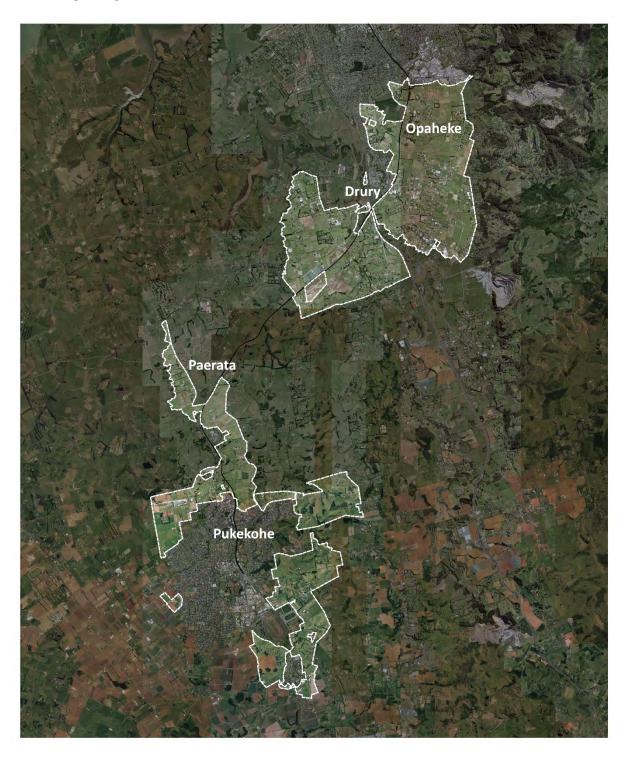
# Southern Structure Plan Area Neighbourhood Design Statement

# **Revision B**

# **Drury-Opāheke and Pukekohe-Paerata**





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# **Section A: Introduction**

#### Introduction

The Council's strategic direction for growth in Auckland includes the urbanisation of areas surrounding Drury to Opāheke, and Paerata to Pukekohe, which have been zoned Future Urban Zone (FUZ) in the Auckland Unitary Plan (operative in part). These areas have been identified by Auckland Council as being suitable for urbanisation and will change from mainly rural land use to urban land uses.

The Auckland Unitary Plan (operative in part) sets out the requirements for a structure plan for all new urban areas in the Regional Policy Statement and Appendix 1. The Council's Future Urban Land Supply Strategy 2017 sets out a programme for sequencing future urban zoned land over 30 years across Auckland, and the structure plans for Drury-Opāheke and Paerata- Pukekohe will become the basis for Council-initiated plan changes in the future.

## A1. The need for a Neighbourhood Design Statement

#### Requirement under Appendix 1

Structure Plans are being prepared for the Southern Growth Areas of Drury-Opāheke and Pukekohe-Paerata in accordance with Appendix 1 of the Auckland Unitary Plan (operative in part). As part of this process this Neighbourhood Design Statement (NDS) is provided as a specialist document to support the implementation of the structure plan and future plan change processes.

#### Aim of the Neighbourhood Design Statement (NDS)

The aim of the NDS is to provide guidance to assist the development of more detailed spatial planning such as master planning, as well as guidance when developing regulatory information for future plan changes. The NDS will provide a key implementation tool for the Council and other agencies responsible for delivering development outcomes across this growth area. The NDS information should help to inform and influence other components of work as part of future implementation stages. For example, those organisations developing the supporting infrastructure to serve the structure plan areas, or those preparing plan changes and development proposals; all are expected to acknowledge the intent of this document for achieving urban design quality and the desired urban form outcomes.

## A2. Scope of the Neighbourhood Design Statement

#### Context of what is covered

This statement covers the Southern Structure Plan Area (Drury-Opāheke and Pukekohe-Paerata), rather than specially defined neighbourhood boundaries, as there are many universal issues that impact across the different neighbourhoods. There are several types of neighbourhoods discussed in this document:

- Centres (small and larger) with mixes of uses.
- Residential dominated areas.
- Employment dominated areas.

There is also discussion around the land use and built form responses along more linear road and public transport networks that connect these areas including co-locating dense forms of development with high quality public transport corridors.

## **Proposed Structure Plans context with NDS Design Considerations**

Proposed Structure Plans have been prepared for the Drury-Opāheke and Pukekohe-Paerata areas. As part of the Neighbourhood Design Statement, mapping information has been developed for each structure plan area

to enable the reader to understand the NDS Design Considerations (contained in Section C of this document); in the context of the structure plan information.

#### Plan change, subdivision and land use consent levels

The NDS has developed "Five Themes". From the themes a series of more detailed sub-themes and design considerations have been developed. These five key themes have provided overarching, multi-disciplinary principles to guide from the master planning level through to regulatory plan changes and land development. Some design considerations will be relevant when developing overall master planning concepts, whereas others more relevant at subdivision and land use consent stages. To ensure integration and completeness, design considerations have been addressed beyond the structure plan stage to provide designers and developers with an understanding of what is expected to be achieved to ensure initial designs enable these outcomes in the future.

Five key themes underpin the NDS (detailed in Section B)

- 1. Neighbourhoods that vary in density and mix of uses according to their locational attributes.

  Supports compact quality development the design should demonstrate the ability to increase density over time as the area is built out.
- 2. Neighbourhoods with many safe choices of movement with good access to services and amenity.

  Promotes a safe, connected and permeable street pattern, enabling multi modal transport options
- 3. Neighbourhoods with many choices of use and activity that reflect the changing needs of the community and the sub-region.
  - Enables a diverse built form that supports a mix of land uses to establish over time
- **4.** Neighbourhoods that celebrate their unique identity and are attractive, safe and easily understood. *Promotes a sense of character and positive identity*
- 5. Neighbourhoods that protect and enhance the natural environment while enabling urbanisation.

  Protects the natural environment for climate resilience

The information developed in this NDS document should be used to help develop content for future plan changes, as well as other implementation processes, to achieve the desired development outcomes and expectations this NDS has signalled. In addition to this NDS guidance, its envisaged further supporting urban design information will also be developed as required over time to support implementation stages of the Structure Plan such as:

- supporting regulatory plan change information with more detailed urban design information being developed.
- to support on the ground implementation needs for subdivision, building development and infrastructure development.

#### Alignment with existing plan provisions and guidelines

This document does not replace any existing Auckland Council rules or guidelines. As such, it should be considered as additional guidance alongside the Auckland Plan 2050, the Auckland Unitary Plan (Operative in part), and other guidance documents such as: Auckland Design Manual (including the Te Aranga Māori Design Principles for considering Mana Whenua values). Auckland Transport - The Roads and Streets Framework and Transport Design Manual provide guidance about Auckland Transport's requirements for the planning, design, construction and management of the road and street network. The Framework and Manual are living documents and will be continually updated to ensure they are fit for purpose and reflect best practice.

## A3. Structure of this Document

This document is separated into three sections:

Section A: Introduces the need, aim and scope of the NDS and outlines the key terms and acknowledgements.

**Section B:** Outlines the visions, introduces the five key themes and shows how these achieve the Auckland Plan outcomes and Te Aranga Māori Design Principles. This section discusses the sub-themes relationship with NDS design considerations contained in Section C and provides mapping information for each structure plan area to enable the reader to understand the NDS design considerations in the context of the structure plan information.

**Section C:** The NDS is set out under a hierarchy of headings starting with undertaking a site analysis at the start of a project, to wider movement and open space networks, through to single lot development. The design considerations aim to provide practical guidance when undertaking more detailed master planning/ concept plan development, regulatory plan changes and actual development phases.

# A4. Key Terms

The following key terms are used throughout the document and are defined as follows:

**Centre:** Centres as defined by Auckland Council include town centres, local centres, and neighbourhood centres.

**Frequent Transit Network (FTN):** A bus or light rail system that travels along or adjacent to the road network and has some priority, or in certain cases corridors separate from private vehicles, and a level of services that runs at least every 15 minutes through the day and evening.

**Neighbourhood:** Within this Neighbourhood Design Statement neighbourhood boundaries have not been spatially defined, however they can include centres (small and larger) with mixes of uses, residentially dominated areas, employment dominated areas, and road and public transport corridors, which are more linear in form.

**Public Open Space:** Public open spaces as defined by Auckland Council include residential parks (usually 0.3-0.5ha), suburb park (usually 3-5ha), and suburb parks with a sports park (usually up to 10ha).

## A5. Acknowledgements

The perspectives used to illustrate the NDS were originally produced by Neil Coleman, ASAP Ltd. Permission has been granted for use of these images in this document. The content of this document was substantially developed and drafted by Urbanismplus Limited with assistance from the Auckland Design Office Auckland Council.

# **Section B: Visions, Themes, Structure Plan Context**

#### Introduction

The section outlines the visions for the Drury-Opāheke and Pukekohe-Paerata structure plan areas:

- introduces the five key themes developed to guide the NDS;
- shows how these themes work to achieve the Auckland Plan outcomes and Te Aranga Māori Design Principles;
- discusses the sub-themes developed to guide the outcomes of the NDS and how they relate to the design considerations set out in Section C;
- provides mapping information to help understand the NDS design considerations in Section C with the proposed structure plans developed for Drury-Opāheke and Pukekohe-Paerata

#### **B1.** Vision Statements

Vision statements were developed as part of the public consultation process undertaken for the structure plan process:

#### Vision Statement for Drury-Opāheke:

The vision for Drury-Opāheke is a sustainable, liveable, compact and accessible place with successful centres and residential options close to a variety of employment opportunities. It is well connected to the wider Auckland region through rail and road networks. Cultural and heritage values are respected.

#### Vision Statement for Pukekohe-Paerata:

New growth areas will enhance Pukekohe as a focal point and place to further support the surrounding rural economy. These areas will offer a range of housing choice and employment opportunities for people at all stages of life. It will be well connected to the wider Auckland and Waikato regions, while protecting and enhancing the natural, physical and cultural values that contribute to Pukekohe's unique character and identity.

### **B2.** The Five Themes

Themes were developed as part of a workshopping process with urban design specialists working with other technical specialists who had been developing the structure plan analysis and information (such as Natural Environment, Stormwater, Ecology, Transport, Parks and Open Space, Planning etc). Five themes have been developed to guide the NDS outcomes and provide overarching, multidisciplinary principles to guide master planning, regulatory plan changes and development. The key themes aim to achieve the visions set out in the Drury-Opāheke and Pukekohe-Paerata Structure Plans together with the outcomes of the Auckland Plan:

- 1. Neighbourhoods that vary in density and mix of uses according to their locational attributes.
- 2. Neighbourhoods with many safe choices of movement with good access to services and amenity.
- 3. Neighbourhoods with many choices of use and activity that reflect the changing needs of the community and the sub-region.
- 4. Neighbourhoods that celebrate their unique identity and are attractive, safe and easily understood.
- 5. Neighbourhoods that protect and enhance the natural environment while enabling urbanisation.

## Continuity with Plans and Places' Structure Plan work

The five key themes have been considered alongside the Drury-Opāheke and Pukekohe-Paerata Structure Plan themes, (Refer to Appendix 3 containing detailed information about the themes listed below) to ensure continuity with these outcomes. The sub-themes identified in Section B3 (Sub-themes and their Implementation), have absorbed these outcomes either within the sub-theme or as a design consideration.

