APPENDIX 1

Lincolnshire Farm Structure Plan

Directing growth and delivering quality

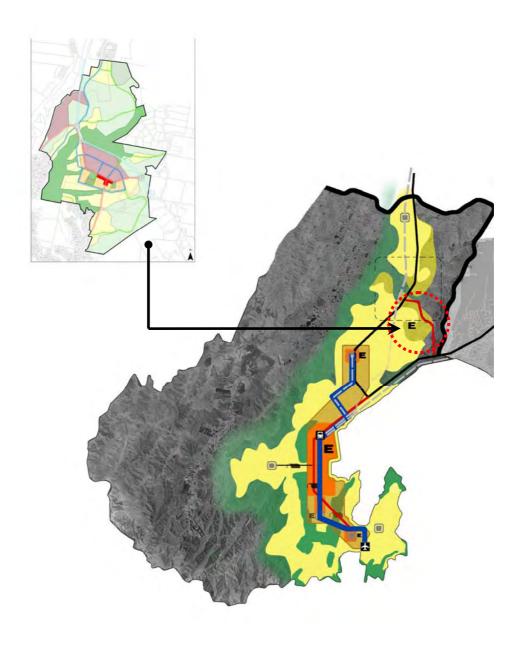


Table of contents

1.	Introduction	4
1.1 1.2	Overview Application of Structure Plan and Further Information	4 5
2.	Resource Management Issues	6
2.1	Background	6
2.2	Northern Growth Management Framework Wellington Regional Strategy (WRS)	6 6
2.4	Regional Transport Connectivity	7
2.5	Urban Development Strategy	7
2.6	Site Assessment	7
2.7	Urban Design	8
2.8	Resource Management Issues	8
3.	Key Principles	9
3.1	Key Principles of the Structure Plan	9
4.	Pattern of Development	10
4.1	Resource Management Strategy	10
4.2	Areas of Protection	10
4.3	Limited Development Areas	11
4.4	Development Areas	11
5.	Movement and Connectivity	12
5.1	Resource Management Strategy	12
5.2	Movement and Connectivity	13
6.	Landuse	14
6.1	Resource Management Strategy	14
6.2	Specific Land use Guidance	15
7.	Infrastructure	20
7.1	Resource Management Strategy	20
7.2	Specific Infrastructure Principles and Requirements	21
8.	Staging	22
8.1	Resource Management Strategy	22
8.2	Staging Principles and Requirements	23
9	Implementation and Other Methods	24

9.1	Resource Management Strategy	24
9.2	Urban Design	24
9.3	Partnership	24
9.4	Development Contributions	24
9.5	Employment Area implementation	24
9.6	Infrastructure	25
9.7	Link Road	25
Append	dix A: Specific Stage Requirements	26
Resider	ment Areas: Stages and precursors ntial Areas: Stages and precursors Fill Areas: Stages and precursors	26 29 37

Maps:

MAP 1:	Location Map
MAP 2:	Context Map
MAP 3:	Pattern of Development
MAP 4:	Movement
MAP 5:	Public Transport
MAP 6:	Land use
MAP 7:	Major Infrastructure
MAP 8:	Staging

Part I: Issues

1. Introduction

1.1 Overview

1.1.1 The structure plan

This document sets out a structure plan (the structure plan) for the development of an area generally referred to as Lincolnshire Farm as shown on Map 1.

A structure plan is a series of maps and diagrams with supporting text to guide the development of a particular area by defining the pattern of development and landuses, areas of open space, the layout and nature of infrastructure, and other key features to manage the effects of development.

Implementation of the structure plan provides an opportunity to realise the Council's strategic vision and implement the principles of the Northern Growth Management Framework (NGMF). This would be achieved through high-quality integrated urban development and protection of significant features in accordance with the provisions set out in this structure plan.

1.1.2 The Site

Lincolnshire Farm is strategically located between State Highways 1 and 2, close to all three major Wellington urban centres of Porirua, Hutt Valley and Wellington City.

The structure plan area is roughly the area bound by State Highway 1, Grenada North, Woodridge / Newlands and Horokiwi ridge. This approximately 400 hectare area is the largest remaining opportunity for greenfield development in Wellington City and one of largest and most strategically located in the whole Wellington region.

1.1.3 Proposed development

The structure plan proposes that staged development of the site (over approximately a 10-15+ year period) will include:

- New road connections, as well as recreation and ecological links and protection
- A business area with local employment opportunities of around 45 hectares in size
- 800-900 new households in a variety of densities and styles
- A 4-lane link road from State Highway 1 between Tawa and Grenada interchange connecting to State Highway 2 between the Petone and Dowse interchanges in the Hutt Valley

1.1.4 Development of the Structure Plan

The structure plan has been developed through a process of review, analysis and consultation with stakeholders. This has focused on:

- The vision and guidance for the site provided by the NGMF (see below)
- The strategic context of the development opportunities of the site in relation to the emerging Wellington Regional Strategy (WRS), the Urban Development Strategy (UDS) and the Western Corridor Transport Study
- The site specific characteristics, opportunities and constraints
- Public consultation on the draft principles of the structure plan during May 2006

The structure plan will be implemented by way of a change to the District Plan as well as other interlinked actions by both the Council and other stakeholders (see Section 9 below).

Further information on the resource management issues, background and development principles of the structure plan are contained in "Lincolnshire Farm Structure Plan, Background Paper" (the Background Paper), Wellington City Council, 2006.

1.2 Application of Structure Plan and further information

This structure plan relates directly to the site identified on the attached maps. It provides guidance to give effect to the Council's Urban Development Strategy, Environmental Strategy, and the Northern Growth Management Framework. It provides design assessment criteria for both subdivision and landuse consent applications within this area and should be referred to in relation to development adjoining this area or impacting upon the implementation of the structure plan.

This structure plan forms part of the Wellington City Council District Plan (the District Plan) and should be read in conjunction with all other applicable sections of the District Plan. This includes:

- The Subdivision Design Guide in relation to the detail of subdivision consent applications
- The technical and engineering criteria relating to the implementation of development which are contained in the separate Code of Practice for Land Development.

The structure plan relates directly to resource management issues for the Lincolnshire Farm area and introduces a new policy direction for this area. On this basis this document is considered more applicable to the area than general provisions of the District Plan. As such, where conflict exists between the District Plan and the provisions of this structure plan, the structure plan should generally be considered to take precedence.

2. Resource Management Issues

2.1 Background

This land has been identified for potential future urban development since the 1970's. At this time the comprehensive development of the area between Newlands and Takapu was planned for future urban growth as a series of interconnected neighbourhoods forming a larger development area¹.

Of this area, only two major stages were developed – Grenada Village and Grenada North. As the remainder of the development, including the supporting roading infrastructure, was not completed, these new areas remain poorly connected and relatively isolated (particularly in the case of Grenada North).

The site was largely zoned for residential development until 1994, when as part of the development of the District Plan, all undeveloped land was 'down zoned' and the site became Rural. This decision was appealed and as a result of this a notation was included in the District Plan that the site was intended for future urban development.

2.2 Northern Growth Management Framework

The potential for development of the area was again considered as part of the detailed development of the NGMF in 2002 and 2003. At this time principles were agreed and adopted as Council policy that the land should be developed for not only residential growth, but also to provide a new employment centre for local people and the Wellington Region.

The development of the NGMF provided a strategic analysis of the appropriateness of development on the site, and outlined the potential form that such development should take.

The core goal of the NGMF is the creation of a highly attractive, efficient, and accessible urban area in order to realise the vision of "...an integrated, liveable, diverse, sustainable and prosperous community".

To achieve this vision, the NGMF set in place a programme of actions, including the development of the Lincolnshire Farm area. The NGMF specifically requires this to include a "major new employment centre" with a very high standard of design and accessibility with a focus on local employment to help manage travel demand for growth in the northern suburbs.

The NGMF also sets out objectives, themes and values to guide development in order to achieve the vision (see Background Paper). These principles have been applied to the structure plan to help realise this vision.

Ensuring a high quality of development which maximises the development opportunities of the site, while demonstrating best practice urban design and implementation of the principles of the NGMF have been key issues addressed by the structure plan.

2.3 Wellington Regional Strategy (WRS)

The WRS provides economic and regional land use development strategy for the region. In order to support the implementation of the WRS, the structure plan will need to manage development of the employment land in order to help maximise regional benefit.

Key issues addressed by the structure plan therefore include:

- The phasing of development in order to support the implementation of the WRS
- Ensuring both the quality of development and that this is employment focused
- The need to use a variety of tools outside of the structure plan to support the successful development of the employment area

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¹ Churton: Bridgetown: Grenada Development Report, Wellington City Corporation, 1976

2.4 Regional Transport Connectivity

In April 2006 Greater Wellington approved a draft Regional Transport Programme which includes construction of a new link road between SH1 and Dowse Interchange by 2014/15.

