## INTRODUCTION

This Outline Development Plan (ODP) is for that area of land in Rolleston situated generally to the north of Burnham School Road and Brookside Road between Dunns Crossing Road and the recently developed Stonebrook Drive subdivision to the east of Stonebrook Drive.

This ODP is known as the Stonebrook Drive ODP and uses urban design principles to set the pattern of development over the area to guide future development, and provide a degree of certainty for all parties in the establishment of land uses across the site. It provides a design rationale for the key structuring elements, including the road network, cycle and pedestrian network, open space network, development pattern and utilities to service the area.

Consistent with the Greater Christchurch Urban Development Strategy and Proposed Change Number 1 to the Regional Policy Statement, the ODP provides an opportunity for the creation of an integrated development which meets the objectives of those planning documents, as well as being in keeping with the strategy set out in the Rolleston Structure Plan.

# The ODP has been broken down into four plans. (Density, Movement Network, Green Network and Blue Network).

## **URBAN DESIGN**

The design principles that underpin this ODP are in line with the New Zealand Urban Design Protocol, and promote the following environmental outcomes:

- An urban form which creates a distinguishable sense of place and encourages a community to develop.
- A safe, comfortable and healthy living environment (CPTED Crime Prevention through Environmental Design – principles applied).
- Integration of the roads within the neighbourhood area with existing state highway and arterial roads and public transport routes.
- An integrated roading hierarchy that supports effective and efficient public transport.
- Installation of all the necessary services within the zone, and the connection of those services to all external infrastructure networks.
- Provision of a network of open spaces integrated with cycle and pedestrian routes.
- Dual purpose reserve areas, used for recreation and amenity purposes as well as for stormwater management.
- Opportunities for a wide variety of residential development at low, medium and high residential densities in order to attract a wide range of people from different economic and social groups as future residents.
- Medium density development including elderly persons housing located in conjunction with a core of community facilities and having ready access to public transport.
- Opportunity for high density buildings which relate well to each other and are strategically located in relation to open space and amenities.
- A development that meets District Plan policies to achieve an overall increase in residential density, urban consolidation and a compact urban form.

- Provisions to enable neighbourhood retail, community, or medical facilities to be located within walkable distance (400 - 800m) of any part of the zone, and be within walkable distance of a bus stop within the zone (400 - 800m).
- Provision of local shopping and small business facilities.
- A sustainable stormwater disposal system integrated with open space and reserves.
- The establishment of a master planned concept that provides a defined basis for integrated future development.
- Protection of groundwater resources from contamination.

## **DENSITY PLAN**

The ODP provides for a variety of allotment sizes, with emprehensive residential development and (Recommendation 16) medium density development located close to open space areas and local business centres. More intense development concentrated around the key open space locations will provide greater amenity and encourage high quality urban design features in these areas.

The neighbourhood and Local Centres are is (Recommendation 15) located with frontage to the main through road. A primary school could be located within this ODP, subject to confirmation by the Minister of Education / Ministry of Education and the landowners. (Recommendation 17)

The ODP area achieves a net density of 11 households per hectare, based on a net area of approximately 57.5 hectares. The inclusion of medium density and comprehensive (Recommendation 16) housing areas within the ODP covering some 5.5 hectares means that the entire area will accommodate approximately 633 households.

## MOVEMENT NETWORK

A specific transport assessment completed by Traffic Design Group Ltd (TDG), May 2009, has been carried out, which describes the existing transport environment, provides an assessment of the traffic generation associated with the proposed ODP, considers the development in terms of the local, regional and national planning documents, and assesses the potential traffic effects. The assessment also takes into account the Christchurch Rolleston and Environs Transportation Study (CRETS) formalised within the Canterbury Transportation Regional Implementation Plan (CTRIP).

Access to the area is from four locations: an existing connection to Dunns Crossing Road via Newmans Road, a new road connection to Dunns Crossing Road, a new road connection to Brookside Road and a connection to Stonebrook Drive.

The internal road network includes a main road through the site that will link the southern most access point on Dunns Crossing Road through to Brookside Road, in accordance with the Rolleston Structure Plan. This will be designed in accordance with the principles of new urbanism to promote reduced vehicle speeds and increased safety to other street users. Some form of intersection treatment is appropriate at the main intersections on the main through road to reduce traffic speeds, such as roundabouts or raised tables.

Noise attenuation will be required along the boundary with SH1 to mitigate the effects of traffic noise from that route.

Pedestrian footpaths will be provided on at least one side of each internal road. A number of pedestrian and cyclist links will be provided through the site following road and green linkages.

A significant cycle/pedestrian route will run through reserve areas north to south along the redirected water race. A formal road crossing facility will be provided where this pedestrian/cycle link crosses the main road through the site.

The low speed traffic environment will create pedestrian and cycle friendly public spaces, and provide direct and convenient access within 400m walking distance to open space areas from any dwelling within the site, in accordance with the Rolleston Structure Plan.