Drury-Opāheke Structure Plan key outcomes to implement the vision:

- 1. Community Focus
- 2. Quality Built Environment
- 3. A Well-Connected Drury-Opaheke
- 4. Integration with Infrastructure Delivery
- 5. Natural Hazards
- 6. The Natural Environment

Pukekohe-Paerata Structure Plan key outcomes to implement the vision:

- 1. A place for people
- 2. Our shared stories
- 3. A healthy, flourishing and sustainable community
- 4. Valuing our natural environment
- 5. Rural Pukekohe
- 6. Servicing our future community

#### **Delivering on the Auckland Plan Outcomes**

The Auckland Plan 2050 is the long-term spatial plan for Auckland. It considers how Auckland will address the key challenges of high population growth, shared prosperity, and environmental degradation. Both the Auckland Plan Outcomes and the NDS themes are multidisciplinary. Appendix 1.0 demonstrates how the NDS themes align to the relevant Auckland Plan Outcomes - focus areas. We have specifically sought to identify only spatially relevant focus areas that sit under the Auckland Plan Outcomes and identify these to the five NDS themes.

## Achieving Te Aranga Māori Design Principles

Te Aranga Māori Design Principles are a set of outcome-based principles founded on intrinsic Māori cultural values and designed to provide practical guidance for enhancing outcomes for the design environment. While these principles and their implementation have been documented in Section C1, they are an implicit part of the wider Neighbourhood Design Statement intended outcomes under the five NDS themes – this has been demonstrated at Attachment 2.0.

## B3. The sub-themes and their implementation

#### Development of the sub-themes and design considerations

The "Five NDS Themes", identified in section B2, provide the guiding development outcomes for the structure plan areas. To understand what this means on the ground, these have been broken down into further subthemes and it is the sub-themes that provide a context for understanding the desired outcomes.

Design considerations were developed in five discipline categories (Uses, Built Form, Movement, Open Space, and Natural Environment). Initially, due to the multidisciplinary context, each key theme was set out in a table with sub-themes located in the vertical rows, and five disciplines located in the horizontal columns, see example following table:

Them	Theme 1: Neighbourhoods that vary in density and mix of uses according to their locational attributes.					
	Sub-Theme	Uses	Built Form	Movement	Open Space	Natural Environment
1.1	Provide uses and densities that	Aim for a diverse range of uses and				
1.2						
1.3						

While achieving the multidisciplinary goal, this layout did not provide a practical guide for users. As such, design considerations were re-formatted into a more user-friendly guideline as now set out in Section C of this document.

While the design considerations sit under different headings in Section C, it is important to retain the connection between the <u>what</u> is aimed to be achieved and <u>how</u> it can be achieved. As such, the following table lists all the sub-themes along with the relevant section where the design considerations to achieve this appears in the document.

The NDS themes have been aligned to the relevant Auckland Plan Outcomes and focus areas. This demonstrates how the development of the structure plan areas, if following through on the guidance provided from the NDS, can deliver on the expectations envisaged in the Auckland Plan 2050.

## **Sub-themes**



# Theme 1:

# Neighbourhoods that vary in density and mix of uses according to their locational attributes.

Elements: Uses, Activities, Zoning, Density, Employment, Community Facilities, Cultural

	Sub-Theme	NDS	Reference to the Auckland Plan 2050
		Section C	-
1.1	Provide uses and densities that are appropriate to their location and role within each neighbourhood, these may include: centres, public transport nodes/ corridors, living and employment environments	C4, C7, C8, C9	3 Homes and Places Focus Area 1: Accelerate quality development at scale that improves housing choices  4 Transport and Access Focus Area 2: Target new transport investment to the most significant challenges Focus Area 5: Better integrate land-use and transport Focus Area 7: Develop a sustainable and resilient transport system  6 Opportunity and Prosperity Focus area 2: Ensure regulatory planning and other mechanisms support business, innovation and productivity growth
1.2	Promote high-intensity residential, retail and employment uses, and community services, around new centres and public transport corridors.	C5, C7, C8, C9	3 Homes and Places Focus Area 5: Create urban places for the future  4 Transport and Access Focus Area 5: Better integrate land-use and transport Focus Area 7: Develop a sustainable and resilient transport system
1.3	Match the intensity of centres with their level of public transport provision.	B8, C3	3 Homes and Places Focus Area 5: Create urban places for the future  4 Transport and Access Focus Area 3: Maximize the benefits from transport technology Focus Area 5: Better integrate land-use and transport Focus Area 7: Develop a sustainable and resilient transport system
1.4	Promote higher intensity of uses along the frequent transit networks (FTN) routes in order to respond to public transport provision.	C8, C14	3 Homes and Places Focus Area 5: Create urban places for the future  4 Transport and Access Focus Area 5: Better integrate land-use and transport Focus Area 7: Develop a sustainable and resilient transport system
1.5	Locate lower density development along the periphery and harbour and stream areas of significance.	C8, C9	4 Transport and Access Focus Area 5: Better integrate land-use and transport Focus Area 7: Develop a sustainable and resilient transport system



# Theme 2:

# Neighbourhoods with many safe choices of movement with good access to services and amenity.

Elements: Morphology, Blocks, built interface with the Public Realm, Building Design, Typologies

	Sub-Theme	NDS Section C	Reference to the Auckland Plan 2050
2.1	Create safe, attractive, and accessible rail station settings.	C12	4 Transport and Access Focus Area 2: Target new transport investment to the most significant challenges
2.2	Design development along frequent transit network (FTN) routes that ensures they efficiently serve their catchments while promoting safety, amenity and pedestrian / cycle connectivity.	C8	4 Transport and Access Focus Area 5: Better integrate land-use and transport Focus Area 6: Move to a safe transport network, free from death and serious injury Focus Area 7: Develop a sustainable and resilient transport system
2.3	Provide a well-connected street network which accommodates all forms of movement, with streets that are designed to reflect their function within the hierarchy.	C5, C7	4 Transport and Access Focus Area 4: Make walking, cycling and public transport preferred choices for many more Aucklanders Focus Area 7: Develop a sustainable and resilient transport system
2.4	Provide safe, universally accessible, and well-connected pedestrian and cycle routes to all amenity and services destinations.	C6, C7, C12	4 Transport and Access Focus Area 4: Make walking, cycling and public transport preferred choices for many more Aucklanders
2.5	Provide arterials and transport corridors which reconcile movement functionality with the quality of place.	C14	4 Transport and Access Focus Area 7: Develop a sustainable and resilient transport system
2.6	Provide efficient, resilient and safe connections to employment areas.	СЗ	4 Transport and Access Focus Area 5: Better integrate land-use and transport Focus Area 6: Move to a safe transport network, free from death and serious injury  6 Opportunity and Prosperity Focus area 2: Ensure regulatory planning and other mechanisms support business, innovation and productivity growth
2.7	Provide parking approaches which contribute to convenience, safety and retail viability, without undermining the urban character.	C7, C18	4 Transport and Access Focus Area 5: Better integrate land-use and transport Focus Area 7: Develop a sustainable and resilient transport system



# Theme 3:

Neighbourhoods with many choices of use and activity that reflect the needs of the community and the sub-region.

Elements: Passenger Transport, Rail, Bus, Walking, Cycling, Freight, Street Network and Design

	Sub-Theme	NDS Section C	Reference to the Auckland Plan 2050
3.1	Provide communities with a wide range of choices and experiences.	C4, C5, C7, C9	1 Belonging and Participation Focus Area 7: Recognize the value of arts, culture, sport and recreation to quality of life
3.2	Co-locate areas of higher density residential where there are a concentration of services, employment and public transport options.	C4	1 Belonging and Participation Focus Area 3: Support and work with communities to develop the resilience to thrive in a changing world
3.3	Consider transport (all modes) and other benefits when locating education, healthcare, and retirement facilities	C8	1 Belonging and Participation Focus Area 1: Create safe opportunities for people to meet, connect, participate in and enjoy community and civic life
3.4	Provide for a range of housing choices and respond to housing needs.	C9	3 Homes and Places Focus Area 1: Accelerate quality development at scale that improves housing choices Focus Area 5: Create urban places for the future
3.5	Ensure compatibility between uses.	С9	1 Belonging and Participation Focus Area 3: Support and work with communities to develop the resilience to thrive in a changing world 3 Homes and Places Focus Area 5: Create urban places for the future
3.6	Encourage approaches to adaptability that will allow efficient responses to social, economic, climate, and technology changes.	C3, C5, C5, C7, C9	1 Belonging and Participation Focus Area 3: Support and work with communities to develop the resilience to thrive in a changing world
3.7	Attract and accommodate non-retail, 'new economy' employment uses.	C9, C15, C16	3 Homes and Places Focus Area 5: Create urban places for the future 6 Opportunity and Prosperity Focus area 2: Ensure regulatory planning and other mechanisms support business, innovation and productivity growth
3.8	Ensure retail contributes to an active public realm and helps in enabling other community and employment activities.	C7, C15	Belonging and Participation     Focus Area 1: Create safe opportunities for people to meet, connect, participate in and enjoy community and civic life
3.9	Design neighbourhood parks which are fit for purpose and safe, in the appropriate locations.	C4	1 Belonging and Participation Focus Area 7: Recognize the value of arts, culture, sport and recreation to quality of life
3.10	Promote a range of centres, of varying size, according to their function in the region		3 Homes and Places Focus Area 1: Accelerate quality development at scale that improves housing choices Focus Area 5: Create urban places for the future
			6 Opportunity and Prosperity Focus area 2: Ensure regulatory planning and other mechanisms support business, innovation and productivity growth



# Theme 4:

Neighbourhoods that celebrate their unique identity and are attractive, safe and easily understood.

Elements: Public and Private Space, Parks, Squares, Recreation, Open Space Activities, Cultural

	Sub-Theme	NDS Section C	Reference to the Auckland Plan 2050
4.1	Design legible, safe, inclusive and accessible environments for all ages and abilities that offer privacy and security.	C4, C5, C6, C7, C11, C12	1 Belonging and Participation Focus Area 1: Create safe opportunities for people to meet, connect, participate in and enjoy community and civic life
4.2	Display a strong local identity and appropriate visual character while emphasising visual and function character differences between nodes and communities.	C8, C20	1 Belonging and Participation Focus Area 5: Recognize, value and celebrate Aucklanders differences and strength
4.3	Respect and celebrate mana whenua values.	C1	1 Belonging and Participation Focus Area 4: Value and provide for the Tiriti o Waitangi/the Treaty of Waitangi as the bi-cultural foundation for an inter-cultural Auckland  2 Maori Identity and Wellbeing Focus Area 6: Celebrate Maori culture and support te reo Maori to flourish Focus Area 7: Reflect mana whenua matauranga and Maori design principles throughout Auckland
4.4	Protect historic heritage and existing character.	C20	1 Belonging and Participation Focus Area 4: Value and provide from the Tiriti o Waitangi/the Treaty of Waitangi as the bi-cultural foundation for an inter-cultural Auckland  2 Maori Identity and Wellbeing Focus Area 7: Reflect mana whenua matauranga and Maori design principles throughout Auckland
4.5	Provide high quality landscaping with a preference for utilisation of native species, preferably diverse and suitable to the area.	C5	



## Theme 5:

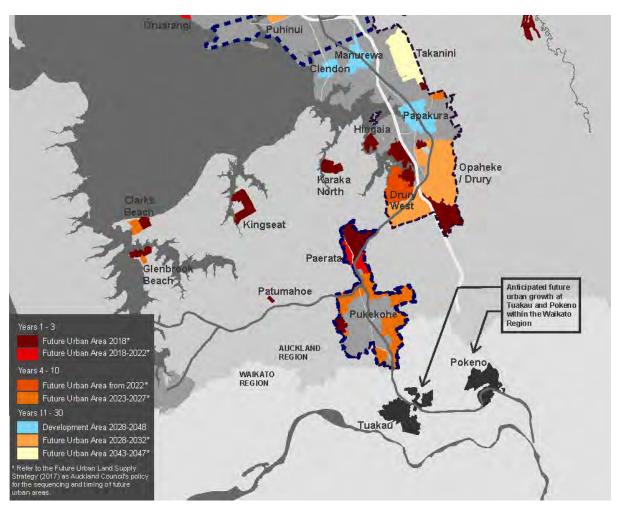
# Neighbourhoods that protect and enhance the natural environment while enabling urbanisation.

