

# Appendix 3: Proposed amendments to the IPI for the Upper Hutt City District Plan (Updated 8 May 2023)

Key:

UHCC proposed inserts in blue, deletions in red

GWRC proposed inserts and deletions in purple.

Scope for proposed amendments from GWRC submission points shown as footnotes

## 3.1 Definitions

Amend Definition for: Hydraulic neutrality means managing stormwater runoff from all new subdivision and development through temporary storage and controlled release either on-site disposal or storage, so that stormwater is released from the site at a rate that does not exceed the predevelopment peak stormwater runoff for the 10% and 1% rainfall Annual Exceedance Probability event<sup>1</sup>

Add the Definition for **Well-functioning urban environment** as set out in the NPS-UD<sup>2</sup>

## PART 2 - DISTRICT-WIDE MATTERS STRATEGIC DIRECTION

### UFD - Urban Form and Development

Add New Objective: Urban land use, subdivision and development design integrate features, in particular nature-based solutions, that support reductions in greenhouse gas emissions and the risk of natural hazards and that increase the climate resilience of the communities and natural environments of Upper Hutt City.<sup>3</sup>

Amend New Policy UFD-P1 Provide for and encourage medium and high density residential development that is consistent with the Council's Medium and High Density Design Guide in Appendix 1, giving priority to design elements that support reductions in greenhouse gas emissions and that increase the climate resilience of the communities and natural environments of Upper Hutt City.<sup>4</sup>

Amend Appendix 1- Medium and High Density Design Guide to provide for low-emission and climate-resilient development. Proposed amendments are included on page 9.<sup>5</sup>

### SUBDIVISION SUB-GEN – General Subdivision Provisions that Apply in All Zone

Add New Objective: Future subdivision and development is resilient to the effects of climate change and protects the health and well-being of all receiving environments and communities.<sup>6</sup>

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<sup>1</sup> Matter of clarification

<sup>2</sup> OS41.18

<sup>3</sup> OS41.18

<sup>4</sup> OS41.18

<sup>5</sup> OS41.5; OS41.10; OS41.12; OS41.18

<sup>6</sup> OS41.18

Add New Objective: Subdivision and development design integrates features, in particular nature-based solutions, that support reductions in greenhouse gas emissions and that increase the climate resilience of the communities and natural environments of Upper Hutt City.<sup>7</sup>

Add New Objective: Subdivision and development contribute to an improvement in the health and well-being of waterbodies and freshwater ecosystems.<sup>8</sup>

Add New Policy to require hydrological controls in all zones:

SUB-GEN-xx: The adverse effects of stormwater quantity on natural stream flows and aquatic ecosystem health shall be avoided as far as practicable by requiring hydrological controls and water quality management for new development and subdivision in the following zones: (i) General Residential Zone. (ii) High Density Residential Zone. (iii) City Centre Zone. (iv) Town Centre Zone. (v) Neighbourhood Centre Zone. (vi) Local Centre Zone. (vii) Mixed Use Zone.<sup>9</sup>

Replace policy suggested above to better align with drafting of SUB-GEN-P13

Add New Policy SUB-GEN-xx: Subdivision and development will be designed, and incorporate on-site stormwater management measures (hydrological controls), to:

- (i) retain increased stormwater volumes and flowrates from new development, prior to discharge; and
- (ii) protect and improve the health and well-being of waterbodies and freshwater ecosystems

in the following zones: (i) General Residential Zone. (ii) High Density Residential Zone. (iii) City Centre Zone. (iv) Town Centre Zone. (v) Neighbourhood Centre Zone. (vi) Local Centre Zone. (vii) Mixed Use Zone.<sup>10</sup>

Add New Definition for hydrological controls<sup>11</sup>

Hydrological controls means:

For greenfield development:

- (a) the modelled mean annual runoff volume generated by the fully developed area must not exceed the mean annual runoff volume modelled from the site in an undeveloped (pastoral) state
- (b) the modelled mean annual exceedance frequency of the 2-year Average Recurrence Interval (ARI) so-called 'channel forming' (or 'bankfull') flow for the point where the fully developed area discharges must not exceed the mean annual exceedance frequency modelled for the same site and flow event arising from the area in an undeveloped (pastoral) state.