A key issue for the structure plan is to make provision for a link road that is designed:

- to accommodate at least 25,000 VPD
- to allow high average vehicle speeds (70-80km/hr)
- to have a minimum number of intersections to maintain traffic speeds
- to provide connections to the structure plan area

A further implication is that due to the potential for demand by a substantial volume of traffic, care needs to be applied to ensure that the staging of development does not result in a substandard road connection being made available from SH1 to the Hutt Valley – including any connection via Horokiwi Road, which is incapable of safely servicing such volumes.

2.5 Urban Development Strategy

To ensure that future growth and change occurring within Wellington reinforces the physical and spatial characteristics that make the city so distinctive and contribute to the stimulating and intense urban experience it offers, the Council has developed an Urban Development Strategy (UDS).

The key solution sought by the UDS is for 'A growth management strategy that directs growth to where the benefits are greatest, where the adverse effects are minimised, and delivers on quality'. As such, the UDS directs that the majority of growth and urban development in Wellington will occur in the central area and along the area identified as the 'growth spine'.

As a supporting strand of this core strategy, the UDS recognises and provides for limited greenfield growth in the NGMF area and in particular the development of the new employment centre at Lincolnshire Farm as well the potential link road from Grenada to the Hutt Valley.

A key issue addressed by the structure plan is therefore the need to be consistent with the strategic direction and guiding principles of this strategy by ensuring that the quality of development supports the implementation of the overall UDS.

2.6 Site Assessment

The location and area of the structure plan is shown on Map 1.

A full description and assessment of the site and its surrounding context is contained in the Background Paper. This assessment has been carefully considered and factored into the development of the structure plan.

From the assessment, key site constraints, opportunities and issues are shown on Map 2.

2.7 Urban Design

Key urban design issues for the creation of the structure plan to create a successful, attractive and vibrant urban environment include the following:

Legibility: through the creation of a sense of place, identifiable through clear links, nodes, landmarks and edges

Variety: through the creation of a mixture of uses within the development area, including a range of opportunities and choices for work, for living and for social interaction

Permeability: through a variety of choices for movement between high quality, sustainable, interesting and identifiable spaces

Vitality: through a mixture of uses surrounding the central neighbourhood centre area

Design that supports and encourages public transport provision, walking and cycling

High quality design and layout of buildings in key areas such as adjacent to public spaces, the neighbourhood centre and the employment area

Design that enhances public safety and reduces opportunity for crime and anti-social behaviour through application of "Crime Prevention Through Design" (CPTED) principles

Design that respects and relates to the ecological, landscape and contextual qualities of the site.

2.8 Resource Management Issues

Within the context outlined above, the following are considered the key resource management issues related to a structure plan for the Lincolnshire Farm area:

- In line with the NGMF, development of the land should achieve the following:
 - A high quality of development based upon the principles of best practice urban design to create an integrated, liveable, diverse, sustainable and prosperous community
 - o A highly attractive, efficient and accessible urban area
 - o Protection and linkage of significant landscape, ecological and natural features of the site
 - o Inclusion of a major new employment centre design to provide local and regional employment opportunities. Such a centre should be of a high quality design with a variety of building a lot sizes, with no 'big box' retail
 - o Inclusion of a neighbourhood centre to provide facilities for local residents and workers
 - o Inclusion of a variety of housing and lifestyle choices to meet the needs of a cross section of the community
- Phasing of development needs to be managed in order to ensure that necessary infrastructure is put in place to support the development and connections are made between the surrounding communities
- The staging and quality of development of the employment centre should be managed in order to support the implementation of the Wellington Regional Strategy
- The structure plan and development must be designed and staged to support the implementation of the Urban Development Strategy
- The structure plan must include provision for a link road running from State Highway 1 / Grenada to State Highway 2 / Hutt Valley
- The structure plan must relate to the site specific characteristics and contextual form and location
 of the site
- The structure plan must promote and facilitate development based upon the principles of good urban design

Part II: Structure Plan

3. Key Principles

3.1 Key Principles of the Structure Plan

From the resource management issues above the following are identified as being the key Principles for the structure plan:

Principles	•
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KP1: Quality of development. Development opportunities of the site should be maximised where possible to create a compact urban form, while demonstrating best practice urban design and implementation of the principles of the Northern Growth Management Framework. Development of the structure plan area should create a highly attractive, efficient and accessible urban area while protecting and linking the significant landscape, ecological and natural features of the site.

KP2: Mixture of uses. Ensure that development includes range of opportunities and choices for work, for living and for social interaction. This must include a major new employment centre which has no 'big box' retail, an accessible and well designed neighbourhood centre, local parks and reserves and a range of housing types.

KP3: Phasing of development and implementation of infrastructure. These aspects need to be managed in order to support the implementation of the Urban Development Strategy, Wellington Regional Strategy and ensure that necessary infrastructure is put in place to support the social and economic development of the structure plan area.

KP4: Connectivity. Ensure legible and accessible connections are made through the site to link local communities, the region through the State Highway 1 to State Highway 2 link road, and ecological and recreational areas.

Results anticipated and explanation

The structure plan area will be developed in a way which creates an integrated, liveable, diverse, sustainable and prosperous community.

These key Principles provide the overarching goals of the structure plan. All development proposals should first be considered in relation to these and then to the specific Principles and Requirements set out below in order to assess whether the vision of the structure plan is being put into practice.

4. Pattern of Development

4.1 Resource Management Strategy

The structure plan area is a complex physical environment situated in the middle of four existing communities. The pattern of development is largely dictated by the constraints of the topography and ecological values of the site as well as opportunities to connect with and strengthen existing communities.

Through assessment of the qualities, location and context of each area of land, a pattern of potential development can be established which will help to ensure that development fits well within the environmental and contextual qualities of the site, while providing opportunities to create a well connected and vibrant central area.

As shown on Map 3, three broad areas are identified:

- Areas of Protection: which are not considered suitable for development and will generally become Council owned reserves
- Limited Development Areas: where limited development could occur provided that this does not compromise the existing values of the land
- Development Areas: where development should be encouraged and concentrated

It is noted that the boundaries of these areas are approximate only and will be determined through the consideration of specific development proposals and reference to types of land use as set out below.

4.2 Areas of Protection

Principle	APP1: Protect, retain and enhance the landscape, ecological or recreational values of Areas of Protection.
Requirements	APR1: The landscape, ecological or recreational values of Areas of Protection should be retained and protected from inappropriate or unnecessary development which compromises these values.
	APR2: Development in Areas of Protection should be limited to the provision of necessary infrastructure (such as sewerage, transport connections and tracks). Such infrastructure should be designed and located in order to not unduly compromise the values of these areas.
Results anticipated and explanation	These areas will provide a green corridor through the structure plan area which retains and protects the significant environmental values of the area and provides for a variety of recreational activities.
	Areas of Protection are generally considered unsuitable for development due to their landscape, ecological or recreational values. These areas combine to form a network open space through the structure plan area. Due to the size and location of these areas, there will be a requirement to construct some infrastructure such as tracks, roads, sewerage lines and reservoirs through these areas. Where this occurs, this should be designed in a way to minimise disturbance to these areas.

4.3 Limited Development Areas

Principle	LDP1: Allow for well designed, low intensity, generally rural residential type development provided that this does not compromise the landscape, landform or ecological values of Limited Development Areas.
Requirements	LDR1: Development in Limited Development Areas, including earthworks, vegetation clearance and construction should be sensitively designed in order to not compromise the landscape, landform and ecological values of the site.
	LDR2: Development should be at a low level of intensity to ensure that the environmental qualities of the land are not dominated by built structures or modifications as a result of development.
	LDR3: All earthworks and vegetation clearance should be limited to that necessary to create suitable access and building sites. Removal of significant or primary bush remnants should be avoided.
Results anticipated and explanation	The environmental qualities of these areas will be retained and enhanced, linking to and supporting the values of Areas of Protection while allowing for appropriate low intensity development.
	Limited Development Areas contain a range of qualities which should be retained and protected from inappropriate development which could compromise these values. Combined with the Areas of Protection they help form the sense of space through the structure plan area. These areas contain a range of qualities which should generally be retained and protected from inappropriate development which could compromise these values.

4.4 Development Areas

Principle	DAP1: Concentrate the majority of development within Development Areas with a graduated increase in intensity of landuse towards an identifiable centre.
Requirements	DAR1: Where possible, the environmental qualities of the land should be retained in Development Areas.
	DAR2: Higher density development should occur towards the centre of Development Areas with the intensity decreasing towards the periphery.
Results anticipated and explanation	The vast majority of development in the structure plan area will occur within the identified Development Areas thereby helping to protect more sensitive or less appropriate areas from development.
	Development Areas have been identified as being more suitable for development due to their landscape, topographical, ecological and locational characteristics. In order to support a walkable, compact, vibrant and high quality central area, which can link with public transport routes, the intensity of development should be concentrated towards the centre of the main Development Area.