Elements: Biodiversity, Water Quality, Water Re-Use, Waste, Energy, Natural Hazards, Geotechnical, Cultural, climate change consequences

	Sub-Theme	NDS Section C	Reference to the Auckland Plan 2050
5.1	Promote urban environments that recognise the intrinsic value of the landscape and respond to natural features, ecosystems, and water quality.	C4, C9	5 Environment and Cultural Heritage Focus Area 1: Encourage all Aucklanders to be stewards of the natural environment, and to make sustainable choices Focus area 3: Account fully for the past and future impacts of growth Focus Area 4: Protect Auckland's significant natural environments and cultural heritage from further loss
5.2	Improve freshwater quality within the catchment, the marine receiving environment, and the management of riparian margins.	C4, C5, C7	5 Environment and Cultural Heritage Focus Area 2: Focus on restoring environments as Auckland grows Focus Area 5: Adapt to a changing water future
5.3	Protect and improve biodiversity and ecologically sensitive areas.	C4, C5, C7	5 Environment and Cultural Heritage Focus Area 1: Encourage all Aucklanders to be stewards of the natural environment, and to make sustainable choices Focus Area 2: Focus on restoring environments as Auckland grows Focus area 3: Account fully for the past and future impacts of growth Focus Area 4: Protect Auckland's significant natural environments and cultural heritage from further loss Focus Area 6: Use green infrastructure to deliver greater resilience, long-term cost savings and quality environmental outcomes
5.4	Reduce energy usage and waste production to support a low carbon development model.	C6, C7, C21	5 Environment and Cultural Heritage Focus Area 1: Encourage all Aucklanders to be stewards of the natural environment, and to make sustainable choices
5.5	Promote water re-use.	C5	5 Environment and Cultural Heritage Focus Area 5: Adapt to a changing water future

## **B4.** Proposed Structure Plans and NDS Design Considerations

#### **Overview - Southern Growth Context**



Map Source: Auckland Plan 2050 Development Strategy Sequencing Years 1-30

The Southern Structure Plan Area is focussed on the future urban areas at Drury-Opāheke and Pukekohe-Paerata. However, it's important to understand the wider context of growth in the south in proximity to these areas. The Auckland Plan 2050 Development Strategy identifies areas that have been targeted for growth (existing urban and future urban) over the next 30 years. In addition to the Auckland Plan 2050, future growth identified for parts of nearby Waikato Region are also of relevance.

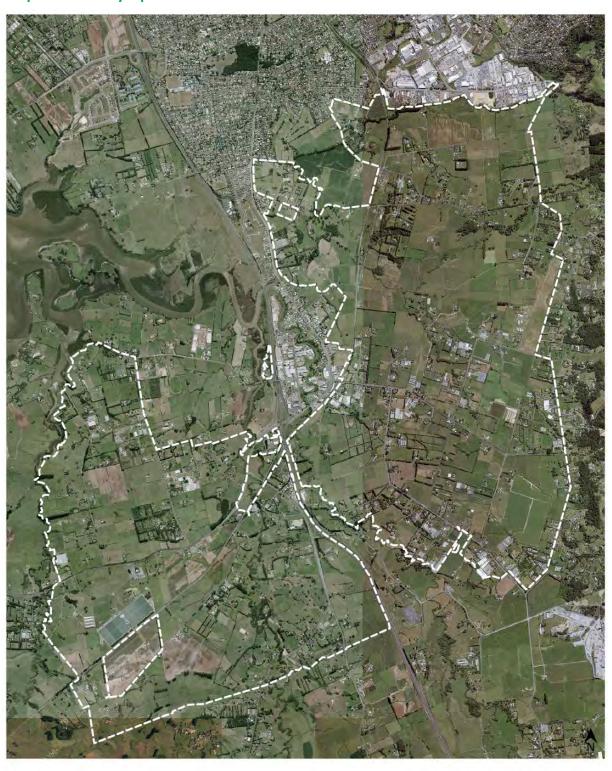
- Nearby future urban areas that are live zoned & under development (Hingaia, Karaka North, Kingseat, Clarks Beach, Glenbrook Beach);
- Future urban areas that are live zoned and next to the structure Planning areas Drury South,
   Auranga Stage 1 and 2 (part of Drury West), Paerata Rise and Belmont (part of Paerata-Pukekohe);
- Existing urban areas identified for significant growth Papakura
- Future urban areas later sequenced for growth Takanini
- Growth in the nearby rural towns of Tuakau and Pokeno, both located within the Waikato Region.

# Structure Planning information for Drury-Opāheke and Pukekohe-Paerata

Proposed Structure Plans have been prepared for the Drury-Opāheke and Pukekohe-Paerata areas. The following map series has been developed for each structure plan area to enable the reader to understand the NDS design considerations contained in Section C, in the context of the structure plan information.

Any further information developed such as more detailed spatial plans or regulatory plan change information should demonstrate how these relationships are achieved, as well as address other relevant design considerations from Section C.

Map Series: Drury-Opāheke



LEGEND Structure Plan area outline

DRURY-OPAHEKE STRUCTURE PLAN
AERIAL PHOTOGRAPH

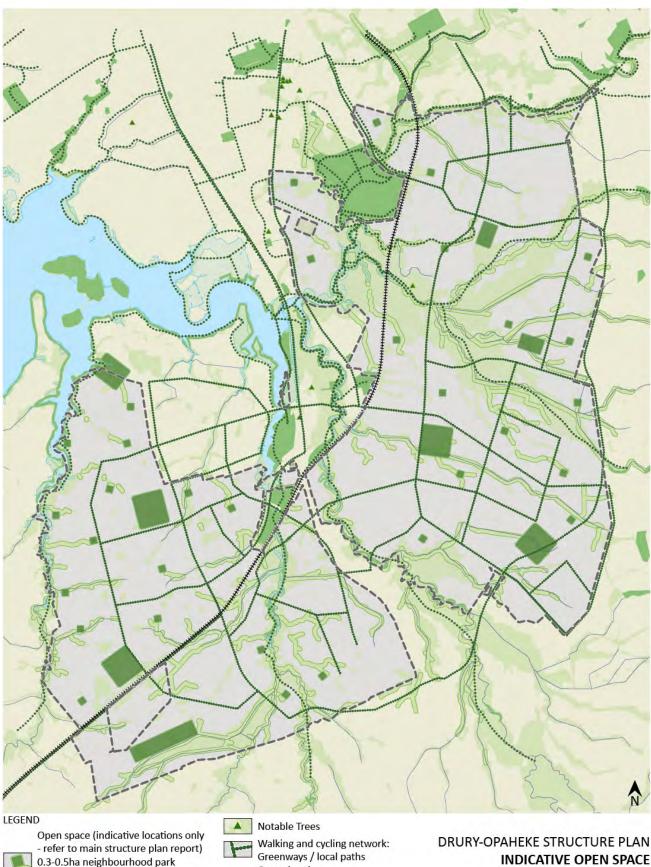
Date:August 2019 Scale: Not to scale

# Open space and natural environment, walking and cycling network.

The purpose of this plan is to help the reader to understand the spatial relationship across the following: walking and cycling network; open space network, and natural environment features. Note that a finer grained walking and cycling network is expected to be developed with the local road network, creating a high degree of permeability across the entire structure plan area. The content of the following Design Considerations in Section C is relevant to this plan:

C3 Key Connections
C4 Open Space Framework
C5 The Green Network
C7 Permeable Street Network

C20 Identity, Character and Heritage



3-5ha suburban park

5-10ha sport park

20m riparian margin to permanent and intermitent streams

Floodplains

Streams and Rivers

Walking and cycling network: Greenways / local paths Coastal paths

Separated cycleways

Existing open spaces Coastal inundation 1% AEP plus 1m control

Structure Plan area outline

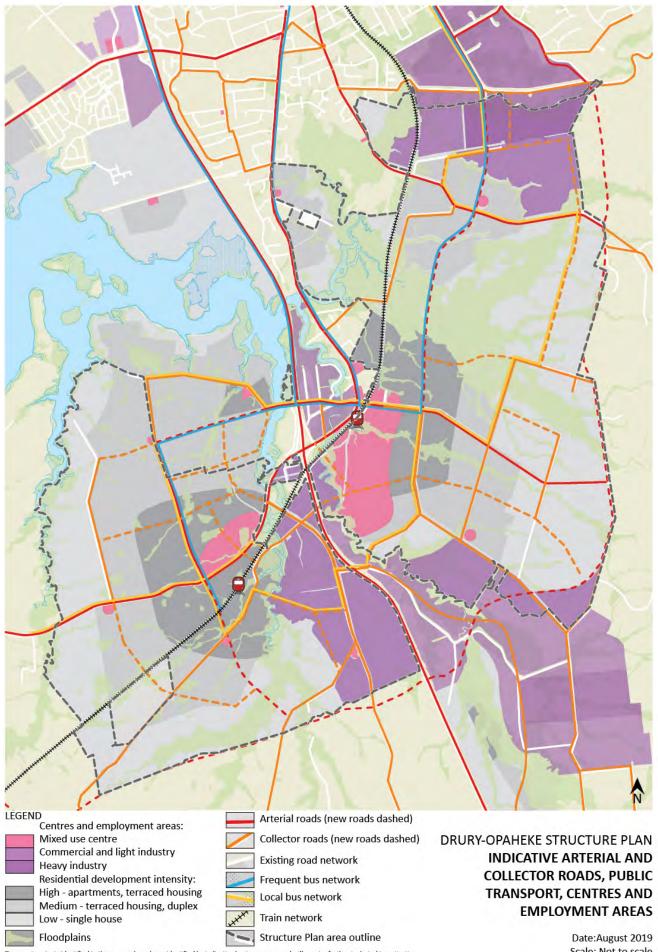
**INDICATIVE OPEN SPACE** NATURAL ENVIRONMENT **WALKING & CYCLING NETWORK** 

> Date:August 2019 Scale: Not to scale

# Arterial and collector roads, public transport, centres and employment areas

The purpose of this plan is to help the reader to understand the spatial relationship between the centres and employment areas; residential development intensity; the arterial and collector roads; and public transport. The content of the following Design Considerations in Section C is relevant to this plan:

C3 Key Connections C7 Permeable Street Network C8 Density and Intensity C9 Diversity of Use C14 Responding to Arterials



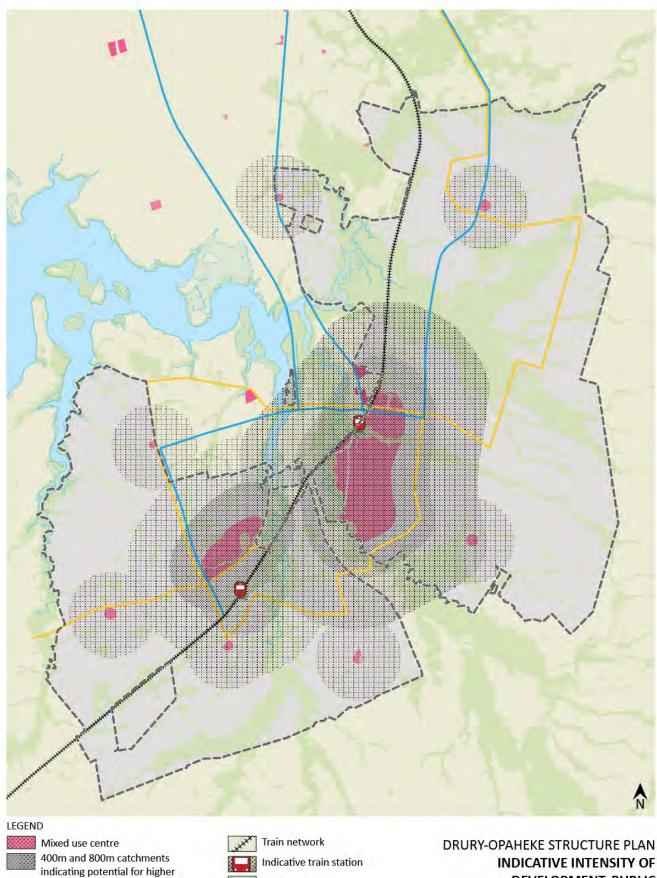
Transport projects identified in these maps have been identified by indicative business cases and will require further technical investigation, engagement with communities and landowners and statutory approvals before their detail, location or land requirement is confirmed. They are also yet to be prioritised for funding for delivery over the next 10-30 years. Features and map notations (including zone boundaries, new parks etc) are indicative only and will be refined through later (more detailed) processes such as Plan Changes or Notice of Requirements.