For brownfield and infill development:

- (a) the modelled mean annual runoff volume generated by the fully developed area must be reduced, as far as practicable, towards the mean annual runoff volume modelled for the site in an undeveloped state
- (b) the modelled mean annual exceedance frequency of the 2-year ARI so-called 'channel forming'

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<sup>7</sup> OS41.12

<sup>8</sup> OS41.5

<sup>9</sup> OS41.6

<sup>10</sup> OS41.6

<sup>11</sup> OS41.6

(or 'bankfull') flow for the point where the fully developed area discharges to a stream, or stormwater network, shall be reduced as far as practicable towards the mean annual exceedance frequency modelled for the same site and flow event in an undeveloped state.

Amend New Controlled Activity Rule: SUB-GEN-R2A <sup>12</sup>

Subdivision and development must be designed to ensure that the stormwater runoff from all new impermeable surfaces will be disposed of, re-used, or stored on-site and released at a rate that does not exceed the peak stormwater runoff when compared to the pre-development situation for the 10% and 1% rainfall Annual Exceedance Probability event and provides hydrological controls for more frequent events.

Council will limit its control to and may impose conditions over the following matters:

1. Any potential effects on any downstream flooding hazard;
2. The size and scale of the development and the ~~additional~~ stormwater that the proposal will generate ~~compared to the existing situation~~;
3. The capacity of the local stormwater network; and
4. Whether there are any site-specific constraints or opportunities within the local area that mean that hydraulic neutrality or hydrological controls are ~~is~~ not required; and
5. Whether there are site specific ecological or cultural values downstream of **the** development that justify bespoke stormwater solutions to avoid adverse impacts.

**Add** New Controlled Activity Rule to address the effects of stormwater on water quality: <sup>13</sup>

SUB-GEN-Rxx: Subdivision and development must be designed to ensure that the adverse effects of stormwater runoff on water quality and stormwater volumes will be minimised by implementing water sensitive urban design.

Council will limit its control to and may impose conditions over the following matters:

1. Any potential effects of urban contaminants; and
2. Any potential effects of modified stormwater volumes.

## **GRZ – General Residential Zone**

Add New Objective GRZ-Ox: Building and development is resilient to the effects of climate change and protects the health and well-being of communities and all receiving environments, including those connected via **a** reticulated stormwater network. <sup>14</sup>

Add New Objective GRZ-Ox: Stormwater is managed to protect water quality and receiving environments <sup>15</sup>

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<sup>12</sup> OS41.6

<sup>13</sup> OS41.5(g)

<sup>14</sup> OS41.18

<sup>15</sup> OS41.5(g)]

Add New Policy GRZ-Pxx: New buildings and development will be designed to provide hydrological controls and water quality management.<sup>16</sup>

Add New Policy GRZ-Pxx: New buildings and development will be designed to protect the health of the natural environment and contribute to the climate resilience of the site and surrounding area, including through the use of nature-based solutions to:

- avoid adverse effects from flooding;
- avoid adverse effects on water quality and freshwater ecosystems;
- reduce demand on potable water supplies;
- mitigate urban heat; and
- maintain and enhance indigenous biodiversity.<sup>17</sup>

Add New Policy GRZ-Pxx: Encourage and enable the design of new buildings and development to be resilient to predicted changes in climate over the anticipated life span of the building and development.<sup>18</sup>

#### GRZ – General Residential Zone Standards

Add New Standard GRZ-Sx: Permeable surface: A minimum of 40% of the net site must be permeable surface.<sup>19 20</sup>

Add Definition for Permeable surface: Means a surface which allows for the soakage of water into the ground, including:

1. areas grassed or planted in trees or shrubs, gardens and other vegetated areas;
2. porous or permeable paving;
3. green roofs; and
4. decks which allow water to drain through to a permeable surface.