5. Movement and Connectivity

5.1 Resource Management Strategy

A well connected place will be a successful place. Improved connectivity offers choice, supports a variety of land uses and helps to strengthen links within and between communities.

Safe and attractive urban environments also rely on good connections to offer a variety of choices for movement between places. If good conditions are provided for pedestrians, this will also encourage more movement and create opportunities for interaction and recreation in the street environment.

Good linkages should therefore be made through the structure plan area to existing communities and within the new development which occurs. Where possible, such links should be anchored by identifiable spaces. Quality spaces will encourage people to interrupt their journey in order to rest, enjoy the space and interact with others.

The movement network within the structure plan area will be made up by roads (with provision for walking, cycling, private vehicles and public transport) and dedicated pedestrian / cycle links. These should interlink to create a safe, accessible and legible network which encourages sustainable forms of transport.

A hierarchy and network of road links is required by the structure plan, linking to the pattern of development. An indicative layout of these links is shown on Map 4. It is noted that with detailed design, the exact location of these roads is likely to alter.

Indicative public transport routes and the 400m walkable catchment of these are shown on Map 5.

The key roads include the following:

- Link road / Arterial providing regional connectivity between State Highway 1 / Grenada and State Highway 2 / Hutt Valley. At present principal access to the structure plan area is via the Grenada exit of State Highway 1. This interchange may require upgrade if it were to provide the main point of access to and from the completed Link road. The alternate preferred option to this is the construction of a new link from SH1 approximately 400m south of the existing Tawa interchange to the Link road as shown on Map 4. The Link road will be a limited access road meaning that there will be no direct property access onto or off the road in the structure plan area (including to the Employment Area). Access will instead be provided from the Major Intersections identified.
- Avenue / Principal Road This is the 'main street' providing the backbone of the movement network in the structure plan area including the main public transport routes. This would connect directly onto the Link Road and also connect with the extended Woodridge Drive. The design and layout of this road will alter through the structure plan area to reflect how it integrates with and supports the adjacent landuses.
- Collector network providing the key connections within the structure plan area and to the surrounding communities.
- Key local roads providing secondary connection within the structure plan area and to the surrounding communities. These connections include links Horokiwi via Horokiwi Road and / or Hillcroft Road. Due to the nature of lower Horokiwi Road and its connection to State Highway 2, it is not suitable for any significant additional traffic and through access to this road would need to be tightly controlled (see staging requirements of stages RA13, RA16 and RA17 in Appendix 1).
- Track network providing secondary pedestrian / cycle and recreational links through the Areas of Protection
- Track / road connections identified locations where the local roading system will need to provide connection and frontage to the track and reserves network

5.2 Movement and Connectivity

Principles MCP1: Ensure that identified road connections are appropriately designed, provided for and constructed as part of the development of the structure plan area to create a well connected and legible place. MCP2: Create a movement network which supports and encourages sustainable forms of transport – in particular walking, cycling and public transport. MCP3: Create a track network linking from the urban areas and road network through the open space areas. Requirements MCR1: The design of all development, including subdivision and landuse must incorporate provision for and not compromise the identified road or track connections. MCR2: Road connections should be appropriately designed to reflect their status in the roading hierarchy and to facilitate a safe, accessable and sustainable movement network. MCR3: The Avenue / Principal Road should be designed to provide a main street environment with a high level of pedestrian amenity and public transport provision. MCR4: Roads should where possible provide safe and legible connection and frontage to reserves and the track network. MCR5: No through road access should be constructed to Horokiwi Road unless the Link Road is constructed or alternative or improved access onto State Highway 2 has been constructed. **Results** Development will result in the construction of a movement system which provides a high level of connectivity and legibility. anticipated and explanation The roading network forms an essential part of the movement network within the structure plan area. It is vital that as the development is staged, the future roading network is considered and provided for so that the ability to construct future connections is not compromised. This includes ensuring that roads are vested and constructed to the boundary of development areas. The road network is fundamental to sustainable forms of movement including walking, cycling and public transport. As such it needs to link to, and provide access to, the track system and the reserves and open space areas. The potential public transport routes through the structure plan area are shown on Map 5.

6. Landuse

6.1 Resource Management Strategy

Appropriate land uses within the structure plan area have been determined with reference to the pattern of development and movement network identified above. This will both locate land uses to the areas most suitable for the activities that will occur, and will support a compact urban form which will support sustainable modes of transport.

As shown on Map 6, eight types of land use have been identified from the pattern of development. It is noted that the boundaries of these areas are approximate only and will be determined through the consideration of specific development proposals and the final location of roads which generally provide separation between landuses.

6.1.1 Areas of Protection

Reserve 1: due to the significant environmental qualities of this land, and the opportunities it can
offer for recreation, landscape protection or ecological enhancement, it will be protected by
becoming the reserves network through the structure plan area, owned and managed by the
Council.

6.1.2 Limited Development Areas

• Rural Residential Area: These areas are considered suitable for low intensity rural residential development provided such development does not compromise the landscape, landform or ecological values of the site. Any subdivision or development proposals in these areas will therefore need to be supported by detailed landscape and ecological assessments and measures required to avoid, remedy or mitigate the impacts of development – including the location and design of roads, driveways and buildings. On this basis, no minimum lot size is required, with the pattern of subdivision and development instead required to fit the environmental qualities of the land and provide sufficient space for onsite sewage and stormwater disposal. This also provides for the possibility of land being held in communal ownership arrangements.

6.1.3 Development Areas

- Reserve 2: These areas are central public open spaces which will be developed in order to provide high quality amenity space for recreation and social activity and will be owned and managed by the Council. They are centrally located adjoining the neighbourhood centre to ensure that they are highly accessible to as many people as possible both residents and workers. Requirements are set to ensure the quality of design of surrounding landuses which are essential to ensure the safety and quality of the spaces.
- Residential 1: These areas are considered most suitable for general housing. A range of densities, styles and sizes of houses is encouraged to meet the needs of the wider community.
- Residential 2: This area is situated in close proximity to the Neighbourhood Centre and to public transport routes and other amenities. As such it is considered more suitable for a higher density residential development. Requirements guide density and the mixture of housing types to encourage a range of housing stock to meet the needs of a cross section of the community.
- Neighbourhood Centre: This is the heart of the structure plan area. It will provide the location for local shops (serving both local residents and workers), a place to meet and community facilities. Requirements are set to ensure the quality of urban design and suitability of landuses.
- Employment: There are two employment areas. These areas are considered the most suitable locations for employment uses due to their good transport access, position in the movement network and unsuitability for residential development due to the location of the Link Road and State Highway 1. Requirements are set to ensure the quality of urban design and suitability of landuses in particular no 'big box' retail.
- Clean Fill Site: One major site for clean fill has been identified. This area adjoins the existing Grenada North sports fields which were created from clean fill. Development of the structure plan area is likely to result in a surplus fill from earthworks and this site has been selected as a suitable

location for this spoil. Long term, it is intended that the clean fill site could be developed as an extension of the existing sports fields. This will require that the clean fill site is managed and filled in such a way to ensure long term stability and suitable drainage. Additional Clean Fill sites may be identified through the development process and the relevant principles and requirements set out below will apply to these also.

6.2 Specific Land use Guidance

The Principles and Requirements set out below provide specific guidance on the development of each of the land use areas.

Refer to Section 1.2 above for guidance on the general application of the structure plan.

6.2.1 Reserve 1

Principle	RS1P1: Protect and enhance the environmental qualities of this land as a public reserve for landscape, ecological or recreation purposes.
Requirements	RS1R1: The landscape, ecological or recreational values of Reserve 1 areas should be retained and protected from inappropriate or unnecessary development which compromises these values.
	RS1R2: Development in Reserve areas should be limited to the provision of necessary infrastructure (such as sewerage, transport connections and tracks). Such infrastructure should be designed and located in order to not unduly compromise the values of these areas.
Results anticipated and explanation	The Reserve 1 areas will provide a publicly owned network of open space through the structure plan area which links to the Outer Greenbelt, retaining and protecting the significant environmental values of the area.
	Reserve 1 areas are generally considered unsuitable for development due to their landscape, ecological or recreational values. Due to the size and location of these areas, there will be a requirement to construct some infrastructure such as tracks, roads, sewerage lines and reservoirs through the area, however the impacts of such works shall be minimised.

6.2.2 Reserve 2

Principle	RS2P1: Development of high quality centrally located public open spaces providing amenity space for recreation and social activities.
Requirements	RS2R1: Reserve 2 areas should be centrally located, adjoining the Neighbourhood Centre, well connected to pedestrian and cycle links and fronted by roads to provide public access and passive surveillance.
	RS2R2: Development of sites adjoining Reserve 2 areas should be designed in order to enhance the amenity values of these spaces and provide passive surveillance.
Results anticipated and	High quality attractive urban open space areas which provide for a variety of active and passive recreational activities.
explanation	Reserve 2 areas are areas of public open space which are managed for recreation and social activities. They are centrally located adjoining the neighbourhood centre to ensure that they are highly accessible to as many people as possible – both residents and workers.