Scale: Not to scale

# Public transport, centres and intensity of development

The purpose of this plan is to help the reader to understand the spatial relationship between the centres, public transport and intensity of development around transport nodes and centres. The content of the following Design Considerations in Section C is relevant to this plan:

C3 Key Connections C8 Density and Intensity C9 Diversity of Use



Transport projects identified in these maps have been identified by indicative business cases and will require further technical investigation, engagement with communities and landowners and statutory approvals before their detail, location or land requirement is confirmed. They are also yet to be prioritised for funding for delivery over the next 10-30 years. Features and map notations (including zone boundaries, new parks etc.) are indicative only and will be refined through later (more detailed) processes such as Plan Changes or Notice of Requirements.

Floodplains

Structure Plan area outline

**DEVELOPMENT, PUBLIC** TRANSPORT AND CENTRES

> Date:August 2019 Scale: Not to scale

intensity of development

Frequent bus network

Local bus network

**Map Series: Pukekohe-Paerata** 



LEGEND Structure Plan area outline

PUKEKOHE-PAERATA STRUCTURE PLAN AERIAL PHOTOGRAPH

> Date:August 2019 Scale: Not to scale

# Open space and natural environment, walking and cycling network.

The purpose of this plan is to help the reader to understand the spatial relationship across the following: walking and cycling network; open space network, and natural environment features. Note that a finer grained walking and cycling network is expected to be developed with the local road network, creating a high degree of permeability across the entire structure plan area. The content of the following Design Considerations in Section C is relevant to this plan:

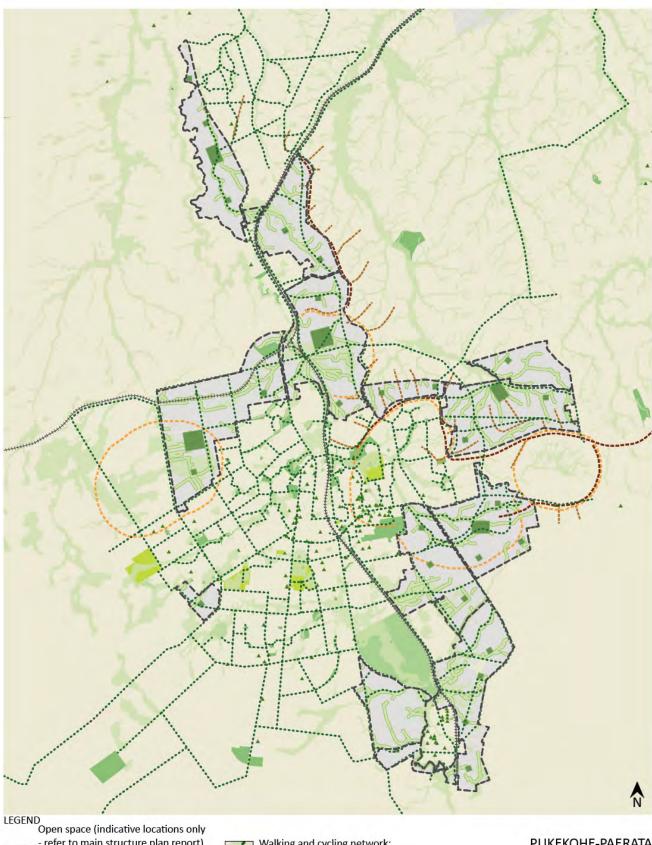
C3 Key Connections

C4 Open Space Framework

C5 The Green Network

C7 Permeable Street Network

C20 Identity, Character and Heritage



- refer to main structure plan report) 0.3-0.5ha neighbourhood park

3-5ha suburban park 5-10ha sport park

20m riparian margin to permanent and intermitent streams

Floodplains Notable Tree

Existing open space



Walking and cycling network: Greenways / local paths Separated cycleways Ridge lines (major - dark and minor



- light brown)



Tuff ring



Existing school Structure Plan area outline

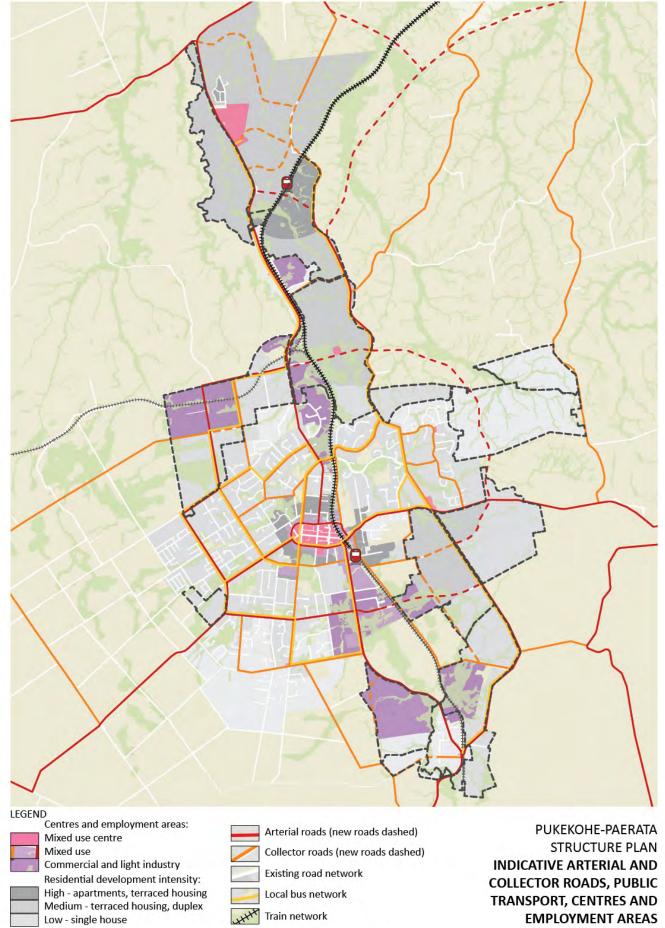
PUKEKOHE-PAERATA STRUCTURE PLAN INDICATIVE OPEN SPACE, NATURAL ENVIRONMENT, WALKING AND CYCLING NETWORK

> Date: August 2019 Scale: Not to scale

# Arterial and collector roads, public transport, centres and employment areas

The purpose of this plan is to help the reader to understand the spatial relationship between the centres and employment areas; residential development intensity; the arterial and collector roads; and public transport. The content of the following Design Considerations in Section C is relevant to this plan:

C3 Key Connections C7 Permeable Street Network C8 Density and Intensity C9 Diversity of Use C14 Responding to Arterials



Structure Plan area outline

Transport projects identified in these maps have been identified by indicative business cases and will require further technical investigation, engagement with communities and landowners and statutory approvals before their detail, location or land requirement is confirmed. They are also yet to be prioritised for funding for delivery over the next 10-30 years. Features and map notations (including zone boundaries, new parks etc) are indicative only and will be refined through later (more detailed) processes such as Plan Changes or Notice of Requirements.

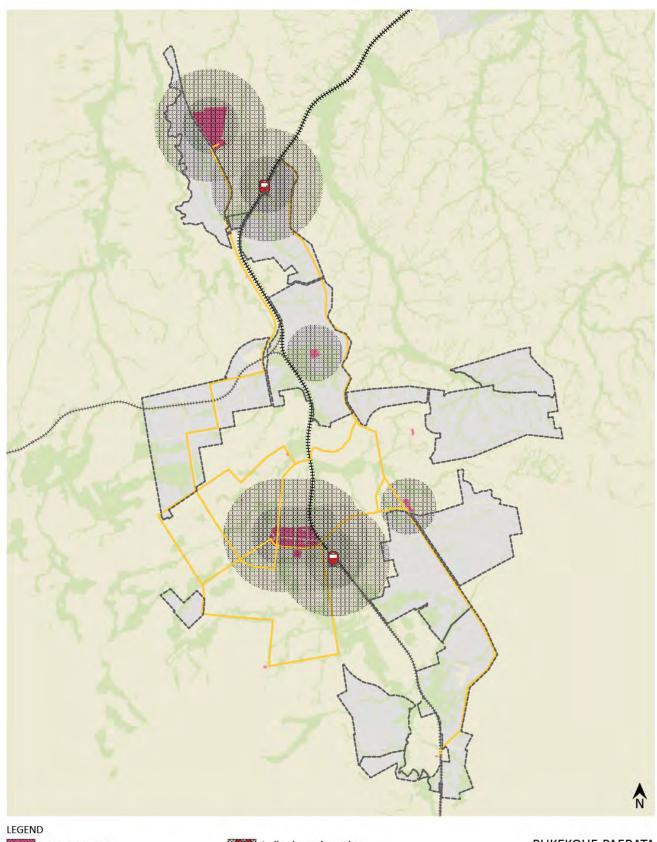
Date: August 2019 Scale: Not to scale

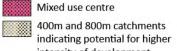
Floodplains

# Public transport, centres and intensity of development

The purpose of this plan is to help the reader to understand the spatial relationship between the centres, public transport and intensity of development around transport nodes and centres. The content of the following Design Considerations in Section C is relevant to this plan:

C3 Key Connections C8 Density and Intensity C9 Diversity of Use





intensity of development

Local bus network

Train network

Indicative train station

Floodplains

Structure Plan area outline

PUKEKOHE-PAERATA STRUCTURE PLAN INDICATIVE INTENSITY OF DEVELOPMENT, PUBLIC TRANSPORT AND CENTRES

> Date: August 2019 Scale: Not to scale

Transport projects identified in these maps have been identified by indicative business cases and will require further technical investigation, engagement with communities and landowners and statutory approvals before their detail, location or land requirement is confirmed. They are also yet to be prioritised for funding for delivery over the next 10-30 years. Features and map notations (including zone boundaries, new parks etc) are indicative only and will be refined through later (more detailed) processes such as Plan Changes or Notice of Requirements.

# **Section C:** Neighbourhood Design Statement: Design Considerations

Figure C.1: Hypothetical neighbourhood design



#### Introduction

The Neighbourhood Design Statement is an implementation tool. It aims to provide a user-friendly guide for land owners, developers and designers working within the Structure Plan Area in order to achieve the vision statements and outcomes set out in the five themes in Section A.

The aim is to encourage designers to start with an analysis of the specific site and context and then work through the design considerations that are set out; starting with large scale movement and open space network design and then moving to block layout and smaller scale lot design.

Not all sections will be applicable to every development scenario, however it is expected there will need to be information developed at the spatial planning stage before developing information to support plan changes and/or development stages. The document aims to allow designers to move between relevant sections as required.