Add New Standard GRZ-Sx: Hydrological controls<sup>21 22</sup>

New buildings and development must demonstrate that they achieve hydrological controls as per the definition (requiring the installation of an appropriate rainwater reuse tank).

Add New Standard GRZ-Sx Canopy trees

A residential unit at ground floor level must include indigenous canopy trees in an unobstructed area within the site, clear of infrastructure (such as three waters, electricity, telecommunications) and any required vehicle access and manoeuvring, with a planted size of at least 80L, at a rate set out below.<sup>23</sup>

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<sup>16</sup> OS41.6

<sup>17</sup> OS41.12

<sup>18</sup> OS41.10

<sup>19</sup> OS41.5(g)]

<sup>20</sup> Relies on NPS-FM as a qualifying matter

<sup>21</sup> OS41.6

<sup>22</sup> Relies on NPS-FM as a qualifying matter

<sup>23</sup> OS41.10; OS41.12

i. <u>Detached residential unit</u>	<u>Two per residential unit</u>
ii. <u>Duplex residential unit</u>	<u>Two per residential unit</u>
iii. <u>Terrace housing unit</u>	<u>One per residential unit</u>
iv. <u>Apartment buildings</u>	<u>Minimum of one tree per site with an additional tree for every 200m<sup>2</sup> of site area</u>
v. <u>All other activities</u>	<u>Minimum of one tree per site with an additional tree for every 200m<sup>2</sup> of site area</u>

Amend [GRZ-S16 Landscaped area](#)<sup>24</sup>

(1) A residential unit at ground floor level must have a landscaped area of a minimum of 20% of a developed site with grass or plants, and can include the canopy of trees regardless of the ground treatment below them, with a preference for indigenous species.

(2) The landscaped area may be located on any part of the development site, and does not need to be associated with each residential unit.

Amend GRZ-R11 Policies UDF-P1, UDF-P2,<sup>25</sup>

Buildings ~~accessory to a permitted or controlled activity~~ which do not comply with permitted ~~and controlled~~ activity standards Council will restrict its discretion to, and may impose conditions on:  
RDIS

GRZ-P1A, GRZ-P1B, GRZ-P1C, GRZ-P1D, GRZ-P1E, GRZ-P1, GRZ-P2, GRZ-P3, GRZ-P4, GRZ-P5 GRZ-P8, GRZ-P9, GRZ-P10.

(1) Height and sunlight access.

(2) Setbacks and coverage.

(3) Landscaping and screening, particularly the use of canopy trees.

(4) Provision of and effects on utilities and/or services.

(5) Standard, construction and layout of vehicular access, manoeuvring and traffic safety.

(6) Streetscape effects.

(7) Effects on ~~neighbourhood character and~~ amenity.

(x) The effects on the stormwater system and the health and well-being of receiving environments.

(8) Financial contributions.

(9) The matters contained in the Medium and High Density Design Guide in Appendix 1, in particular those that contribute to reductions in greenhouse gas emissions and increase climate resilience.

<sup>24</sup> OS41.12

<sup>25</sup> OS41.10; OS41.5(g)

[\(10\) measures to avoid, remedy or mitigate adverse effects.](#)

[\(11\) Cumulative effects.](#)

[This rule does not apply to residential units.](#)

#### GRZ – General Residential Zone Add rule

Add Additional Standard to [GRZ-R12 The construction and use of 1, 2 or 3 residential units that do not comply with one or more of the following permitted standards:](#)

- (i) [GRZ-S3 – Building coverage.](#)
- (ii) [GRZ-S4 – Setbacks.](#)
- (iii) [GRZ-S5 Outdoor living space.](#)
- (iv) [GRZ-S7 – Building height.](#)
- (v) [GRS-S8 – Height in relation to boundary.](#)
- (vi) [GRZ-S9 – Hydraulic neutrality.](#)
- (vii) [GRZ-S14 – Outlook space \(per unit\).](#)
- (viii) [GRZ-S15 – Windows to street.](#)
- (ix) [GRZ-S16 – Landscaped area.](#)
- (x) [GRZ-S17- Hydrological controls.](#) <sup>26</sup>
- (xi) [GRZ-S18 Canopy trees.](#) <sup>27</sup>

