elimination of thermal bridges.

Permeable Driveway:	Means a driveway that allows for water to naturally pass through its surface.
Scheme:	Means the applicable Local Planning Scheme to which this Policy applies being Local Planning Scheme No. 5 (LPS 5).
Significant Additions and/or Alterations:	Means an addition and/or alteration with a floor area greater than 50 per cent of the existing building footprint.
Single House:	Means Single House development as defined in R-Codes Volume 1.
Solar Absorptance:	The fraction of the total incident solar radiation that is absorbed by the roofing material, with the remainder being reflected.
Solar PV:	Means solar photovoltaic (PV) system.
Tree Planting Area:	An area around the tree, provided to support the healthy growth of a tree and is free from development or structure, including areas of hard stand and roof cover.
Waterwise Plants:	As classified in the Water Corporation's Waterwise Plant Search for Subiaco.

(b) All other terms, words and expression used in this policy have the same meaning as they have in the Scheme and applicable local planning framework.

3.0 Sustainability Measures

- 3.1 All new single houses and grouped dwellings must reach a minimum of 100 points under **Table 1** below.
- 3.2 Proponents are required to submit the Sustainability Checklist (**Form 1**) when lodging a development application to indicate which sustainability measures have been incorporated into the development. If there is more than one dwelling, a **Form 1** must be provided for each dwelling.
- 3.3 Sustainability measures must also be reflected on the development plans and will be reinforced through condition(s) of development approval.
- 3.4 Significant additions and/or alterations are only required to reach a minimum 75 points under **Table 1** below.
- 3.5 Where proponents can demonstrate that an item(s) under **Table 1** is already included in the design of an existing dwelling, discretion to the point value allocation of the sustainability measure(s) may be reduced to the minimum points required under clauses 3.1 and 3.4. The sustainability measure(s) must:

- Be of a minimum standard as per **Table 1**; and
 - Be able to be maintained in perpetuity.
- 3.6 The City may consider request(s) for alternative sustainability measure(s) to be included in the proposal. Where a proponent wishes to pursue this option:
- (a) All requests must be made to the City of Subiaco in writing seeking approval as part of the development application. The request must include:
- i. A description of the sustainability measure(s); and
 - ii. Unit of measure (if applicable); and
 - iii. Manufacturer (if applicable); and
 - iv. A description of the proposed tangible sustainability benefit that would be provided.
- (b) The points value attributed to a request under clause 3.6 will be considered as the remaining point value required to meet clauses 3.1 or 3.4 of the Policy (whole or in-part).
- (c) Where considering a request under clause 3.6 the City will consider the following:
- i. Clauses 3.6(a) – (b) of this Policy; and
 - ii. How the proposed sustainability measure(s) meets the objectives of the policy; and
 - iii. How the sustainability measure(s) is proposed to be implemented; and
 - iv. If the sustainability measure(s) can be maintained in perpetuity.

Table 1 – Sustainability Measures

Item	Theme	Sustainability Measure	Points
1	Solar Efficiency	Solar PV system with the following minimum size inverters: <ul style="list-style-type: none"> • 3kW for dwellings with 2 or less bedrooms; or • 5kW for dwellings with 3 or more bedrooms. 	25
2		Solar battery storage of a minimum: <ul style="list-style-type: none"> • 4kWh for each dwelling with 2 or less bedrooms; or • 6kWh for each dwelling with 3 or more bedrooms. 	25
3		A minimum 300L: <ul style="list-style-type: none"> • Solar hot water system with a minimum 2 panels of solar collector area; or • Heat pump hot water system. 	25
4		Roof colour to have a solar absorptance value of not more than 0.45. <i>Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only.</i>	25