6.2.3 Rural Residential

Principle	RRP1: Allow for well designed, low intensity, generally rural-residential type development provided that this does not compromise the landscape, landform or ecological values of this area.
Requirements	RRR1: Subdivision and development proposals will be assessed in relation to the Rural Area Design Guide.
	RRR2: Development in Rural Residential areas, including earthworks, vegetation clearance and construction shall be sensitively designed in order to avoid, remedy or mitigate effects on the environmental qualities of the land.
	RRR3: Development should be at a low level of intensity and sustainably designed to ensure that the environmental qualities of the land are not dominated by buildings or the impacts of earthworks.
	RRR4: All earthworks and vegetation clearance should be limited to that necessary to create suitable access and building sites. Removal of significant or primary bush remnants should be avoided.
	RRR5: Any subdivision or development proposals shall generally include methods such as building design (height, cladding, location, construction methodology) landscaping, habitat enhancement, consent notices or covenants to avoid, remedy or mitigate the impacts of development to ensure the environmental qualities of the land are protected or enhanced on an ongoing basis.
Results anticipated and explanation	The environmental qualities of these areas will be retained and enhanced, linking to and supporting the values of Reserve 1 areas while allowing for appropriate low intensity development.
	Rural Residential areas generally form a buffer between Areas of Protection and Development Areas. These areas contain a range of qualities which should be retained and protected from inappropriate development which could compromise these values. Combined with the Areas of Protection they help form the open space network through the structure plan area.

6.2.4 Residential 1

Principle	R1P1: Ensure well designed, well connected residential areas which offer a range of living choices.
Requirements	R1R1: Subdivision of Residential 1 areas shall provide for a variety of lot sizes in order to facilitate a variety of housing types and sizes.
	R1R2: Subdivision and development proposals in the Residential 1 area shall provide for the passive surveillance of adjoining Reserve 1 and Reserve 2 areas.
Results anticipated and	Through compliance with the pattern of development set by the structure plan, attractive, compact and accessible residential areas will be developed.
explanation	Guidance on the development of residential areas – location, links, proximity to other activities, layout and design is generally contained in other sections of the structure plan and through the relevant provisions of the District Plan.

6.2.5 Residential 2

Principle	R2P1: Ensure well designed, well connected residential areas which offer a range of living choices at a medium density of development within generally
	multi-unit development.

Requirements R2P1: Subdivision of the Residential 2 area shall be designed to provide for future medium density residential development, including multi-unit housing developments. R2P2: Subdivision and development proposals in the Residential 2 area shall provide a minimum density of 25 household units per hectare of gross land area. R2P3: Multi-unit housing developments in the Residential 2 area shall include a range of housing sizes and types. R2P4: Subdivision and development proposals in the Residential 2 area shall provide for the passive surveillance of adjoining Reserve 1 and Reserve 2 areas. Results An area of medium density residential development, incorporating a range of anticipated and living choices will be created within easy walking distance of local amenities explanation including shops, parks, public transport routes and community facilities. Guidance on the development of residential areas – location, links, proximity to other activities, layout and design is generally contained in other sections of the structure plan and through the relevant provisions of the District Plan.

6.2.6 Neighbourhood Centre

	rhood Centre
Principle	NCP1: Ensure a well designed, compact and well connected neighbourhood centre with a high level of amenity which provides amenities and facilities to serve the needs of local residents and workers.
Requirements	NCR1: Development of the Neighbourhood Centre shall be in accordance with an approved detailed development plan for the whole area in order to achieve the Principle for this area. Matters which will need to be included in the development plan include the matters listed below:
	 Layout and scale of buildings: these should generally be of two to three stories in height providing a strong and active relationship to the street
	 Location of carparking and streets: No off-street car parking should be located at the front of buildings adjoining the Avenue or the extension of Woodridge Drive. Car parking should be provided either on-street, or at the rear of buildings where possible
	 Relationship to the Reserve 1 and Reserve 2 areas: Development should present an active edge and strong connection with the Reserve 1 and Reserve 2 areas in order to provide passive surveillance and sense of ownership. The neighbourhood centre should be separated from the Reserve 1 and Reserve 2 area by way of a local road which is significantly traffic calmed
	 Creation of active frontages: onto the Avenue / Principal Road and the extension of Woodridge Drive through the use of a fine grain of tenancies / activities, doorways and glazed facades
	 Public transport: provision needs to be made for the location of public transport routes and waiting areas, as the Neighbourhood Centre will provide the hub for public transport
	The quality of public space: including footpaths and roads, places to meet, landscaping, sunlight and wind protection
	Relationship to surrounding residential development
	 Mixture of uses: these shall generally be commercial / community facilities on the ground floor and residential or commercial on upper floors. Residential access should be provided from the rear of

development as opposed to from the Avenue or Woodridge Drive extension The design of commercial tenancies shall include a variety of sizes in order to provide a finer grain of development to allow for a mixture of smaller business rather than the centre being dominated by singular large retail / commercial activities Concept plan for infrastructure provision, including the location of any major infrastructure requirements and the management of stormwater flows and quality Any residential development should be on upper floors only The creation of a high quality, popular, commercially successful and attractive Results anticipated and neighbourhood centre which provides a focal point for the local community. explanation The Requirements above provide guidance as to what is appropriate on this site in order to address the resource management issues identified and achieve the Principles of the structure plan. These will need to be addressed through the development of a detailed development plan for the area.

6.2.7 Employment

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Principle	EMP1: Ensure a well designed compact and well connected employment area with a high level of amenity for non-retail commercial uses.
Requirements	EMR1: Development of each stage of the Employment Area shall be in accordance with an approved detailed development plan for the phase in order to achieve the Principle for this land use area. Matters which will need to be included in the development plan include the matters listed below:
	 General layout and scale of buildings: these should generally be a maximum of 15m in height providing a strong relationship to the street. Building coverage should not exceed 70% of each site
	 Street layout: provision will need to be made for access by trucks, and should also provide for rear servicing of development fronting the Avenue / Principal road, walking and cycling
	 Location of carparking and servicing: No off-street car parking should be located at the front of buildings adjoining the Avenue. On all sites car parking should be provided either on-street, or at the rear or side of buildings where possible
	 Scale of development sites: Development should be at a graduated scale and intensity with smaller, finer grained development adjoining the Avenue and larger development sites away from more sensitive landuse areas
	• The Avenue / Principal road: Development fronting the Avenue opposite the Reserve 2 and Neighbourhood Centre areas should present an active frontage to the street with servicing to occur from the rear of the buildings
	• Front façade: All development sites should present a well designed, attractive frontage to the street
	• The quality of public space: including footpaths and roads and places to meet within the Employment area
	• Landscaping: the development of sites not fronting onto the Avenue shall include details of how these will be landscaped in order to present an attractive frontage to the street
	• Concept plan for infrastructure provision, including the location of

any major infrastructure requirements and the management of stormwater flows and quality

EMR2: All land use within the Employment Areas shall be of an employment / manufacturing / distribution focus.

- Any residential development should be on upper floors and linked to the employment uses located on the site.
- Any retail activity over 500m2 on any site shall be ancillary to the principal activity of the site. The principal activity of any site shall not be retail, including bulk retail activity.
- No industries with noxious, offensive discharges or contaminants including odour, air pollution, waste water or hazardous substances shall be established in the area

Results anticipated and explanation

Development of a vibrant, attractive and successful place to work and do business.

While other parts of the District Plan provide general guidance on the scale, intensity and type of landuse appropriate for this area, the Principle and Requirements above provide more detailed guidance as to what is appropriate in this area in order to address the resource management issues identified and achieve the Principles of the structure plan.

6.2.8 Clean Fill

Principle	CFP1: Provide for a well managed spaces where clean fill from the development of the structure plan area can be placed in order to provide for a future recreation or development areas
Requirements	CFR1: Prior to any fill being located on a Clean Fill site, a detailed development plan will need to be approved in order to achieve the Principle for this land use area. Matters which will need to be included in the development plan include the matters listed below: • Quantity and quality of fill
	Area of fill
	Management and operation of the activity
	Noise, dust, sediment and stormwater management
	Traffic management and routes for trucks
	Remediation of the site
Results anticipated and explanation	Well managed clean fill sites where the effects of the operation are adequately avoided, remedied or mitigated. On the identified Clean Fill site a new recreation area will be established.
	The Clean Fill area identified in the structure plan adjoins the existing Grenada North sports fields which were created from clean fill. Development of the structure plan area is likely to result in a surplus fill from earthworks and this site has been selected as a suitable location for this spoil. Long term, it is intended that the clean fill site be developed as an extension of the existing sports fields. Additional Clean Fill sites may be identified through the development process and the relevant principles and requirements will apply to these also.