Amend Matters of Discretion: [Council will restrict its discretion to, and may impose conditions on:](#) <sup>28</sup>

(1) [The matters contained in the Medium and High Density Design Guide in Appendix 1, in particular those that contribute to reductions in greenhouse gas emissions and increase climate resilience.](#)

(x) [The effects on the stormwater system and the health and well-being of receiving environments, including those connected via reticulated stormwater network.](#)

[\(2\) Site layout and design.](#)

[\(3\) Consideration of the effects of the standard not met.](#)

[\(4\) Cumulative effects.](#)

[\(5\) The matters contained in the Code of Practice for Civil Engineering Works.](#)

[\(6\) The imposition of financial contributions.](#)

[Restriction on notification: Public notification of an application is precluded under this rule.](#)

Add Additional Standard to GRZ – General Residential Zone Add rule <sup>29</sup>

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<sup>26</sup> OS41.6

<sup>27</sup> OS41.12

<sup>28</sup> OS41.18

<sup>29</sup> OS41.6

GRZ-R12A The construction and use of 4 or more residential units that comply with the following permitted standards:

- (i) GRZ-S3 – Building coverage.
- (ii) GRZ-S4 – Setbacks.
- (iii) GRZ-S5 Outdoor living space.
- (iv) GRZ-S7 – Building height.
- (v) GRZ-S8 – Height in relation to boundary.
- (vi) GRZ-S9 – Hydraulic neutrality.
- (vii) GRZ-S14 – Outlook space (per unit).
- (viii) GRZ-S15 – Windows to street.
- (ix) GRZ-S16 – Landscaped area.
- (xii) GRZ-S17- Hydrological controls.
- (xiii) GRZ-S18 Canopy trees <sup>30</sup>

Amend GRZ-R12B The construction and use of a residential unit(s) that is not a permitted activity, and do not fall under rules GRZ-R12 or GRZ-R12A. <sup>31</sup>

Council will restrict its discretion to, and may impose conditions on:

- (1) The matters contained in the Medium and High Density Design Guide in Appendix 1,
- (2) Site layout and design.
- (3) The matters contained in the Code of Practice for Civil Engineering Works.
- (4) Consideration of the effects of the standard not met.
- (5) Transport effects.
- (6) Methods to avoid, remedy, or mitigate adverse effects.
- (7) Cumulative effects.
- (x) Contributions to reductions in greenhouse gas emissions and climate resilience.
- (x) The effects on the stormwater system and the health and well-being of receiving environments, including those connected via reticulated stormwater network.

GRZ – General Residential Zone Amend Matters for Consideration

Amend Matters for Consideration<sup>32</sup>

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<sup>30</sup> OS41.12

<sup>31</sup> OS41.18

<sup>32</sup> OS41.18

Matters that may be relevant in the consideration of any resource consent, other than for a restricted discretionary activity, may include the following:

GRZ-MC1 Site layout, area and Building coverage

- (1) The arrangement of buildings, car parking and vehicle movements on site.
  - (2) The extent of landscaping and screening.
  - (3) Whether the topography of the site has been taken into account.
  - (4) Whether a better standard of development can be achieved by varying the design standards.
  - (5) The ability to provide adequate outdoor living areas.
  - (6) The extent to which ~~decreases in site size or~~ increased building coverage ~~would have an adverse effect on the amenity of the area~~ is compatible in form and scale with the neighbourhood's planned built character.
- (x) Contributions to reductions in greenhouse gas emissions and climate resilience.
- (x) The effects on the stormwater system and the health and well-being of receiving environments.