5		<p>100% of windows:</p> <ul style="list-style-type: none"> • double glazed • Triple glazed. <p>Note: <i>this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only.</i></p>	25 50
6	Water Efficiency	Rain water tank of minimum 3,000L capacity that is plumbed in to a toilet and/or laundry.	25
7		A minimum 3,000L capacity grey water reuse system ¹ that collects grey water from the laundry and bathroom and redirects it for garden irrigation.	25
8		<p>Construct a permeable driveway.</p> <p>Note: <i>this sustainability measure is an option for green title lots only.</i></p>	25
9	Vegetation	Waterwise plants as defined by the Water Corporation comprise 75% of the total landscaped area. The landscaped area must be a minimum of 20m ² . A landscaping plan must be provided with the development application, to the satisfaction of the City of Subiaco.	25
10		<p>Retain one mature tree on-site with a tree height of:</p> <ul style="list-style-type: none"> • Under 10m • 10m or higher <p>for current and future protection.</p> <p>An arborist report and Form 2 must be provided with the development application. The City of Subiaco will determine whether the proposed tree satisfies the requirement of this sustainability measure.</p>	50 75
11		<p>Provide an additional new tree on-site than what is required under the R-Codes. The tree must be native with a planting size of:</p> <ul style="list-style-type: none"> • between 45L and 100L • between 100-200L <p>The tree must:</p> <ul style="list-style-type: none"> • have a minimum 2x2m tree planting area; and 	25 50

¹ Refer to the [Code of Practice for the Reuse of Greywater in Western Australia 2010](#), which specifies the minimum areas of garden or lawn required for greywater disposal.

		<ul style="list-style-type: none"> • Have a free draining unimpeded base; and • have a minimum soil depth of 1m; and • be retained in perpetuity. <p>A Form 3 must be provided with the development application. The City of Subiaco will determine whether the proposed tree satisfies the requirement of this sustainability measure.</p>	
12	Transport	At least one car parking bay provided with a minimum 7kW electric vehicle charger.	25
13	Energy Efficient Design	<p>Achieve a Nationwide House Energy Rating Scheme (NatHERS) star rating of a minimum of one star in excess of the current energy efficiency requirements of the Building Codes of Australia for class 1a buildings. The energy efficiency rating for the dwelling shall be certified by a suitably qualified and accredited energy assessor using accredited software and shall be provided at the development application stage.</p> <p>The City will also consider an alternative evidenced through an equivalent rating tool. Where an alternative certification is being sought, seek prior approval from the City's Climate Change Officer.</p>	75
14		<p>Design the dwelling to a 'Passivhaus' (Passive House) standard. The dwelling design must be certified by a Passive House Institute accredited Building Certifier. Evidence of the certification must be provided at the development application stage.</p> <p>Note: <i>this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only.</i></p>	100
15	Additional Sustainability Measure(s)	<p>Refer to clause 3.6 of this policy.</p> <p>Note: <i>Should a proponent wish to use an alternative sustainability measure in accordance with clause 3.6/item 15, it is recommended they contact the City of Subiaco for advice on the suitability of the measure prior to lodgement of the development application. The City of Subiaco will advise if further sustainability measures in addition to the alternative sustainability measure is required to achieve the points required in accordance with clause 3.1 and 3.4.</i></p>	

Form 1 - Sustainability Checklist

Name: _____

Address of Development: _____

Development Type (include Lot No. if grouped dwelling): _____

Notes:

1. In accordance with clause 3.2, if more than one dwelling is proposed on-site, one Form 1 checklist is required for each dwelling
2. In accordance with clause 3.3, sustainability measure(s) must also be reflected on development plans (including site, floor, roof and elevation plans)

Item	Theme	Sustainability Measure	Points	Check
1	Solar Efficiency	Solar PV system with the following minimum size inverters: <ul style="list-style-type: none"> • 3kW for dwellings with 2 or less bedrooms; or • 5kW for dwellings with 3 or more bedrooms. 	25	
2		Solar battery storage of a minimum: <ul style="list-style-type: none"> • 4kWh for each dwelling with 2 or less bedrooms; or • 6kWh for each dwelling with 3 or more bedrooms. 	25	
3		A minimum 300L: <ul style="list-style-type: none"> • Solar hot water system with a minimum 2 panels of solar collector area; or • Heat pump hot water system. 	25	
4		Roof colour to have a solar absorptance value of not more than 0.45. <i>Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only.</i>	25	
5		100% of windows: <ul style="list-style-type: none"> • double glazed • Triple glazed. <i>Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only.</i>	25 50	
6	Water Efficiency	Rain water tank of minimum 3,000L capacity that is plumbed in to a toilet and/or laundry.	25	