7. Infrastructure

7.1 Resource Management Strategy

Infrastructure provides the necessary services required for development to occur such as power, road access and sewerage disposal. As shown on Map 7, the structure plan area will largely be serviced by infrastructure connections from the west and south of the site. This will direct the phasing of development, with infrastructure put in place in earlier stages servicing the subsequent stages of the structure plan.

Allowance for the future development of the entire structure plan area should therefore be made in the location and design of infrastructure. Detail of the design of key infrastructure components is set out in the Council's Code of Practice for Land Development.

The key infrastructure requirements of the structure plan area are as follows:

- Electricity: There are no known capacity issues in relation to the supply of electricity to the site, although there may be specific requirements in relation to local transformers and substations.
- Gas: There is currently no gas network in the area. Provision of a network system of gas will be at the discretion of the developer
- Telecommunications: While there are local telecommunications exchanges which can be connected to, there is no local cable or fibre optic network. Such a system will be required as part of the development of the structure plan although how this connects to a wider network will need to be negotiated between the developer and telecommunications suppliers.
- Sewerage: Connection can be made to the existing Council sewerage system which runs through Glenside and Tawa to the treatment plant in Porirua which is jointly operated with Porirua City. While there may be existing actual capacity within the plant to accommodate the development of the whole structure plan area, depending on the demands of other development in the catchment area of the plant, upgrade works to this treatment plant over the development life of the whole structure plan area may be required. Such works may require a review of current development contributions to pay for this work.
- Stormwater: The principal means of stormwater disposal from the structure plan area will be the Belmont Stream. As such the management of the quality of stormwater and control of flows are key considerations for development.
 - Quality: General principles for stormwater management are set by the Subdivision Design Guide with specific design guidance set by the Code of Practice for Land Development. This guidance, combined with the Requirements below, will encourage sustainable forms of stormwater management are utilised where possible as opposed to 'traditional' hard stormwater systems such as piping into streams. The quality of stormwater and impacts on the Belmont Stream are also able to be considered against a baseline assessment of water quality undertaken in 2004 (Boffa Miskell, NGMF Belmont Stream, 2004).
 - O Quantity: Again, the Subdivision Design Guide and Code of Practice for Land Development provide guidance to ensure stormwater systems are designed so that flows are controlled to avoid major peaks. Downstream impacts are controlled through the Seton Nossiter retention dam to prevent such peaks and down stream flooding. In addition, development of the structure plan area has been modelled in terms of downstream stormwater impacts. This study links into the minimum floor levels set through Tawa in the District Plan (Connell Wagner Nov 1997 Porirua Stream Flood Mitigation- Mike11 Catchment Model 1997).
- Water: Connection can be made to the existing Council water system. Two major reservoirs are required to service the structure plan area.

The location of major elements of infrastructure are shown on Map 8. Generally, all other infrastructure will run along road corridors or will be identified in the development plan for each stage of the structure plan.

7.2 Specific Infrastructure Principles and Requirements

Principle	IFP1: Ensure the efficient and sustainable provision of infrastructure throughout the structure plan area.
Requirements	IFR1: The design of all development, including subdivision and landuse must incorporate provision for, and not compromise the development of required infrastructure for the entire structure plan area.
	IFR2: Development shall include the provision of a fibre optics network capable of servicing all stages of the structure plan area.
	IFR3: All utilities and service infrastructure shall be located underground where possible.
	IFR4: Each stage of development shall include a concept plan for stormwater management to address the anticipated flows and quality of runoff. Such plans should seek to ensure that runoff flows are less than or equal to the run off flows prior to development and the water quality of the Belmont Stream is not adversely affected.
Results anticipated and	Development will be efficiently and effectively serviced by the infrastructure required for both current and future stages of the structure plan area.
explanation	Infrastructure provides the networks of essential services required to service development. In order to minimise future works, infrastructure needs to be designed taking into account the potential development of the whole structure plan area. Particular attention needs to be given to the impacts of stormwater disposal on the Belmont Stream to ensure the qualities of this waterway are not compromised.
	A fibre optics network provides the backbone of modern communication systems. These are becoming increasingly important in order to service a range of needs including broadband, cable television and opportunities for business and commerce.

8. Staging

8.1 Resource Management Strategy

It is anticipated that the development of the structure plan area will be staged over a 10 to 15+ year period. Factors which will affect this staging of development – both in terms of where and when it occurs include the following:

- Implementation of infrastructure and how this services current and future stages. Development stages will have to follow the pattern of earlier infrastructure provision meaning that this will be the key determinant in when stages occur.
- Market forces and demand for development. This will be a key determinant for how quickly development occurs.
 - O Current demand for new housing development in the NGMF area amounts to around 165-250 houses per annum. Assuming a high proportion of all demand occurred within the structure plan area (50%), this would mean that there is approximately 8-12+ years supply (to 2016 2020+).
 - Estimated demand for the employment land is around 3-5 hectares per annum. Based on such a level of demand, it is estimated the employment area would take at least 10-15+ years to be fully developed (to 2018 2023+).
- Specific stage requirements. The requirements for each stage set out in Appendix 1 will ensure
 that the land is developed in a coordinated and efficient manner by controlling the development of
 stages until required precursors have been completed.
- Linkage to the Wellington Regional Strategy and Urban Development Strategy the implementation of both of these strategies may influence the timing of development of the employment area.

Map 8 shows the stages of the development. **These are not necessarily sequential and each stage may involve several phases.** The stages do show the approximate boundaries of each area to be comprehensively developed as a phase of the structure plan.

For each stage Appendix 1 sets out:

- Particular issues to be addressed
- Works which need to be undertaken as part of the stage
- Works or stages which need to be undertaken prior to the development of the stage

These are considered essential to ensure that the structure plan area is effectively and efficiently developed and that the required infrastructure and facilities are provided to service the development.

The actual implementation of required precursors or other works not specifically listed will be controlled through the use of conditions on resource consents (as will other matters such as internal servicing, provision of infrastructure etc). As such, the matters listed in Appendix 1 are not intended to be exhaustive, but rather note the key issues which need to be addressed at each stage.

For some stages, there are few, or no particular requirements to be addressed and some stages will be able to be undertaken simultaneously.

The Principles and Requirements below and in Appendix 1 set out the requirements and precursors for each stage. These have been broken into three broad areas: Employment Areas (EA1 - EA5), Residential Areas (RA1 - RA19) and the Cleanfill Area (CA1).

8.2 Staging Principles and Requirements

Principle	STP1: To ensure the efficient, sustainable and integrated design and development of each stage of the structure plan area to achieve high quality, well designed development to support future land uses
Requirements	STR1: Development of each stage of the structure plan shall be in accordance with an approved detailed development plan for the stage in order to achieve the Principle for staging. Matters which will need to be included in each detailed development plan are set out in Appendix 1
Results anticipated and explanation	Development will be well designed and effectively managed throughout the anticipated 10-15 year development period of the site. Specific stage requirements have been included in the structure plan to ensure that these are clearly set out in order that developers, the Council and other stakeholders are clear about how the development can be staged, including the provision of major infrastructure.

9 Implementation and Other Methods

9.1 Resource Management Strategy

Successful implementation of the structure plan will require a variety of tools and methods. The primary statutory tool will be a change to the District Plan to give effect to this structure plan. Key other methods include the following set out below.

9.2 Urban Design

Key urban design principles have been encapsulated into the structure plan. As a signatory to the Urban Design Protocol, the Council has a duty to continue to advocate for and strive to achieve good urban design outcomes within the structure plan area. This will require working with the developer to ensure that these principles are incorporated into the development proposals.

9.3 Partnership

A key principle of the NGMF is to work in partnership with stakeholders. The implementation of the structure plan will therefore require ongoing dialogue and communication with key stakeholders, including the communities of the surrounding areas (in particular Grenada Village, Grenada North, Horokiwi and Woodridge / Newlands / Paparangi).

Other key stakeholders will include developers, Transit New Zealand, the Wellington Regional Strategy forum, Greater Wellington, Hutt City, Porirua City and network utility providers.

9.4 Development Contributions

The Council's Development Contributions Policy sets out a policy framework for development contributions under Section 198 of the Local Government Act 2002.

In addition to the applicable City wide development contributions, the structure plan area is entirely included in a specific development contributions catchment, currently identified in the 2005 policy as Area J.

The Policy sets out the development contributions payable. It is reviewed through the LTCCP process, however changes may also be made through the Annual Plan to reflect changes in capital budgets.

It is anticipated that most of the infrastructure works within the structure plan area will be undertaken by the land owners / developers. If this is not the case, then there may be a requirement to review the development contributions for this area.

9.5 Employment Area implementation

In order to achieve regional economic benefits, the quality and staging of the Employment Area will need to be linked to the implementation of the Wellington Regional Strategy. This will require a partnership approach between the developer, the Council and other local authorities in the Region through the forum of the WRS.

9.6 Infrastructure

Some major infrastructure works will need to be implemented by the Council (paid for by development contributions). This may include roads, water and sewerage infrastructure, including, as noted above, possible works to augment the capacity of the Porirua sewerage treatment plant.