## HRZ – High Density Residential Zone

Add New Objective HRZ-Ox: Building and development is resilient to the effects of climate change and protects the health and well-being of communities and all receiving environments, including those connected via reticulated stormwater network.<sup>33</sup>

Add New Objective HRZ-Ox: Stormwater is managed to protect water quality and receiving environments<sup>34</sup>

Add New Policy HRZ-Pxx: New buildings and development will be designed to provide hydrological controls and water quality management<sup>35</sup>

Add New Policy HRZ-Pxx: New buildings and development will be designed to protect the quality of the natural environment and contribute to the climate resilience of the site and surrounding area, including through the use of nature-based solutions.<sup>36</sup>

Amend Policy HRZ-P6 Provide for and encourage medium and high density residential development that is consistent with the Council's Medium and High Density Design Guide in Appendix 1, giving priority to design elements that support reductions in greenhouse gas emissions and/or that increase the climate resilience of the communities and natural environments of Upper Hutt City.<sup>37</sup>

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<sup>33</sup> OS41.18

<sup>34</sup> OS41.5(g)

<sup>35</sup> OS41.6

<sup>36</sup> OS41.12

<sup>37</sup> OS41.18



## Amend “Appendix 1: Medium and High Density Design Guide” to include principles that provide for low-emission and climate-resilient development<sup>38</sup>

Suggested text below is derived from the Wellington City Council Design Guide for the Proposed District Plan, with [tracked changes in red](#) being GWRC amendments.

### Vegetation and planting

Vegetation, including front yard planting, contributes to the overall greening of our city, ensuring we are resilient into the future, and it offers important visual amenity to both residents and pedestrians.

Provide planting within new development that is of an appropriate mature scale when fully grown and is suitable for the situation (wind, sun exposure and soil type), placing them to enhance amenity both within and beyond the site.

*Quality planting on private sites is expected as it plays an essential role in our city’s overall greening and environmental resilience. Planting should be carefully selected to help facilitate passive surveillance of the street in balance with privacy to the dwelling.*

*Determine the appropriate mature scale of planting and trees by the proportions and height of the building typology it is associated with and the size and location of the bed in which it is planted.*

Planting should be used as a way to mitigate stormwater runoff and flooding effects.

Indigenous canopy trees shall be included in developments to mitigate urban heat and other climate extremes, while providing co-benefits for indigenous biodiversity, amenity and human well-being.

Existing trees that contribute to local streetscape or public realm amenities should be retained and thoughtfully integrated into a new development. When a tree must be removed, it is recommended the tree is relocated on the site or a new native tree be planted in its place.

Trees located adjacent to the development, including overhanging the site or within the street front, should be retained

### Urban Ecology

Landscaping should contribute to biodiversity and tree canopy areas and minimise the loss of ecosystems or habitats. Retaining and/or enhancing existing mature vegetation, especially native vegetation, efficiently and effectively enhances the ecosystem and provides for resilience to climate change for both nature and people.

### Carbon reduction - natural environment

Orientate buildings to maximise solar access to improve energy efficiency.

Dwellings should have natural cross ventilation by locating windows on opposing or corner sides of the unit.

Consider planting specimen trees to provide shade, as it reduces the overall heat island effect of the city

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<sup>38</sup> OS41.5; OS41.6; OS41.10; OS41.12; OS41.18]

## **Stormwater**

New development should achieve hydraulic neutrality and apply hydrological controls to improve the quality and reduce the quantity of stormwater runoff. This could be through:

- » Minimising the area of impervious surfaces.
- » Providing filtration and attenuation around car parks and other large impervious surfaces.
- » Providing roof gardens and vegetation on surfaces that would typically be covered by cladding or exterior building materials.
- » Capturing roof runoff in stormwater detention tanks for management.
- » Soakage/ground water recharge.
- » Implementing best practice water sensitive design
- » Collecting rainwater to flush toilets for laundry use and outdoor irrigation

## **Water conservation**

Water conservation methods and retention are recommended to be integrated into the landscape and building design.

*This could be through:*

- Reducing demand on mains by capturing rainwater/stormwater for reuse for toilet flushing, laundry, irrigation and other non-potable uses.
- Utilising plant and tree species that do not require regular irrigation unless using captured rainwater/stormwater.

Consider grey water reuse and circular water systems for washing and cleaning purposes.

## **Ecology**

Developments should be set back from waterbodies to maintain and protect the environmental, open space, and amenity values of the riparian margins, to avoid or mitigate adverse effects on water quality, and reduce the risk of adverse effects from flooding.