## C1. Te Aranga Māori Design Principles

As discussed in Section B3 and Appendix 2.0, Te Aranga Māori Design Principles were designed to provide practical guidance for enhancing Māori cultural values and outcomes in the design environment.

The principles have been considered alongside the wider NDS intended outcomes and align as design considerations under other theme and discipline headings e.g. there is a high emphasis on biodiversity, water quality, and cultural expression throughout the NDS.

Te Aranga Māori Design Principles are listed below along with **examples of key design considerations** related to each principle to demonstrate their practical application at spatial planning development or part of implementation at plan change and/or development stages.

1. Mana: The status of iwi and hapū as mana whenua is recognised and respected

## Design Consideration Examples

- Engagement and relationships with Mana Whenua is established prior to finalising design approaches to maximise the opportunities for design outcomes;
- Creative expression of narratives is incorporated into the design of buildings and

- public spaces with direction from Mana Whenua:
- Artworks to celebrate Mana Whenua;
- Opportunities for Mahi Toi is created for Mana Whenua artists;
- Strong identity of space;
- Any new development respects and celebrates the natural features and Maori cultural landmarks of the area e.g. Pa, Maunga, Awa.
- 2. Whakapapa: Māori names are celebrated

#### Design Consideration Examples

- Names of public spaces, significant public buildings and streets are gifted by Mana Whenua;
- Recognition of traditional place names through bilingual signage and wayfinding.
- 3. Taiao: The natural environment is protected, restored and / or enhanced

## Design Consideration Examples

- Protection of waterways and natural features and landmarks;
- Creating and connecting ecological corridors; rainwater harvesting;
- Low VOC coatings and finishes wherever possible;
- Streets pavements and location of amenities are designed for active transport and walkability;
- Low impact design and development stormwater treatment methods are adopted throughout the development;
- Use of locally sourced materials or repurposing materials wherever possible;
- Primarily native, diverse, endemic and local planting is used throughout the development;
- Establishment and management of traditional food and cultural resource areas allowing for active kaitiakitanga.
- Mauri Tu: Environmental health is protected, maintained and / or enhanced

## Design Consideration Examples

- Protection of waterways and natural features by restoration or daylighting;
- Creating and connecting ecological corridors remediation of contaminated soils;
- Rainwater harvesting systems, grey-water recycling systems and passive solar design opportunities are explored in the design process;
- Low VOC coatings and finishes wherever possible;

- Streets pavements and location of amenities are designed for active transport and walkability;
- Low impact design and development stormwater treatment methods are adopted throughout the development;
- Use of locally sourced materials or repurposing materials wherever possible; primarily native, diverse, endemic and local planting is used throughout the development;
- Establishment and management of traditional food and cultural resource areas allowing for active kaitiakitanga.
- 5. Mahi Toi: lwi/hapū narratives are captured and expressed creatively and appropriately

Design Consideration Examples

- Creative expression of Mana Whenua narratives is incorporated into the design of buildings and public/civic spaces and amenities;
- Use of locally sourced materials wherever possible; primarily native planting is used in public space landscaping.
- 6. Tohu: Mana whenua significant sites and cultural landmarks are acknowledged

Design Consideration Examples

Any new development respects and celebrates the natural features and cultural landmarks of the area:

- Heritage trails, markers and interpretation boards throughout the development.
- 7. Ahi Ka: Iwi/hapū have a living and enduring presence and are secure and valued within their rohe

Design Consideration Examples

- Any new development respects and celebrates the natural features and cultural landmarks of the area;
- Visual connection to significant sites to be created, preserved and enhanced;
- Creative expression of narratives is incorporated into the design of buildings and public spaces and amenities.

## Implementation

The above principles should be incorporated where appropriate at each step in the design process alongside consideration of the recommendations of the Cultural Values Assessment for the structure plan areas.

Engagement and relationships with Mana Whenua should be established prior to finalising design approaches to maximise the opportunities for design outcomes.

# **C2.** Understanding the Site and Context



Figure C.2: Hypothetical Site and Context Example

#### **UNDERTAKE A SITE ANALYSIS**

# Design considerations for spatial planning development to inform plan change development

Showing the constraints and opportunities on a plan at the beginning avoids misunderstanding and can inspire new ways of looking at the project. Cover the area beyond your site, at least 400m away (approximately 5 minutes' walk in any direction). Indicate and note possible design responses to the following:

- Natural features, existing trees, streams (A), views and orientation.
- 2. Site levels and soil conditions.
- 3. Overland flow paths and possible stormwater management needs.
- 4. Nearest public transport facilities (B), shops (C), schools and parks.
- All possible vehicle access points and opportunities for street links to neighbouring sites (D).
- 6. Existing pedestrian and cycle routes.
- 7. Heritage or cultural features.
- 8. Neighbouring buildings and whether they front or back onto the site.
- 9. Night-time conditions e.g. safety and street lighting, and local sources of noise.
- 10. Availability and capacity of site services such as wastewater, water supply, power and communications.

- 11. Existing buildings and/or land uses that are to be retained.
- 12. Utilising key information from structure plan SWOT analysis (Strengths, Weaknesses, Opportunities, Threats)

# C3. Key Connections

together and enables modal conflict to be resolved early in the process.

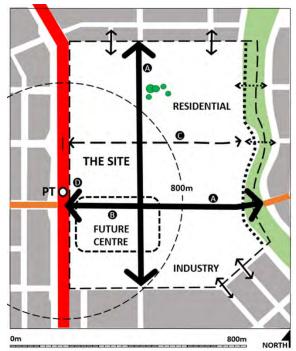


Figure C.3: Hypothetical Key Connections Example

#### **GET THE BIG CONNECTIONS IN FIRST**

# Design considerations for spatial planning development to inform plan change development

- Create the grid. Consider the wider destinations and allow for big connections through the site (A).
- 2. Co-locate busier streets and centres (B) to ensure the commercial uses benefit from the movement economy, ensure good pedestrian and cycling conditions are still delivered.
- 3. Consider secondary links across and beyond the site (C).
- 4. Ensure there is good, direct and connected pedestrian and cycle access to public transport (PT) stops.
- Provide appropriate access for freight to industrial areas and other high traffic destinations.
- 6. Consider how the layout will accommodate changes in use over time.

Note: Auckland Transport's Roads and Streets Framework and Transport Design Manual provide guidance about Auckland Transport's requirements for the planning, design, construction and management of the road and street network.

Using this information is an integral first step in project development. It allows place as well as the local and strategic network needs to be considered

## C4. Open Space Framework

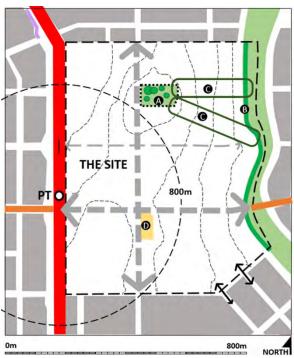


Figure C.4: Hypothetical Open Space Example

# Design considerations for spatial planning development to inform plan change development

- Celebrate and retain the natural landform elements such as rivers and streams, escarpments, ridgelines and other landmarks where practical.
- Incorporate key landscape elements of cultural importance into the design and consider mana whenua values regarding the treatment of natural environments.
- Avoid extensive landform modifications or dissection by roads of streams and vegetated corridors which would radically disturb the natural character of the area, harm ecologically sensitive habitats, or significantly affect hydrology, which can also harm ecologically sensitive areas where these contain species dependent on different levels of water availability.
- 4. Locate overland flow paths and determine future alignments, as well as their connection with stormwater detention, or retention areas.
- 5. Identify mature trees and consider their retention, possibly within a new public open space (A).
- 6. Identify areas of biodiversity, often located along wetlands, coastal edges, and streams (B), consider how their ecological values can be preserved and enhanced.
- Provide public access (B), where ecological conditions permit, along open space corridors.

- 8. Provide biodiversity links between areas of natural habitats (C) to encourage bird and insect movement, these may, at minimum, entail contiguous rows of indigenous tree.
- Determine which additional open spaces will be required and their role such as civic spaces (D), residential parks (A) (usually 0.3-0.5ha), suburb park (usually 3-5ha), and suburb park with a sports park (usually up to 10ha).
- Ensure open spaces have a locational logic with regards to equitable access from within a neighbourhood, and proximity to nodal centres of public transport access points.
- 11. Determine the open spaces' specific functions, such as facilitating play facilities, passive and active recreation activities, enhancing biodiversity, and stormwater function.

#### C5. The Green Network

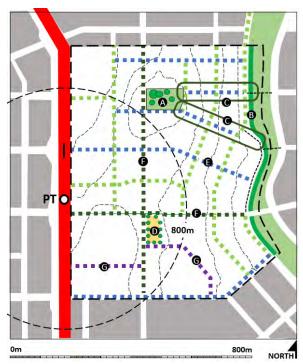


Figure C.5: Hypothetical Green Network Example

#### **GREEN NETWORK OF PLACES AND PATHS**

### Design considerations for spatial planning development to inform plan change development

- Identify a green network that enhances and compliments the existing natural systems, and the future movement network of streets and pathways.
- 2. Define natural features and habitats through public spaces and front these with development to ensure they are safe.

### Design considerations at plan change and/or development stages

- Provide for and design safe and high quality, shared places and spaces where social and cultural life can flourish by designing open spaces (public and private) that enable a wide range of outdoor activities, including organised events and markets as well as informal use by individuals and small groups.
- 4. Promote flexibility of use with simple, uncluttered layouts.
- 5. Promote winter usage of open spaces by having some areas with good drainage and hard surfaces for play activities.
- 6. Ensure public spaces are inclusive and accessible in their design.
- 7. Consider temporary access and parking needs for open spaces.

#### LANDSCAPE DESIGN

### Design considerations at plan change and/or development stages

- 8. Focus areas of high-quality landscaping around centres to support higher levels of activation and uses.
- Support higher density-built form with high quality public landscaping including planting, paving, street furniture, public art and lighting
- Provide high quality finishes and vegetation along key pedestrian and cycle routes to encourage active use and provide pedestrian scale.
- 11. Emphasise movement network hierarchy with corresponding street tree and berm planting, paving and street furniture.
- 12. Provide opportunities for front boundary planting in setbacks along key transit routes.
- Integrate stormwater infrastructure planting within neighbourhoods through use of highquality materials. Encourage techniques that allow trees to be planted in close proximity to services.
- 14. Encourage techniques to reduce the space requirements for underground services without affecting their maintenance needs.
- 15. Design for shade, as well as solar access, shelter and views for open spaces.
- 16. Use contrast and differentiation in design to make each public space memorable.

#### **PLANTING BIODIVERSITY**

- 17. Follow the design philosophy of 'right plant, right place'. Choose species appropriate to the local conditions, microclimate and anticipated climate change with a preference for native species.
- 18. Prioritise native trees and vegetation natural to the sub-region (ecological district and naturally occurring ecosystem types in the area), however in some cases exotic species may be more appropriate, e.g. deciduous trees to provide solar access in winter where they do not present maintenance problems.
- 19. Consider a diverse range of plant species, especially ones that support an array of bird and insect life.
- 20. Use species to differentiate one space from another and to express seasonal changes.

#### **THREE WATERS**

### Design considerations for spatial planning development to inform plan change development

- 21. Understand and align with region-wide strategies for improved water quality which encompass rain water, wastewater and fresh water issues.
- 22. Incorporate freshwater systems into the neighbourhood design.