9.7 Link Road

The majority of funding for the Link Road will need to come from Transit New Zealand or the Crown. A decision on when and how to fund the Link Road will depend on the Regional Land Transport Strategy and the priority that is given to other projects in the region in relation to available funding. As such, detailed investigations are unlikely to proceed until funding has been identified.

Once funding is secured. identification of the alignment, detailed design and implementation of the Link Road will require a partnership approach between the Council, the developer, Transit and Hutt City.

Appendix A: Specific Stage Requirements

Employment Areas: Stages and precursors

Stage	All EA Stages
Description and Issues	The following shall apply to all Employment Area stages
Development Plan requirements	A detailed development plan showing the whole stage will be required for each stage of development in order to achieve the objectives of this structure plan. Matters which will need to be included in the development plan include the matters outlined in 6.2 and those listed below: • Movement: internal access within the stage and to adjoining stages • Linkage and frontage to reserves areas and track network • Any areas to be vested as reserve, including the timing / phasing of when this will occur • Density of development including any higher density areas • Concept plan for infrastructure provision, including the location of any major infrastructure requirements and the management of stormwater flows and quality Proposed phasing of each stage of the development
Stage to include	See specific stage
Required works to occur prior to the stage	See specific stage

Stage	EA1
Description and Issues	This is the first stage of the development of the Employment Area. As such it is important that this stage is developed to a standard and design that not only provides necessary infrastructure to the subsequent phases, but also sets the standard in terms of good urban design.
	EA1 adjoins the closed Northern Landfill, State Highway 1 and the access road to the Grenada Interchange. As such there is excellent existing road access. However, the function of this road should not be compromised by vehicle crossings onto this road from the area. Due to the visual prominence of the site, particularly in relation to State Highway 1, landscaping, screening or other mitigation of the visual impacts of development will need to be addressed. Access to EA2 will also need to be provided through EA1.
	EA1 also includes an area Rural Residential on the other side of the access road to Grenada Interchange and will need to address the future use of this land.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters:
·	• Access to EA2
	• Internal servicing, in order to minimise vehicle crossings from the area onto Westchester Drive East
	• Landscaping and visual screening or other mitigation from the area towards State Highway 1
	• Development of the Rural Residential area with regard to the matters set out in 6.2.3
Stage to include	Construction and vesting of access to the western boundary of EA2
Required works to occur prior to the stage	No specific requirements

Stage	EA2
Description and Issues	EA2 adjoins EA1. EA2 also includes the closed Northern Landfill site, part of proposed Link Road and significant power lines. Large areas of EA2 are therefore significantly compromised for development due to these constraints. It is possible that both EA1 and EA2 could be developed together as they potentially serve different uses due to the constraints on EA2. Access to EA2 will need to be through EA1 in order to not compromise the route of the proposed Link Road.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters:
	Access to the stage, including:
	 The potential location and alignment of the Link Road from State Highway 1 to Major Intersection 2
	 Concept layout for Major Intersections 1 and 2
	 The location and alignment of the road linking Jamaica Drive to Mark Avenue extension from Major Intersection 1 to the existing Jamaica Drive
	o Internal servicing
	• Landscaping and visual screening or other mitigation from the area towards State Highway 1
Stage to include	Construction and vesting of the Collector road adjoining RA15 from Major Intersection 1 to the northern extent of EA2
Required works to occur prior to the stage	Prior to any building development in EA2 the major earthworks and infrastructure associated with EA1 shall be complete

Stage	EA3
Description and Issues	This is the first stage of the development of the main employment area. As such it is important that this stage is developed to a standard and design that not only provides necessary infrastructure to the subsequent phases, but also sets the standard in terms of good urban design.
	As the area is on the eastern side of the land bridge over the Belmont Gully, servicing and infrastructure will need to be provided over the bridge prior to development being able to occur.
	The area also adjoins the two main road corridors – the Link Road and the Avenue and will need to provide for the location and alignment of these both adjoining the site and their potential eastern extension to ensure that this is not compromised.
	Due to its central location, adjoining EA4, RA2 and RA3 the development plan will need to show how EA3 links to each of these areas.
	The stage also includes part of the Belmont Gully Reserve 1 area and will need to provide detail of the extent and layout of the reserve, including access, as well as when and how this will be vested as such.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters:
	Access to the stage. This must show:
	Concept layout for Major Intersections 1 and 2
	Works required to the land bridge
	The location and alignment of the Link Road from Major Intersection 1 to Major Intersection 3
	The location and alignment of the Avenue from Major Intersection 1 to the junction with Woodridge Drive extension
	Access and linkage to stages RA2 and RA3
	Access and linkage to stage EA4
	Internal servicing of the stage, including provision for the HGV internal service route and rear servicing of development fronting the Avenue
	Landscaping and visual screening or other mitigation from the area towards the Link Road / Belmont Gulley
Stage to include	The construction and vesting of the Avenue from Major Intersection 1 to the western edge of EA4
	Any substantial earthworks required to the land bridge and for the construction of Major Intersections 1 and 2
Required works to occur prior to the stage	Prior to any building development in EA3 the major earthworks and infrastructure associated with EA1 and RA1 shall be substantially complete

Stage	EA4
Description and Issues	This stage adjoins stage EA3 and should largely follow on from the development of this stage rather than being undertaken independently.
	The quality of development is again a key priority, particularly adjoining the neighbourhood centre area and fronting the Avenue.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters:
	Access to the stage. This must show:
	The location and alignment of the extension of Woodridge Drive extension through into RA13
	The location and alignment of the Avenue from Major Intersection 1 to Major Intersection 3
	Access and linkage to stages EA5, RA3, RA4 and RA13
	Internal servicing of the stage, including provision for the HGV internal service route and rear servicing of development fronting the Avenue
	Landscaping and visual screening or other mitigation from the area towards the Link Road / Belmont Gulley
Stage to include	The construction and vesting of the Avenue from Major Intersection 1 to the western edge of EA5 / junction with Woodridge Drive extension
	Any substantial earthworks required build the extension of Woodridge Drive from the Avenue to the southern edge of RA13
Required works	Prior to any building development in EA4:
to occur prior to the stage	• The major earthworks and infrastructure associated with EA1, EA3, RA1, RA2 and RA3 shall be substantially complete
	Woodridge Drive extension shall be constructed to adjoin the Avenue

Stage	EA5
Description and Issues	This is the final stage of the employment area and should follow on from the development of the previous stages rather than being undertaken independently.
	The quality of development is again a key priority, particularly adjoining the neighbourhood centre area. As this area is more elevated that the other employment areas, the height and bulk of development will need to be carefully considered.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters:
	Access to the stage. This must show:
	 Access and linkage to stages RA4, RA6 and RA13
	• Internal servicing of the stage, including provision for the HGV internal service route and rear servicing of development fronting the Avenue
	• Landscaping and visual screening or other mitigation from the area towards the Link Road
Stage to include	The construction and vesting of the Avenue from Major Intersection 1 to Major Intersection 3
Required works	Prior to any building development in EA4:
to occur prior to the stage	• The major earthworks and infrastructure associated with EA1, EA3, EA4, RA1, RA2, RA3 and RA4 shall be substantially complete
	Woodridge Drive extension shall be constructed to adjoin the Avenue

Residential Areas: Stages and precursors

Stage	All RA Stages
Description and	The following shall apply to all Residential Area stages
Issues	
Development Plan requirements	A detailed development plan showing the whole stage will be required for each stage of development in order to achieve the objectives of this structure plan. Matters which will need to be included in the development plan include the matters listed below:
	Movement: internal access within the stage and to adjoining stages
	Linkage and frontage to reserves areas and track network
	Any areas to be vested as reserve, including the timing / phasing of when this will occur
	Density of development including any higher density areas
	• Concept plan for infrastructure provision, including the location of any major infrastructure requirements and the management of stormwater flows and quality
	Proposed phasing of each stage of the development
Stage to include	See specific stage
Required works to occur prior to the stage	See specific stage

Stage	RA1
Description and Issues	This area forms the extension of Mark Avenue and needs to be the first area of residential development to be completed in order that the link road from Mark Avenue to Grenada interchange is completed. A subdivision application for this area has already been approved, although this may require modification in order to allow for the location of the Link Road and Major Intersection 1.
Development Plan requirements	No specific requirements
Stage to include	Construction and vesting of Mark Avenue extension to Grenada interchange
Required works to occur prior to the stage	Agreement of a concept plan for the layout and location of Major Intersection 1