Where possible, regenerate waterways and enhance the stream ecology where waterways exist above or below ground.

Where possible, protect and enhance existing native bush and significant trees on-site and in the surrounding area

## **Carbon reduction - site**

Developments should provide for a range of sustainable travel modes by:

- » Provide charging capability for electric cars if carparking is proposed.
- » Designing spaces to facilitate easy access to and from nearby public transport stops or mass transit stops.
- » Providing parking areas and facilities for transport options other than private cars that are large enough to service the type and scale of the development.

» Providing end of journey facilities and bike storage in developments.

Bike, scooters and other micro-mobility storage should be included for all dwelling types, either associated with the dwelling or in a shared secure area and easily accessed from the dwellings it serves or the street. A wheel ramp needs to be considered if the storage area is only accessed through steps

### **Carbon reduction - buildings**

Where possible, new developments should consider:

- » Selecting low carbon and carbon banking materials.
- » Specifying locally sourced/manufactured materials (reducing travel/shipping distances).
- » Installing insulation over and above minimum requirements.

Consider compact housing typologies that are more energy efficient, such as terraced houses or apartments.

Consider the adaptive reuse of existing buildings to reduce construction carbon footprint

*Existing buildings contain embodied energy, and their retention avoids the additional use of carbon associated with the construction of new buildings, including in materials, transport, demolition and landfill. Retaining existing buildings in a sustainable long-term use, whether through the retention of its original use or by the adaptation for a new use, can be a sustainable option.*

## OPTIONS For Canopy Tree Metrics

### From Auckland Unitary Plan

#### H5.6. Standards (Residential – Mixed Housing Urban **Zone**)

##### H5.6.19 Deep soil area and canopy tree

Purpose: To build resilience to climate change effects through provision of deep soil areas that support canopy trees, which assist in removing carbon, reducing urban heat island effects and enabling the infiltration of stormwater.

(1) Any site greater than 200m<sup>2</sup> must provide a deep soil area that must comply with the following:

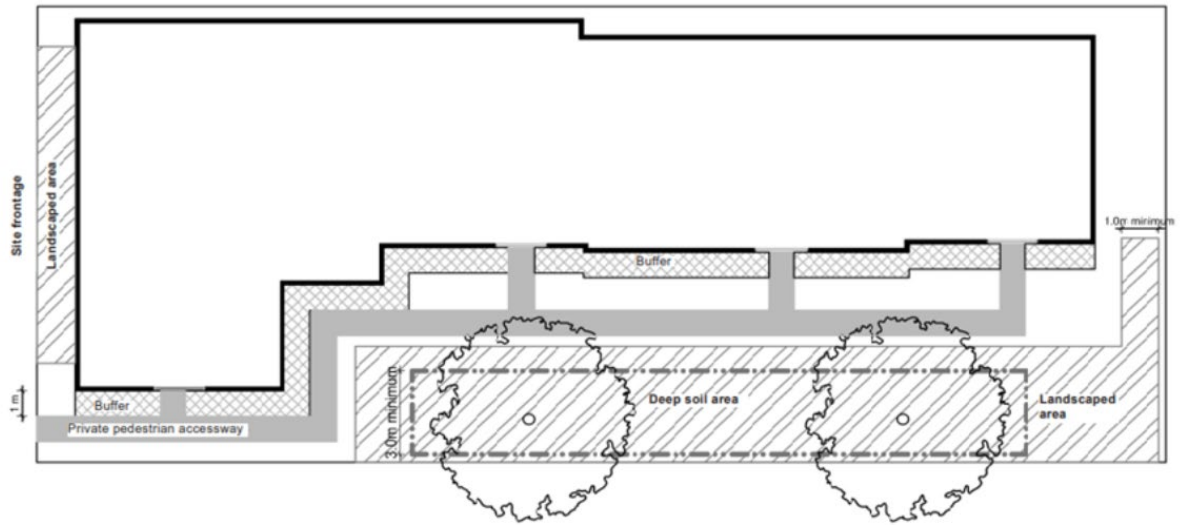
- (a) 10 per cent of the site area must be provided as 1 contiguous deep soil area with minimum 3m dimensions;
- (b) Except that sites 1,200m<sup>2</sup> or greater may have more than 1 deep soil area provided that:
  - (i) each deep soil area is a minimum of 60m<sup>2</sup> with 3m dimensions; and
  - (ii) the combined total deep soil area is a minimum 10 per cent of the site area;
- (c) Deep soil areas must not be provided in private outdoor living spaces but can be provided as part of communal outdoor living spaces and landscaped areas as shown below in Figure H5.6.19.1 Example of Deep soil area requirements and the relationship with Landscaped area and the Safety and privacy buffer; and
- (d) The deep soil area(s) must contain a canopy tree(s) that meets the minimum requirements as set out in Table H5.6.19.1 Minimum requirements for canopy trees; and