- 23. Embed best practice water sensitive urban design (WSUD) to provide for retention, attenuation and infiltration of stormwater at the building, site and neighbourhood scale.
- 24. Use appliances that conserve water.
- 25. Consider rainwater tanks at the site scale and grey water systems at the building scale for harvesting water for selective re-use, e.g. garden watering or car washing.
- 26. Consider different measures for achieving water quality and stormwater management outcomes to enable reduced setbacks in core areas of the towns and local centres.
- 27. Avoid grass berms in high intensity areas such as town/local centre areas.

#### **C6.** Fine Grain Block

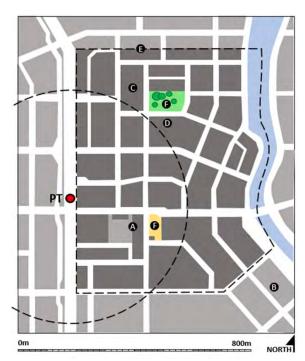


Figure C.6: Hypothetical example of how to achieve a fine grain block

- Encourage block sizes to be as small as possible, especially closer to centres (A) and public transport (PT), as this increases connectivity and legibility for all users.
- For residential neighbourhoods, endeavour to limit block lengths preferably no more than 100-120m, in exceptional cases this may be more if the topography and site geometry necessitates (B).
- Arrange most residential blocks to run in a generally north/south direction (C) to ensure good solar access into east/west facing dwellings.
- 4. Consider apartments on north fronting sites (D).
- 5. Create development blocks which enable backs of buildings to face backs of neighbouring buildings (E).
- Ensure public spaces (F) are overlooked by adjacent developments and are bounded by streets to ensure a greater degree of personal safety.

#### C7. Permeable Street Network

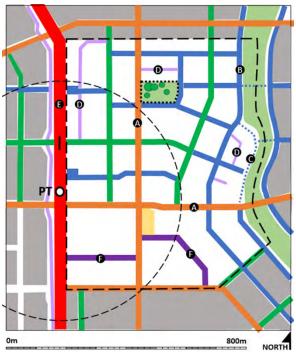


Figure C.7: Hypothetical Permeable Network Example

#### INTERCONNECTED HIERARCHY OF STREETS

### Design considerations for spatial planning development to inform plan change development

- Provide an interconnected street network which is easy to navigate, keep cul-de-sacs to a minimum.
- Consider the role and design of each street, the uses it serves, how much vehicle traffic it will accommodate, and the degree of emphasis on pedestrians and cycle use.
- Locate each street within a hierarchy in accordance with its traffic function, even busier streets (A), if designed well, can offer high amenity for pedestrians and cyclists.
- 4. Provide streets along parks and reserves (B), these can be low speed lanes with low visual impact, as a last resort where streets are not practical, consider pedestrian and cycle pathways (C) which have buildings fronting (including their front doors) onto them.
- 5. Streets along reserves (B) will also increase ecological value and provide access, visibility, amenity, and safety.
- 6. Consider back lanes (D) where frontage streets are unachievable such as along some reserve edges and arterials (E) with limited access.
- 7. Consider the street design requirements for freight movement (F), especially to industrial areas and how to limit the disturbance to residential areas.
- 8. Provide for footpaths throughout the street network, consider other walkway links.

#### LOCAL STREETS



Figure C.X: Example of local street condition

### Design considerations at plan change and/ or development stages

- Design local roads so they balance traffic efficiency with streetscape quality, and pedestrian and cyclist safety and comfort.
- 10. Enable street trees where possible for visual, shading and biodiversity reasons, consider how to limit damage to underground services.
- 11. Provide generous on-street car parking for efficiency from re-use, convenience, and to keep the public realm active and safe.
- 12. Where appropriate provide appropriate bicycle parking.

#### **TRAFFIC SPEEDS**

### Design considerations at plan change and/ or development stages

13. Ensure the streets are designed for appropriate and safe vehicular traffic speeds.

#### **CYCLE AND PEDESTRIAN PATHS**

- 14. Provide for dedicated cycle paths along busier streets such as arterials and collectors and toward the higher order destinations, ensure traffic speeds will be low where cyclists are expected to share travel lanes.
- 15. Consider pedestrian and cycle bridges where streets links are not feasible.
- 16. Back lanes can be effective to enable active frontages and prevent driveways crossing cycle and pedestrian paths on main roads, but do not rely on their use for general pedestrian movement.
- 17. Implement and provide connections identified in greenways plans, walking and cycling strategies, or other spatial plans (refer to Local Path Design

- Guide for guidance on the design of local paths on streets and within open spaces).
- 18. Encourage the use of protected / enhanced stream corridors for high amenity and high functioning pedestrian and cycling connections.

- 19. Design pedestrian routes with good surface conditions, lighting, signage and visual outlook.
- 20. Create recreational circuits for walking, running and cycling along local paths, greenways and 'green streets' streets with street trees and generous planted berms.

#### C8. Density and Intensity

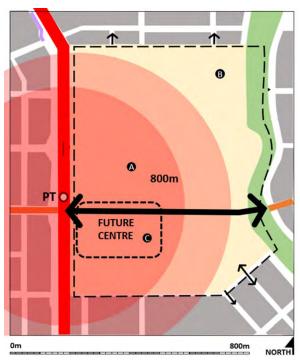


Figure C.8: Hypothetical example of where density can be located

- Locate higher densities and diversity of use within a walkable catchment of 400m from a local centre and 800m (A) from a town centre, rail station or Frequent Transit Network (FTN) bus service.
- 2. Locate lower density residential development along the growth area periphery (B) and vulnerable environmental areas such as harbour and stream edges.
- 3. Locate shops and higher intensity businesses closer (C) to public transport and centres.
- 4. Locate public transport stops (PT) where there is safe access and they are overlooked by adjacent development.
- **5.** Step higher density building heights down to integrate with lower buildings and lower density.

#### C9. Diversity of Use



Figure C.9: Hypothetical example of how to achieve diversity of use

### Design considerations for spatial planning development to inform plan change development

- Aim for a diverse range of uses and housing types which respond to the locational attributes of the site and avoid reverse sensitivity issues.
- 2. To avoid reverse sensitivity, ensure adjacent uses are compatible regarding noise, odours, parking, traffic, cultural and visual issues.
- 3. Locate a mix of shops, office, and apartments above, on main routes (A), especially close to public transport (PT) stops.
- 4. Locate commercial or office uses, possibly with apartments above, along busy streets (B).
- Locate higher density residential such as apartments (C) and terraced housing closer to shops, offices and public transport (PT) stops.
- 6. Consider some higher density residential that responds to amenity conditions such as apartments facing north onto open space for example parks, reserves or squares (D).
- Consider medium density residential in areas with good proximity (E), and or, where associated with good amenity (F) (excluding sports parks).
- 8. To assist creating a positive street environment, when there is a zoning change and where new streets are being master planned, the preference is to change uses where they vary significantly across the back of the lots (G), rather than across the street.

- 9. When there is a zoning change in the vicinity of existing streets: Change uses, where they vary significantly, with consideration of the potential detrimental effects of uses fronting each other on the opposite sides of the street as well as the need to have a defendable boundary between uses, which occasionally can be that of a street.
- Industrial uses (H) fronting onto natural reserves often result in poor environmental outcomes, where practical locate residential (I) in between as a buffer of around 100m.
- 11. Encourage buffer uses such as small business units (J) between noisy elements and residential uses with appropriate interface design considerations.
- 12. Assist retail exposure and accessibility through location on or at intersections of important local streets served by PT.

- 13. Encourage a variety of housing choices with a range of lot sizes, building typologies and tenure arrangements.
- 14. Consider mixed-use buildings which offer live/work opportunities.
- 15. Consider office buildings that can convert to apartments in future through the location of entrances and vertical circulation.
- 16. Consider apartments buildings, or parking buildings, with high stud ceilings at ground floor providing a more adaptable building form that that can convert to offices in the future.
- 17. Consider terraced houses with home offices at ground floor with a separate entrance.

# C10. Clearly defined public and private realms



Figure C.10: A high density residential and mixed-use area with clearly defined public and private places



Figure C.11: A low and medium density residential area with clearly defined public and private places

- Ensure all places can be clearly perceived to be either public or private, in order to avoid ambiguity, which could lead to safety issue or maintenance neglect.
- 2. The best way of achieving this is by defining the fronts and backs of each development as illustrated above.
- 3. When the logic of fronts and backs is consistently applied, the resulting development pattern is known as perimeter development.

#### C11. Fronts and Backs

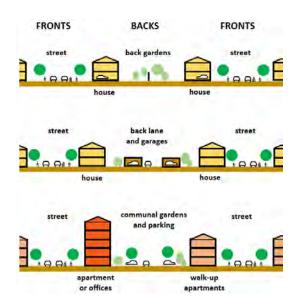


Figure C.12: Cross section of Fronts and Backs

- Promote well-defined, active edges to all public spaces including parks, reserves, streets and public pathways; these are defined as 'fronts' in the figure above.
- 2. Provide secure private spaces with the appropriate degree of privacy. These are best located in the back of blocks, to avoid high walls or fences lining the public realm. These are defined as 'backs' in the figure above.

#### C12. Perimeter blocks

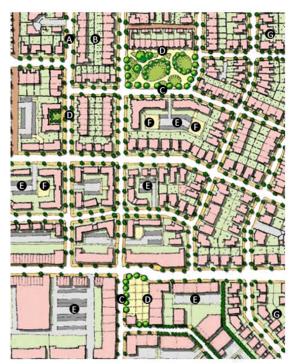


Figure C.13: Neighbourhood development with clearly defined public and private places.

#### **FRONTS**

### Design considerations for spatial planning development to inform plan change development

- 1. Where possible, locate building fronts opposite building fronts (A) and backs opposite backs (B).
- Where possible line parks, civic squares and reserves with streets (C), in some instances some edges may be lined with buildings, including their front doors (D).
- Design buildings to have active uses fronting onto the public areas in front of them, so users or residents can connect with people in the street.

### Design considerations at plan change and/ or development stages

- 4. Avoid street frontages that are dominated by garage doors, by setting garages back from the house front (and ensuring driveways are long enough to accommodate one car without it overhanging the footpath), using single garage doors, or providing garages off a rear lane.
- 5. Avoid blank walls on the street edge where possible.

#### **BACKS**

### Design considerations for spatial planning development to inform plan change development

- Locate large areas of off-street parking (E) in the rear.
- 7. Locate communal gardens (F) which are limited to private use in the rear of the block.

### Design considerations at plan change and/ or development stages

8. Set garages back from the fronts of houses (G) to ensure they do not dominate the street.

#### **FRONTING ONTO CIVIC SQUARES**



Figure C.14: Civic Square fronted by mixed-use and civic uses.



Figure C.15: Civic Square fronted by mixed-use and civic uses.

### Design considerations at plan change and/ or development stages

 In addition to achieving good frontage conditions, consider the inclusion of civic or community uses around civic squares.



Figure C.16: Neighbourhood Park fronted by family houses



Figure C.17: Neighbourhood Park fronted by medium density housing.



Figure C.18: Neighbourhood Park.

### Design considerations at plan change and/ or development stages

 In addition to achieving good frontage conditions, consider creating a range of typologies for variation and choice, and to respond to specific solar conditions.



Figure C.19: Stormwater or coastal area fronted by low and medium density residential.



Figure C.20: Stormwater or coastal area fronted by low and medium and high density residential and mixed-use.

### Design considerations for spatial planning development to inform plan change development

11. In addition to achieving good frontage conditions, consider pedestrian and cycle linkages along and across natural corridors.