Stage	RA2
Description and Issues	This is the first area of residential development on the eastern side of the Belmont Gully land bridge. As such the layout of roading connections and other infrastructure through this area are very important to ensure that future stages can be adequately serviced. The quality of development is also very important to ensure that it sets the standard for following stages. The area also includes a small area of Residential 2. In addition, the stage includes a large part of the Belmont Gully Reserve 1 area and will need to provide detail of the extent and layout of the reserve, including access, as well as when and how this will be vested as such.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters:
	• Access to this stage. This must show:
	 Concept layout for Major Intersections 1 and 2
	 Works required to the land bridge
	 The location and alignment of the Link Road from Major Intersection 1 to Major Intersection
	 The location and alignment of the Avenue from Major Intersection 1 to the junction with Woodridge Drive extension
	 The location and alignment of the Collector and Key Local roads network within RA2 and RA3 to adjoin the extension of Woodridge Drive
	o Access and linkage to stages EA3 and RA3

	The location and layout of the central Reserve 1 and Reserve 2 areas within RA3
Stage to include	Construction and vesting of the internal collector road to the boundary of RA3
	Any substantial earthworks required to the land bridge and for the construction of Major Intersections 1 and 2
Required works to occur prior to the stage	Prior to any building development in RA2 Mark Avenue extension to Grenada interchange shall be substantially complete

Stage	RA3
Description and Issues	This is a substantial residential development area which includes a large area of Residential 1, Residential 2 and a central Reserve 1 / Reserve 2 area. The design, layout and connection from this area to subsequent stages of development are therefore very important.
	The Reserve 1 / Reserve 2 area provides a connection from the wider Reserve 1 Area into the heart of the structure plan. The Reserve 1 area should provide an ecological corridor connecting through to the identified bush remnant which adjoins an area to be developed as a Reserve 2 area.
	In addition, the stage includes a large part of the Belmont Gully Reserve 1 area and will need to provide detail of the extent and layout of the reserve, including access, as well as when and how this will be vested as such.
Development Plan	In addition to those matters noted above the development plan for this stage shall address the following
requirements	matters:
	• The matters outlined in Section 6.2
	Access to this stage. This must show:
	 The location and alignment of the Collector and Key Local roads network within RA4, RA5 and RA6
	o Access and linkage to stages EA3, EA4 and RA3
	• The location, layout and concept design of the central Reserve 1 and Reserve 2 areas within RA3
Stage to include	All substantial earthworks and associated landscaping of the Reserve 2 / Reserve area
	Construction and vesting of the Collector road network and extension of Woodridge Drive through RA3 and RA5 to RA9
Required works	Prior to any building development in RA3 the following shall be substantially complete:
to occur prior to	Mark Avenue extension to Grenada interchange
the stage	All earthworks and provision of infrastructure in stages RA1 and RA2

Stage	RA4
Description and Issues	This is the most important of the residential stages as it contains the majority of the Residential 2 area, the Neighbourhood Centre and is the focal point for movement and development of the structure plan area. Design and connectivity of the area is therefore vital.
	It is possible that the development of this stage will be split into two, with phases separated by the extension of Woodridge Drive.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	• In addition to those matters set out in 6.2 and 8.3 the development plan for this stage shall address the following matters:
	Access to this stage. This must show:
	 The location and alignment of the Collector and Key Local roads network within RA5, RA6 and RA7
	 Access and linkage to stages EA3, EA4 and EA5
	 The extension of Woodridge Drive through to RA13
	o The extension of the Avenue through to Major Intersection 3
	The location, layout and concept design of the central Reserve 1 and Reserve 2 areas within RA4
Stage to include	The construction and vesting of the Avenue from Major Intersection 1 to the western edge of RA4
	Construction and vesting of Woodridge Drive extension from the Avenue to RA9 and RA10
	Construction and vesting of the Collector and Key Local road network within RA4

Required works	Prior to any building development in RA4 the following shall be substantially complete:
to occur prior to	All earthworks and provision of infrastructure in stages RA1, RA2, RA5
the stage	The extension of Woodridge Drive from RA9 to RA4

Stage	RA5
Description and Issues	This stage adjoins the northern boundary of Woodridge and provides access through to RA4 and the Neighbourhood Centre. As such ensuring access through this phase by extending Woodridge Drive is a key issue.
	Development of the stage will largely be driven by the availability of sewerage and water infrastructure.
	In addition, the stage includes a small part of the Reserve 1 area and will need to provide detail of the extent and layout of the reserve, including access, as well as when and how this will be vested as such.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	Access to this stage. This must show:
	 The location and alignment of Woodridge Drive from RA9 to the Avenue
	 Access and linkage to stages RA3, RA4 and RA6
Stage to include	Construction and vesting of Woodridge Drive from RA9 to RA3 and RA4
Required works	Prior to any building development in RA5 the following shall be substantially complete:
to occur prior to the stage	Construction of Woodridge Drive from RA9 to the boundary of RA5

Stage	RA6
Description and Issues	This stage includes includes both Residential 1 and Rural Residential areas with frontage onto the extension of Woodridge Drive. It is however a 'stand alone' stage which can be developed provided that the necessary infrastructure (in particular road access) from previous stages has been completed. However, in practice, as this will require most of the works in RA1 to RA5 to be completed, this will likely be a later stage of the development.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters • Access to this stage. This must show: • The location and alignment of Woodridge Drive from RA9 to the Avenue • Access and linkage to stages RA3, RA4, RA5, RA7 and RA12 • Development of the Rural Residential area with regard to the matters set out in 6.2
Stage to include	No specific requirements
Required works to occur prior to the stage	Prior to any building development in RA6 the following shall be substantially complete: • All earthworks and provision of infrastructure in stages RA4 and RA5 • The construction of the extension of Woodridge Drive from RA9 to RA4 • The construction of the Avenue from RA4 to Major Intersection 1

Stage	RA7
Description and Issues	This stage includes both Residential 1 and Rural Residential areas. It is essentially a 'stand alone' stage which can be developed provided that the necessary infrastructure (in particular road access) from previous stages has been completed. However, in practice, as this will require most of the works in RA1 to RA6 to be completed, this will likely be a later stage of the development.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	Access to this stage. This must show:
	 The location and alignment of the Avenue through to Major Intersection 3
	 The location and alignment of the Link Road past the eastern boundary of RA7
	 Access and linkage to stages RA6, EA5, RA12 and RA13

	• Development of the Rural Residential area with regard to the matters set out in 6.2.
Stage to include	Construction and vesting of the link road from RA7 to RA12 to the eastern boundary of RA7
	Construction and vesting of the Avenue from Major Intersection 1 to Major Intersection 3
Required works	Prior to any building development in RA7 the following shall be substantially complete:
to occur prior to	All earthworks and provision of infrastructure in stages RA4, RA5 and RA6
the stage	The construction of the extension of Woodridge Drive from RA9 to the Avenue
	The construction of the Avenue from RA4 to Major Intersection 1

Stage	RA8
Description and Issues	This relatively small stage will be serviced from the existing Woodridge development. As such it is a stand alone stage with little in the way of required precursors.
	It does however front onto a significant Reserve 1 area and will need to provide detail of the extent and layout of the reserve, including access, as well as when and how this will be vested as such.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	• Access to this stage. This must show:
	 Track linkages through to RA5 and RA3
	 Access through to Woodridge development area
Stage to include	Construction and vesting of the Key Local Road to join Blackpine Road
Required works to occur prior to the stage	No specific requirements

Stage	RA9
Description and Issues	This stage is currently being considered by way of a subdivision application. As such, there are few required works or precursors associated with the development of the area.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	Access to this stage. This must show:
	 The location and alignment of the extension of Woodridge Drive through to RA5 and RA6
	• Development of the Rural Residential area with regard to the matters set out in 6.2
Stage to include	Any substantial earthworks required in order to extend Woodridge Drive through to the boundary of RA5 and RA6 with the legal road area vested in Council
Required works to occur prior to the stage	No specific requirements

Stage	RA10
Description and Issues	This is the last substantial area of Residential 1 development in the Woodridge area. As such, most requirements should have already have been completed.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	 Access to this stage. This must show access and linkage to stages RA9 and RA11
Stage to include	Any substantial earthworks required in order to extend Woodridge Drive through into RA5 and RA6 with the legal road area vested in Council
Required works	Prior to any building development in RA10 the following shall be substantially complete:
to occur prior to the stage	 All earthworks and provision of infrastructure in stages RA9 including any substantial earthworks required in order to extend Woodridge Drive through to the boundary of RA5 and RA6

Stage	RA11
Description and Issues	This stage includes a Rural Residential area above the Residential 1 area of Woodridge. As the development runs up to a ridge from a vegetated gully, particular attention will need to be applied to the location of building sites to avoid impacts on the skyline and ridgeline area as well as the waterway on the northern boundary and native vegetation in this area.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters • Access to this stage. This must show: • Access and linkage to stages RA9 and RA12
	• Development of the Rural Residential area with regard to the matters set out in 6.2.
Stage to include	Construction and vesting of the Key Local road from RA9 to RA12
Required works to occur prior to the stage	Prior to any building development in RA11 the following shall be substantially complete: • All earthworks and provision of infrastructure in stages RA9 • The extension of Woodridge Drive from RA9 to RA6