7		A minimum 3,000L capacity grey water reuse system ² that collects grey water from the laundry and bathroom and redirects it for garden irrigation.	25	
8		Construct a permeable driveway. <i>Note: this sustainability measure is an option for green title lots only.</i>	25	
9	Vegetation	Waterwise plants as defined by the Water Corporation comprise 75% of the total landscaped area. The landscaped area must be a minimum of 20m ² . A landscaping plan must be provided with the development application.	25	
10		Retain one mature tree on-site with a tree height of: <ul style="list-style-type: none"> • Under 10m • 10m or higher for current and future protection. An arborist report and Form 2 must be provided with the development application. The tree will be approved by the City's Parks and Environment Department.	50 75	
11		Provide an additional new tree on-site than what is required under the R-Codes. The tree must be native with a planting size of: <ul style="list-style-type: none"> • between 45L and 100L • between 100-200L The tree must have a minimum 2x2m tree planting area with a free draining unimpeded base, and minimum soil depth of 1m. A Form 3 must be provided with the development application. The tree will be approved by the City's Parks and Environment Department.	25 50	
12	Transport	At least one car parking bay provided with a minimum 7kW electric vehicle charger.	25	
13	Energy Efficiency Design	Achieve a Nationwide House Energy Rating Scheme (NatHERS) star rating of a minimum of one star in excess of the current energy efficiency requirements of the Building Codes of Australia for class 1a buildings. The energy efficiency rating for the dwelling shall be certified by a suitably qualified and accredited energy assessor using accredited software and shall be provided at the development application stage.	75	

² Refer to the [Code of Practice for the Reuse of Greywater in Western Australia 2010](#), which specifies the minimum areas of garden or lawn required for greywater disposal.

		The City will also consider an alternative evidenced through an equivalent rating tool. Where an alternative certification is being sought, seek prior approval from the City's Climate Change Officer.		
14		Design the dwelling to a 'Passivhaus' (Passive House) standard. The dwelling design must be certified by a Passive House Institute accredited Building Certifier. Evidence of the certification must be provided at the development application stage. <i>Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only.</i>	100	
15	Alternative Sustainability Measure(s)	_____ _____ _____ [state sustainability measure(s)] Refer to clause 3.6 of this policy. <i>Note: Should a proponent wish to use an alternative sustainability measure in accordance with clause 3.6/item 15, it is recommended they contact the City of Subiaco for advice on the suitability of the measure prior to lodgement of the development application. The City of Subiaco will advise if further sustainability measures in addition to the alternative sustainability measure is required to achieve the points required in accordance with clause 3.1 and 3.4.</i>		
Sustainability Measure(s) Chosen:		[list item numbers]	TOTAL:	
Declaration:		I _____ [print name], will implement the sustainability measure(s) as identified above and understand that relevant conditions will be contained as part of any development approval for the application. Signature: _____		

Form 2 – Tree Survey Form – Existing Tree

Note: In accordance with clause 3.3, sustainability measure(s) must also be reflected on development plans (including site, floor and elevation plans)

	Tree Attribute	Description	
1	Applicant name:		
2	Address of development:		
3	Development type:	[include lot no. if applicable]	
4	Arborist report completed by:		
5	Arborist contact details:		
6	Location map and photo of tree:	<div style="border: 1px solid black; width: 100%; height: 100%; display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 45%; height: 45%; display: flex; align-items: center; justify-content: center;"> <p>Insert location map</p> </div> <div style="border: 1px solid black; width: 45%; height: 45%; display: flex; align-items: center; justify-content: center;"> <p>Insert photo</p> </div> </div>	
7	Location:		
8	Name (Botanical and Common):		
9	DBH range/ ('L' at planting if new tree):		
10	Height:		
11	Canopy Diameter (average):		
12	Canopy Area ($\pi \times r^2$):		
13	Age Class:		
14	Health / Vitality:		
15	Structural Condition:		
16	Useful Life Expectancy:		
17	Comments:		
18	Amenity Valuation (Helliwell):		
19	Total Points:		
20	Monetary Value:		

21	General Significance:	
22	Historical Significance:	

Form 3 – Tree Survey Form – New Tree

Note: In accordance with clause 3.3, sustainability measure(s) must also be reflected on development plans (including site, floor and elevation plans)

	Tree Attribute	Description
1	Applicant name:	
2	Address of development:	
3	Development type:	[include lot no. if applicable]
4	Supplier:	
5	Botanical Name:	
6	Common Name:	
7	Litre (at time of planting):	
8	Height at Maturity (average):	
9	Life Expectancy (average):	