# C13. Block and Lot Design to reconcile solar gain, private space and good public front



Figure C.21: Hypothetical example of block and lot design to reconcile solar gain, private space and good public front

### Design considerations for spatial planning development to inform plan change development

- Where possible, run residential blocks north/south so that lots face east and west (A) or have north toward their back gardens (B).
- Avoid north facing residential lots (C) as their need for gardens toward the sun and good privacy will either result in high walls along the street, or no privacy for their outdoor areas.
- Where north facing residential lots are inevitable either make them wider to facilitate side-yards (C) or very deep (D) to get sun in the back of a south facing garden.
- 4. North facing lots work well for apartment buildings (E) as there is no conflict with their balconies facing north.
- Consider large bespoke designed lots (L) for industrial uses to ensure their yards and large building footprints can be accommodated, while maintaining reasonable street frontage conditions.

- 6. Consider residential lots with garages off back lanes and front doors onto the street, parks, or reserves (F).
- 7. Consider residential lots with garages off back lanes and front doors onto arterial roads where vehicle access is not possible (G).
- Consider vehicle access off a right of way (H) or 'panhandle' where the alternatives are not viable. Keep these solutions to minimum.
- Consider large bespoke designed lots for apartments (J) to ensure they are big enough to provide good continuous frontages as well as accommodating parking and communal gardens in the rear.
- 10. Consider large bespoke designed lots (K) in retail centres to accommodate the complex needs of speciality shops, large format uses, their sleeving and parking requirements. Ensure safe active pedestrian linkages are achieved through the architectural design.

#### C14. Responding to arterials



Figure C.22: Arterial roads with good frontage

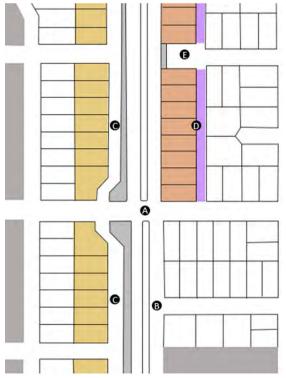


Figure C.23: Fronting arterial roads

### Design considerations for spatial planning development to inform plan change development

- Ensure "place" function is not compromised along arterial corridors where intensive land uses are anticipated to be developed on either side of the road. Ensure safe access and connectivity is achieved both across and along arterial corridors for walking and cycling to get to intensive land uses such as centres, employment destinations, public transport stops & stations, medium to high density residential, etc.
- Aim for high or medium density outcomes in locations where arterial routes including frequent transit network corridors fall within 800m of a bus stop, rail station, or centre.
- Strive to provide positive and active frontages onto these arterial routes and avoid blank walls.
   To achieve this will require special design

approaches, as vehicle access is likely to be prohibited or limited off the arterial. Consider some of the techniques described below (4-9)

- 4. Where alternative options are not possible, test whether access onto the lot is permissible if vehicles can turn around on the site and will face forward when re-entering the arterial road, even if this on a left-in, left-out basis only.
- Consider controlled intersections (A) wherever practical or viable as they facilitate much needed good pedestrian and cycle movement across the arterial.
- Consider left-in left-out access into a side-street
   (B) with the lots adjacent to the arterial presenting a side with windows and low walls, but access off the side street.
- Consider parallel slip lanes, to form a boulevard condition (C), this enables good frontage with benign movement conditions.
- Consider rear lane access lots (D) with buildings, and their front doors, fronting onto the arterial, ensure there is parking for visitors either on the street or nearby.
- Consider a cul-de-sac side street with pedestrian and cyclist through-movement (E).

# C15. Public realm-based retail and sleeving large format uses



Figure C.24: Public realm retail



Figure C.25: Sleeving large format uses

#### **PUBLIC REALM-BASED RETAIL**

## Design considerations for spatial planning development to inform plan change development

- Retail and employment centres should prioritise a public realm-based approach, with good streets (A) and squares (B), over an internalised approach.
- In addition to achieving good frontage conditions, the built form and street design should deliver an attractive, pedestrian friendly destination.

3. Emphasise landmark features, such as gateway entrances (C) or civic uses (D) for good legibility within the neighbourhood.

#### **LARGE FORMAT USES**

### Design considerations at plan change and/ or development stages

- Consider the location of primary entrances (E) to retail so that they contribute to a lively street and the viability of smaller shops.
- 5. Sleeve larger retail (F) and commercial buildings with smaller buildings (G) or finer grained architectural form.

#### **PARKING**

- 6. Consider parallel on-street parking (A) with street trees.
- Minimise the impact of large parking areas by containing them in the layout (H). Strike a balance between the need for parking areas to be visible from the street and providing an attractive and active street edge.
- 8. Where viable, consider decked parking structures or basement parking.

#### C16. Small-scale Employment Uses



Figure C.26: Small-scale employment uses

### Design considerations for spatial planning development to inform plan change development

- Consider provision for small-scale employment uses in close proximity to shops and public transport stops, as these can be significant providers of jobs at all levels of the service and new economy.
- In addition to achieving good frontage conditions, consider locating the parking and other services at the rear of the lot.
- Small to medium-sized offices and professional services can better mix with "sensitive uses" (such as residential and retail) and are therefore encouraged in and around town, local or neighbourhood centres.

#### C17. Business land



Figure C.27: Industrial and commercial areas



Figure C.28: Industrial and commercial areas

#### **PUTTING THE RIGHT USE IN THE RIGHT PLACE**

### Design considerations for spatial planning development to inform plan change development

- Small and medium-sized businesses (less than 2,500m² sites) should be used as a buffer to large-scale ones.
- Large-scale single uses on larger sites should generally not be located along edges of open spaces because their development 'backs' will provide a low amenity interface.

#### SITE DESIGN

- 3. Sites should be designed around balancing:
  - The utility of the site for activities;
  - The efficient use of infrastructure (the number of lots being served by a service lane);
  - The ease which resultant buildings can enhance street and local amenity.
- Avoid 'rear' sites unless it's appropriate to the local topography and movement networks; and helps to hide a less 'clean' use from public view.



Figure C.29: Industrial and commercial areas

#### OFFICE TO THE FRONT

### Design considerations at plan change and/ or development stages

- If there is an office, showroom, shop, staff
  recreational space or other such component onsite, locate it facing and close to the street (A)
  with as much glazing as possible.
- Ensure all public entrances are highly visible and accessible from the street. They should be the most prominent, obvious element of the building façade.
- 7. Provide a clear pedestrian entrance to sites.
- 8. Make individual tenancies highly visible in the front façade design. Ensure entrances are projected forwards; consider varying the colours, materials and finishes of each unit.

#### PARKING TO THE REAR OR SIDE

### Design considerations at plan change and/ or development stages

- 9. For commercial buildings with no yard requirements, locate the parking at the rear (B).
- 10. Where outdoor yard activities are required, locate these to the rear (C).
- 11. Locate staff parking to the rear (D) or, where unavoidable, to the side (E) of the building.

- 12. Avoid parking between the building and the street where possible. Locate visitor parking, if required, to the side (E).
- 13. Communal parking areas (particularly those at the front of development) should be well landscaped.
- 14. Provide a clear pedestrian pathway from parking areas to entrance locations.
- 15. Minimise vehicle crossings with the street. Look to share between multiple tenancies if appropriate.

#### **ADDITIONAL LANDSCAPING**

### Design considerations at plan change and/ or development stages

- 16. Provide additional tree planting where long blank walls (F) fronting onto the street are unavoidable, to soften the bulk.
- 17. Provide additional tree planting where large areas of yard (G) front onto the street.
- 18. Landscaping can accent building design and help to minimise the reflected thermal footprint of a site.
- 19. For uses which require clear visibility between the building and street to be maintained, use a combination of low shrubs and single tree trunks with canopies beginning their spread above 2.0m in height. Avoid low shrubs which block sightlines.

#### **ENERGY EFFICIENCY & CONSERVATION**

### Design considerations at plan change and/ or development stages

- 20. Look to cluster compatible uses together to make shared or common services viable.
- 21. Maximise natural light and invest in automated ventilation and temperature control devices.

#### **LOW IMPACT DESIGN**

- 22. LID treatments such as swales and rain gardens can be more viable if shared between sites along boundaries, collecting water from parking & manoeuvring areas.
- 23. Use semi-permeable paving for car parking spaces.
- 24. Consider the use of low-maintenance landscaping and low shrubs and tussocks in preference to large areas of grass to mow (reduce carbon dioxide footprint from mowing maintenance)

25. Use captured rain water for on-site landscaping and potential for non-potable water needs such as for toilets and shower facilities.

### STORAGE & COLLECTION OF WASTES, SERVICING & LOADING

### Design considerations at plan change and/ or development stages

- 26. Service and deliveries are best suited at the side or rear of the site well away from the frontage.
- 27. Carefully screen service and loading areas to maintain visual amenity and practical on-site security and safety.

For information relating to waste storage and removal contact Auckland Council's Waste Solutions Team - wasteplanconsent@aucklandcouncil.govt.nz

# C18. High and Medium Density Residential



Figure C.30: Medium density precincts



Figure C.31: Medium and high density precincts

### Design considerations at plan change and/ or development stages

 In addition to achieving good frontage conditions, minimise the impact of off-street car parking areas by locating them to the rear of the site where possible, planting large numbers of trees, limiting paved surfaces to the minimum area required for parking and manoeuvring, and breaking large areas into small separated parking clusters. Where unavoidable plan for the future introduction of structured parking with good public realm edges.

- Provide access to entrance lobbies off the street as well from to the rear of apartment buildings, so that needs of visitors and private residents can be met.
- In addition to best practice apartment design (such as sun access, good balconies etc.); also consider making good provision for bicycle parking.

Also refer to Auckland Design Manual

- Sites & Buildings Terraced Housing Design;
   Apartment Building Design and Mixed Use
   Development Design
- Regulations Housing Design for Auckland's Planning Rules (Residential Design Elements)

http://www.aucklanddesignmanual.co.nz/

#### C19. Low Density Residential



Figure C.32: Low and medium density precincts



Figure C.33: Low and medium density precincts

### Design considerations at plan change and/ or development stages

- In addition to achieving good frontage conditions, ensure garages are set back from the street.
- 2. Ensure a habitable room fronts onto the street (such as kitchen, living room etc) to promote passive surveillance.
- 3. Keep front walls and hedges below 1m height.

Also refer to Auckland Design Manual

- Sites & Buildings: Stand-Alone House Design
- Regulations—Residential Design Elements

http://www.aucklanddesignmanual.co.nz/

#### **C20.** Identity, Character and Heritage

### Design considerations at plan change and/ or development stages

- 1. Emphasise the characteristics and history of each distinctive local character area, open space, or precinct.
- 2. Design buildings that incorporate creative expression of narratives and have a rich visual character.
- 3. Consider how the occupants may express their individual identities.
- 4. Encourage design approaches that avoid excessive repetition and inappropriate massing of buildings.
- 5. Consider the form, materials and detailed treatment.
- 6. Vary the character of different street and movement connections.
- 7. Provide strong visual connections between the public spaces and the uses that front them.
- Consider the spatial relationships between a public space and the buildings surrounding it and promote higher degrees of spatial enclosure in more intensive urban conditions.
- 9. Use materials and visual references that reflect the local cultural context and landscape.
- 10. Evoke the full range of senses with designs that use a variety of textures, sound effects, and fragrances.
- 11. Provide effective signage that contributes to the visual character and recognises traditional place names.
- 12. Promote public art works, including art works to celebrate Mana Whenua.
- 13. Protect mature, healthy trees that are an important part of a neighbourhood's identity (e.g. notable trees, trees that are part of special character places and areas, trees of cultural significance and sensitively integrate into development).
- 14. Reference local character, heritage and features though complementary or contrasting designs.

Also refer to Auckland Design Manual

Resources: Design Statements

http://www.aucklanddesignmanual.co.nz/

#### C21. Energy

### Design considerations for spatial planning development to inform plan change development

 Consider region-wide strategies for energy conservation, waste management and climate change.