Stage	RA12
Description and Issues	This stage includes a large area of Rural Residential predominately located on the eastern side of the ridge above Woodridge. As the development runs up to the ridge and is very elevated particular attention will need to be applied to the location of building sites to avoid impacts on the skyline and ridgeline area
	This area has an existing subdivision consent and is covered by a specific Appendix of the District Plan. If a new subdivision consent is sought under the provisions of this structure plan, then the relevant issues set out below will need to be considered.
Development Plan	In addition to those matters noted above the development plan for this stage shall address the following
requirements	matters
	• Access to this stage. This must show:
	 Access and linkage to stages RA7, RA9 and RA11
	• Development of the Rural Residential area with regard to the matters set out in 6.2
Stage to include	Construction and vesting of the Key Local road from RA11 through RA12 to RA7
Required works	Prior to any building development in RA12 the following shall be substantially complete:
to occur prior to the stage	All earthworks and provision of infrastructure in stage RA9 and RA11

Stage	RA13
Description and Issues	This is a relatively large area of Rural Residential with a core area of Residential 1. It also includes part of the Belmont Gully Reserve 1 area. It adjoins the Horokiwi community and includes the alignment of the proposed Link Road. Due to the nature of Horokiwi Road, in particular the access with State Highway 2, this road is not suitable for any substantial increase in traffic. This area should therefore not have through road access to Horokiwi Road constructed unless alternative access to State Highway 2, such as by way of the Link Road, is constructed first. Development will also need to provide for the future alignment of the Link Road and access to and from this
Development Plan	area if the Link road is built. In addition to those matters noted above the development plan for this stage shall address the following
requirements	matters
·	Access to this stage. This must show:
	 Access and linkage to stages EA5 and RA7
	 The location and alignment of the Link Road through RA13
	 The location and area required for the construction of Major Intersection 3
	Development of the Rural Residential area with regard to:
	o The matters set out in 6.2 above
	o The Horokiwi Rural Community Plan
	 Buffering between development on RA13 and the existing Horokiwi rural residential area. Such buffering shall consider size and location of allotments, location of building sites, use of

	covenants or consent notices and landscaping
Stage to include	If the Link Road or alternative improved access to SH2 has been completed, then construction and vesting of the Key Local road from EA5 to Horokiwi Road
	If the Link Road or alternative improved access to SH2 has not been completed then construction and vesting of the Key Local road from EA5 to within 5m of Horokiwi Road with road vested to the boundary of Horokiwi Road
Required works to occur prior to the stage	Prior to any building development in RA13 the following shall be substantially complete: • All earthworks and provision of infrastructure in stages RA6 and RA7

Stage	RA14
Description and Issues	This is the first stage of the residential areas in the northern part of the structure plan. It is located on the lower area of the western spur of the Horokiwi ridge and includes part of the Belmont Gully Reserve 1 area and will need to provide detail of the extent and layout of the reserve, including access, as well as when and how this will be vested as such
	The stage adjoins the existing road connections from Grenada interchange and the substantial earthworks required for the development have largely been completed as part of the works to construct access to the reservoir further up the spur.
	Water and sewerage will also be available early in the development of the structure plan area meaning that this may be one of the earlier stages of development.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	Access to this stage. This must show:
	o Concept layout for Major Intersections 1 and 2
	Works required to the land bridge
	 The location and alignment of the Link Road from Major Intersection 1 to Major Intersection
	 Access and linkage to stages RA1, RA2, EA3, RA15 and RA16
Stage to include	Construction and vesting of the Key Local road from Major Intersection 1 to the western boundary of RA16
Required works	Prior to any building development in RA14 the following shall be substantially complete:
to occur prior to the stage	All earthworks and provision of infrastructure in stages RA1 and RA2

Stage	RA15
Description and Issues	This stage of development includes a relatively constrained Rural Residential area adjoining the Collector road between Jamaica Drive and Mark Avenue extension. It is constrained by State Highway 1, the location of power lines, the road alignment, steep topography and the adjoining closed Northern landfill.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters • Access to this stage. This must show: • Access and linkage to stages EA2, RA14 and RA18 • The location and alignment of the Link Road from State Highway 1 to Major Intersection 2 • The location and alignment of the Collector road from Major Intersection 1 to the existing Jamaica Drive • Development of the Rural Residential area with regard to: • The matters set out in 6.2 above • Location of the power lines and Link Road
Stage to include	Construction and vesting of the Collector road from Major Intersection 1 to the southern boundary of RA18
Required works to occur prior to the stage	No specific requirements

Stage	RA16
Description and Issues	This stage includes a large area of Rural Residential development up the western spur of the Horokiwi ridge with potential through access to both Horokiwi Road and Grenada North. As the stage includes this spur, particular attention will need to be applied to the location of building sites to avoid impacts on the ridgeline. The stage also includes a significant part of the Belmont Gully Reserve 1 area and will need to provide detail of the extent and layout of the reserve, including access, as well as when and how this will be vested as such.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	Access to this stage. This must show:
	 Access and linkage to stages RA14, RA17 and Hilcroft Road
	Development of the Rural Residential area with regard to:
	o The matters set out in 6.2 above
	 Location of the power lines
Stage to include	Construction and vesting of the Key Local road from Major Intersection 1 to the southern boundary of RA17
	If the Link Road or alternative improved access to SH2 has been completed, then construction and vesting of the Key Local road from RA16 to Hilcroft Road
	If the Link Road or alternative improved access to SH2 has not been completed then construction and vesting of the Key Local road from RA16 to within 5m of Hilcroft Road with road vested to the boundary of Hilcroft Road
Required works	Prior to any building development in RA16 the following shall be substantially complete:
to occur prior to the stage	All earthworks and provision of infrastructure in stages RA1, RA2, RA14 and RA15

Stage	RA17
Description and Issues	This stage includes a large area of Rural Residential development with potential through access to Grenada North. This includes some very steep country and particular attention will need to be applied to the location of house sites. The area can be serviced from either RA16 or from RA19 and the requirements below allow for this to occur to give flexibility to the staging of development.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters • Access to this stage. This must show: • Access and linkage to stages RA16, RA18, RA19, CA1 and Hilcroft Road • Concept plan for the Rural Residential area with regard to: • The matters set out in 6.2 above • Location of the power lines
Stage to include	Construction and vesting of the Key Local road to through RA17 If the Link Road or alternative improved access to SH2 has been completed, then construction and vesting of the Key Local road from RA16 to Hilcroft Road If the Link Road or alternative improved access to SH2 has not been completed then construction and vesting of the Key Local road from RA16 to within 5m of Hilcroft Road with road vested to the boundary of Hilcroft Road
Required works to occur prior to the stage	Prior to any building development in RA17 the following shall be substantially complete: EITHER • All earthworks and provision of infrastructure in stages RA16 OR • All earthworks and provision of infrastructure in stages RA19

Stage	RA18
Description and	This stage includes an area of land adjoining the existing Grenada North area and will primarily be serviced
Issues	from this area. It has an existing rural residential type subdivision approval and basic infrastructure has already been put in place. The design of this development specifically allowed for a more intensive form of
	subdivision to occur at a later date. If more intensive subdivision is proposed in accordance with the

	provisions of the structure plan, then the matters outlined below will need to be addressed.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	Access to this stage. This must show:
	Access and linkage to stages RA15 and RA19
	• The location and alignment of the Collector road from Major Intersection 1 to the existing Jamaica Drive
Stage to include	Construction and vesting of the Collector road from Jamaica Drive to the southern boundary of RA18
	Construction and vesting of the Key Local road to the boundary of RA19
Required works to occur prior to the stage	No specific requirements

Stage	RA19
Description and Issues	This stage includes an area of land adjoining the existing Grenada North and will be primarily serviced from this area. It also adjoins the identified Cleanfill site. Design and layout of the stage will therefore need to relate to the Cleanfill site and should be designed to provide passive surveillance of this area when it becomes a recreation area once the cleanfill site closes.
Development Plan requirements	In addition to those matters noted above the development plan for this stage shall address the following matters
	Access to this stage. This must show:
	 Access and linkage to stages RA17 and RA18
	 The location and alignment of the Key Local road from Nassau Drive to Hilcroft Road
Stage to include	Construction and vesting of the Key Local road from Nassau Drive to the northern boundary of RA17 Construction and vesting of the Key Local road to the boundary of RA18
Required works to occur prior to the stage	Prior or concurrent to the approval of the development plan for this area, the development plan for CA1 must be approved.

Clean Fill Areas: Stages and precursors

Stage	All CA Stages / CA1
Description and Issues	This stage includes the development of the Cleanfill site. Specific issues and matters to be considered are set out above in Section 6.2
Development Plan requirements	In addition to those matters set out in 6.2 the approved development plan for this stage shall address the following matters: • Access to this stage. This must show: • Access and linkage to stages RA17, RA18 RA19 and Nassau Drive
Stage to include	Construction of the Key Local road from Nassau Drive to the northern boundary of RA17
Required works to occur prior to the stage	No specific requirements

Maps