(2) Trees required by H5.6.19(1) can be existing canopy trees or new canopy trees in accordance with Table H5.9(3).

**Table H5.6.19.1 Minimum requirements for canopy trees**

<b>Site Area (prior to development or re-development)</b>	<b>Minimum canopy tree requirements</b>
<u>200m<sup>2</sup> – 600m<sup>2</sup></u>	<u>1 small canopy tree per 200m<sup>2</sup> of site</u>
<u>601m<sup>2</sup> – 1,500m<sup>2</sup></u>	<u>1 medium canopy tree per 300m<sup>2</sup> of site</u>
<u>1,501m<sup>2</sup> or more</u>	<u>1 large canopy tree or 2 medium canopy trees per 500m<sup>2</sup> of site</u>

**Figure H5.6.19.1 Example of the Deep soil area requirements and the relationship with Landscaped area and the Safety and privacy buffer**



**From South Australian State Planning Policy for Residential Infill Development**

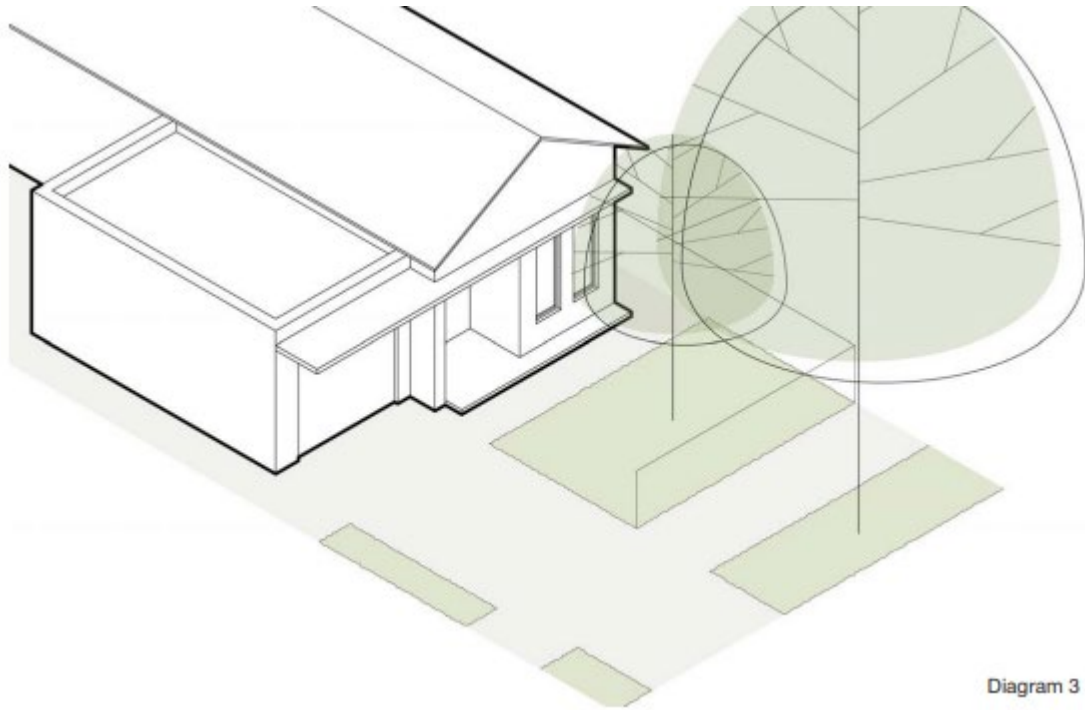
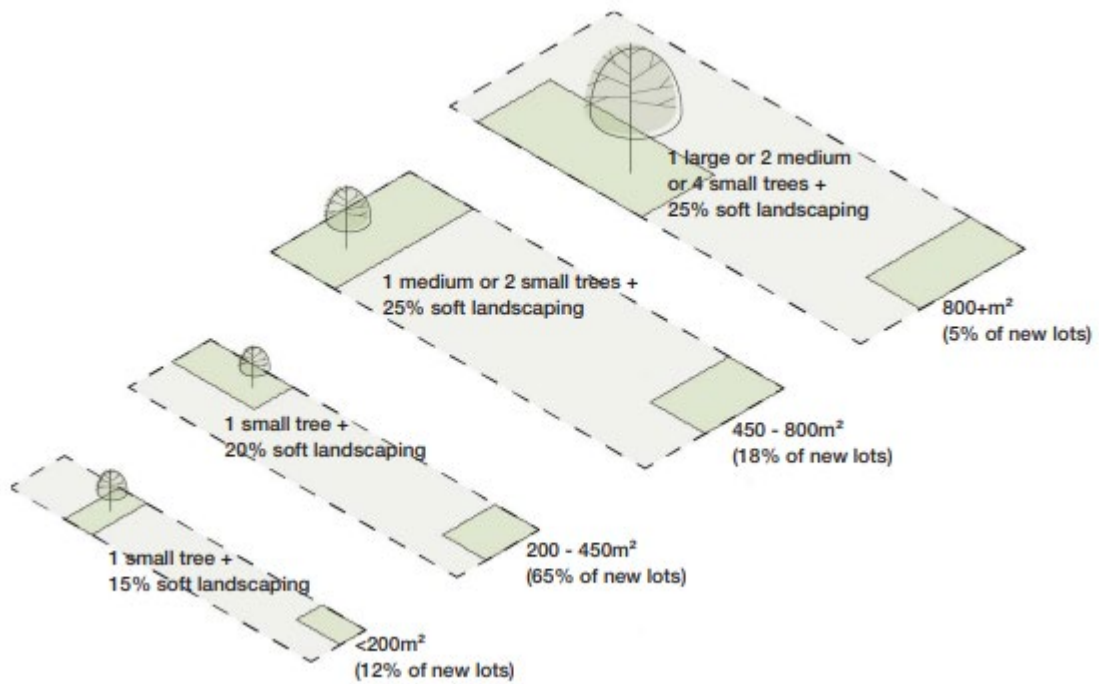


Diagram 3



## **For the information of the panel**

**Links to plans with good examples of provisions that support low-emission and climate-resilient development**

**1. Hamilton City Council PC12**

[Chapter-25.13-Three-Waters \(5\).pdf](#)

[Chapter-4-Residential-Zones.PDF \(storage.googleapis.com\)](#)

**2. Auckland Unitary Plan PC78**

[www.aucklandcouncil.govt.nz/UnitaryPlanDocuments/1.pc-78-chapter-h-zones-residential.pdf](http://www.aucklandcouncil.govt.nz/UnitaryPlanDocuments/1.pc-78-chapter-h-zones-residential.pdf)

**3. South Australian State Planning Policy for Residential Infill Development**

[Raising the Bar on Residential Infill Development | PlanSA](#)

**Link here to a newspaper article referred to at the Hearing discussing the success of good stormwater design to manage heavy rainfall events -**

[The medium density housing developments that defied the Auckland floods - this is how they did it | Stuff.co.nz](#)

**Newsroom's Rod Oram discusses nature-based solutions as part of urban design in Tāmaki Makaurau/Auckland**

<https://www.newsroom.co.nz/the-way-forward/why-nz-needs-to-integrate-nature-and-urban-design>