### Design considerations at plan change and/ or development stages

- 2. Design buildings that require less operational energy.
- Minimise the use of new resources, e.g., by using recycled building materials and limiting the use of energy from non-renewable sources.
- 4. Respond to local wind, rain, soil and sunlight conditions; use natural light and ventilation where possible.
- 5. Use construction techniques that save energy.
- 6. Design to reduce energy demand through the use of daylight and passive solar gain; active solar panels; photovoltaic modules; terrace houses that require less space heating; eaves, overhangs and external screens that let sun into habitable rooms in winter and keep it out in summer; limited glazed areas to the south, where heat loss occurs during winter; and using the heat storage capacity achieved by heavyweight floors bedded on the ground.
- 7. Incorporate e-vehicle charging areas at appropriate locations.

#### Also refer to Auckland Design Manual

- Sites & Building Terraced Housing Design (7. The Building); Apartment Building Design (7. The Building); and Mixed Use Development Design (6. The Building)
- Design Subjects Sustainability

http://www.aucklanddesignmanual.co.nz/

#### C22. Waste and Recycling

### Design considerations at plan change and/ or development stages

- 1. Provide for local recycling of organic and inorganic material.
- 2. Provide for building wastage recycling.

#### Also refer to Auckland Design Manual

- Sites & Building Terraced Housing Design (7. The Building); Apartment Building Design (7. The Building); and Mixed Use Development Design (4. Outdoor Spaces)
- Regulations Residential Design Elements (Design for Waste)

http://www.aucklanddesignmanual.co.nz/

### **Section D: Appendices**

#### 1.0 Delivering on the Auckland Plan Outcomes

The Auckland Plan 2050 is the long-term spatial plan for Auckland. It considers how Auckland will address the key challenges of high population growth, shared prosperity, and environmental degradation. Both the Auckland Plan Outcomes and the NDS themes are multidisciplinary. Appendix 1.0 demonstrates how the NDS themes align to the relevant Auckland Plan Outcomes - focus areas. We have specifically sought to identify only spatially relevant focus areas that sit under the Auckland Plan Outcomes and identify these to the five NDS themes.

	Auckland Plan 2050						
NDS Themes	Belonging and participation	Maori identity and wellbeing	Homes and places	Transport and access	Environment and cultural heritage	Opportunities and prosperity	
1.Neighbour-hoods that vary in density and mix of uses according to their locational attributes			Focus Area 1: Accelerate quality development at scale that improves housing choices Focus Area 5: Create urban places for the future	Focus Area 2: Target new transport investment to the most significant challenges Focus Area 3: Maximize the benefits from transport technology Focus Area 5: Better integrate land-use & transport Focus Area 7: Develop a sustainable & resilient		Focus area 2: Ensure regulatory planning & other mechanisms support business, innovation & productivity growth	
2.Neighbour-hoods with many safe choices of movement with good to access services and amenity				Focus Area 2: Target new transport investment to the most significant challenges Focus Area 4: Make walking, cycling and public transport preferred choices for many more Aucklanders Focus Area 5: Better integrate land-use & transport Focus Area 6: Move to a safe transport network, free from death & serious injury Focus Area 7: Develop a sustainable & resilient transport system		Focus area 2: Ensure regulatory planning & other mechanisms support business, innovation & productivity growth	

	Auckland Plan 2050							
NDS Themes	Belonging and participation	Maori identity and wellbeing	Homes and places	Transport and access	Environment and cultural heritage	Opportunities and prosperity		
3.Neighbour- hoods with many choices of use and activity that reflect the changing needs of the community and the sub- region	Focus Area 1: Create safe opportunities for people to meet, connect, participate in & enjoy community & civic life Focus Area 3: Support and work with communities to develop the resilience to thrive in a changing world Focus Area 7: Recognize the value of arts, culture, sport & recreation to quality of life		Focus Area 1: Accelerate quality development at scale that improves housing choices Focus Area 5: Create urban places for the future		neritage	Focus area 2: Ensure regulatory planning & other mechanisms support business, innovation & productivity growth		
4. Neighbour-hoods that celebrate their unique identity and are attractive, safe and easily understood	Focus Area 1: Create safe opportunities for people to meet, connect, participate in & enjoy community & civic life Focus Area 3: Support and work with communities to develop the resilience to thrive in a changing world Focus Area 4: Value & provide for the Tiriti o Waitangi/the Treaty of Waitangi as the bi-cultural foundation for an inter-cultural	Focus Area 6: Celebrate Maori culture & support te reo Maori to flourish Focus Area 7: Reflect mana whenua matauranga & Maori design principles throughout Auckland						
5.Neighbour-hoods that protect and enhance the natural environment while enabling urbanisation	Auckland				Focus Area 2: Focus on restoring environments as Auckland grows Focus area 3: Account fully for the past & future impacts of growth Focus Area 4: Protect Auckland's significant natural environments & cultural heritage from further loss Focus Area 5: Adapt to a changing water future Focus Area 6: Use green infrastructure to deliver greater resilience, long-term cost savings & quality environmental outcomes			

#### 2.0 Achieving Te Aranga Māori Design Principles

Te Aranga Māori Design Principles are a set of outcome-based principles founded on intrinsic Māori cultural values and designed to provide practical guidance for enhancing outcomes for the design environment. While these principles and their implementation have been documented in Section C1, they are an implicit part of the wider Neighbourhood Design Statement intended outcomes under the five NDS themes.

	Te Aranga Design Principles								
NDS Themes	Mana: The status of iwi and hapu as mana whenua is recognised & respected	Whakapapa : Maori names are celebrated	Taiao: The natural environment is protected, maintained & enhanced	Mauri Tu: Environmental health is protected, maintained & enhanced	Mahi Toi: Iwi/hapu narratives are captured & expressed creatively & appropriately	Tohu: Mana whenua significant sites & cultural landmarks acknowledged	Ahi Ka: Iwi/hapu have a living & enduring presence & are secure & valued within their rohe		
1. Neighbour- hoods that vary in density and mix of uses according to their locational attributes			х			x			
2. Neighbour- hoods with many safe choices of movement with good access to services and amenity			х	X					
3. Neighbour- hoods with many choices of use and activity that reflect the changing needs of community and the sub- region	х								
4. Neighbour-hoods that celebrate their unique identity and are attractive, safe and easily understood	х	X	х		X	X	Х		
5. Neighbour- hoods that protect and enhance the natural environment while enabling urbanisation	Х		Х	X			Х		

#### 3.0 Structure Plan Vision & Key Outcomes: Drury-Opāheke and Pukekohe-Paerata

#### Vision Statement for Drury-Opāheke:

Drury-Opāheke is a sustainable, liveable, compact and accessible place with successful centres and residential options close to a variety of employment opportunities. It is well connected to the wider Auckland region through rail and road networks. Cultural and heritage values are respected.

#### Drury-Opāheke Structure Plan key outcomes to implement the vision:

#### 1. Community Focus

- a) Drury–Opāheke has a strong community focus with an accessible town centre, local and neighbourhood centres and provides business and employment opportunities for residents.
- b) Employment areas and community facilities are located within short to medium distances from residential areas as well as elsewhere in Auckland.
- c) Social infrastructure (such as education, healthcare, retirement village facilities) provision is provided and enabled.

#### 2. Quality Built Environment

- a) A range of housing choices within Drury-Opāheke area recognising the diverse needs of communities and the changing demographics.
- b) Drury-Opāheke has a compact urban form with increased residential densities close to centres and public transport services.
- c) Integrated open space and parks in urban residential areas, linked by transport networks (roads, cycleways, footpaths).
- d) Public spaces including parks and roads are safe and attractive.
- e) Drury-Opāheke is a place that respects and celebrates its relationship with mana whenua and protects its historic heritage and character.
- f) Te Aranga Maori Design Principles are adopted in the planning and development of Drury-Opāheke.

#### 3. A Well-Connected Drury

- a) The transport network responds to anticipated economic growth by providing efficient, resilient and safe connections to employment areas, centres and other destinations within Drury-Opāheke and the wider Auckland region.
- b) Frequent, reliable and attractive public transport options provided by enhancing network connections to support the growth of centres and high-density residential development along key transport routes.
- c) Safe, well-connected cycle and pedestrian network provide high amenity linkages between localised activities and surrounding areas.

#### 4. Integration with Infrastructure Delivery

a) Land development and infrastructure delivery is highly coordinated.

#### 5. Natural Hazards

a) The location and form of development avoids the impacts of natural hazards.

#### 6. The Natural Environment

- b) Management of the natural environment in a way that respects and is guided by Māori tikanga.
- c) Freshwater quality within the catchment is improved.
- d) The quality of the marine receiving environment is maintained or improved.
- e) The freshwater management functions of riparian margins are improved.
- f) Protect and improve biodiversity.

#### Vision Statement for Pukekohe-Paerata:

New growth areas will enhance Pukekohe as a focal point and place to further support the surrounding rural economy. These areas will offer a range of housing choice and employment opportunities for people at all stages of life. It will be well connected to the wider Auckland and Waikato regions, while protecting and enhancing the natural, physical and cultural values that contribute to Pukekohe's unique character and identity.

#### Pukekohe-Paerata Structure Plan key outcomes to implement the vision:

#### 1. A place for people

- a) Ensure a high quality urban environment that people want to live and work in.
- b) Encourage the use of Te Aranga Māori Design Principles in the planning and development of Pukekohe-Paerata.
- c) Provide a range of housing choices to support a growing and diverse community, with increased residential densities close to public transport and amenities.
- d) Provide an integrated and accessible network of high-quality open space and recreational facilities.
- e) Promote a sustainable and low-carbon development.
- f) Encourage development which minimises the risk of natural hazards and effects of climate change.
- g) Provide for local employment opportunities.

#### 2. Our shared stories

- a) Protect and enhance Pukekohe's heritage including built heritage, natural heritage, archaeological sites and Māori cultural heritage landscapes.
- b) Recognise and celebrate Pukekohe's history and diverse stories.
- c) Acknowledge that new development should respect and enhance local character, identity and heritage.

#### 3. A healthy, flourishing and sustainable community

- a) Promote safer journeys, together with positive health, recreation and social benefits
- b) Provide for accessible social infrastructure that supports education opportunities and community wellbeing
- c) Encourage local business and job development that stimulates economic prosperity.
- d) Ensure infrastructure is developed and operated in a way that is sustainable and efficient, and considers economic, social, cultural and spiritual effects.
- e) Recognise the importance of Auckland and Waikato's cross-boundary relationship.

#### 4. Valuing our natural environment

- a) Recognise the fundamental relationship between Māori and the natural environment.
- b) Manage the natural environment in a way that respects and is guided by Māori tikanga.
- c) Enhance freshwater quality throughout the area.
- d) Improve the overall biodiversity of the area and ensure ecosystems are functioning and healthy.
- e) Protect outstanding geological features such as tuff rings and the Pukekohe East explosion crater from inappropriate development.
- f) Protect and enhance the stream network including the Whangapouri and Oira Creeks and Tutaenui Stream.
- g) Promote a water-sensitive design approach to manage stormwater and protect the existing stream network.

#### 5. Rural Pukekohe

- a) Recognise the regional importance of the rural economy such as equine and horticultural industries
- b) Recognise Pukekohe's contribution to the food supply for Auckland and New Zealand.
- c) Enable rural industries to support businesses and provide diverse range of jobs, goods and services.

- 6. Servicing our future community.
  - a) Deliver a transport network with strong local and regional connections that responds to anticipated growth and maximises connectivity for both commuters and freight.
  - b) Provide frequent and attractive public transport options, supported by greater density along key routes.
  - c) Infrastructure delivery and land development are coordinated with funding and provide networks that are cost effective.