## **GREEN NETWORK**

An existing water race runs through part of the site. This is shown on the ODP realigned and incorporated into the reserve and open space network.

The ODP indicates three key open space locations as well as a green network throughout the site. A significant reserve linkage incorporating two of the key open space locations is envisaged that will generally follow the realigned water race through the eastern portion of the site to Burnham School Road.

The other key open space location is shown within the western portion of the site providing green areas at either ends of one of the east-west green linkages.

All key open space locations are adjacent to local business areas, in general accordance with the Rolleston Structure Plan for the positioning of Neighbourhood and Local Centres in this area of Rolleston.

Other areas of open space will be developed as neighbourhood reserves in terms of the overall subdivision design. These will be integrated throughout the area by the green linkages shown on the ODP, and will provide a maximum walking distance of 400m from any dwelling in accordance with the Rolleston Structure Plan.

## **BLUE NETWORK**

All services, including water, sewer, power, and phone are available to the site via the existing road network. There is a sewer pumping station at the corner of Burnham School Road and Brookside Road and there is an existing electricity substation at the corner of Burnham School Road and Dunns Crossing Road.

Water will be supplied from the Council's existing reticulation by connecting to the water main on Brookside Road. Water pressures for the site have been calculated as meeting the requirements of NZS 4404:2004 Land Development and Subdivision Engineering and The New Zealand Fire Service Fire Fighting Water Supplies Cod of Practice NZS PAS 4509:2008.

Sewage will be disposed of to the Rolleston Sewage Treatment Plan via new and existing reticulation. Two sewer main connections will be made from the site to the existing sewer mains. The first connection will service approximately 400 lots and connect to an existing manhole on Burnham School Road. Due to the increase flows, the existing pipe through to the pump station will require upgrading for a length of no more than 50m. The second connection will service approximately 150 lots and will connect to an existing manhole on Brookside Road. The remaining lots will connect to the existing sewer mains running along Burnham School Road and Brookside Road. The existing pump station will not require upgrading to service development in accordance with the ODP.

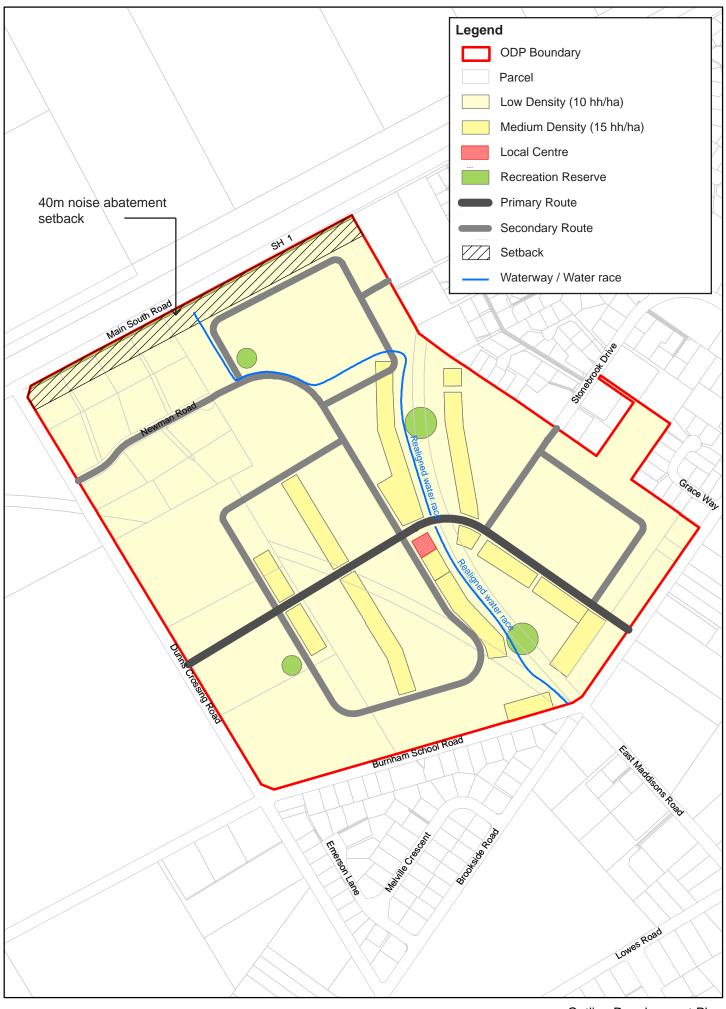
The servicing assessment has been carried out with the Selwyn District Council Five Waters Strategy in mind, and the possibility for recycled water to be made available from the Rolleston Waste Water Treatment Plant to Burnham School Road. If this is available the development may be double plumbed to allow for outdoors irrigation, laundry and

irrigation of public areas with recycled water. This would reduce the potable water input of the development by as much as 40%.

Network operators for both electrical and telecommunications supplies have confirmed that the existing networks have sufficient capacity to reticulate the development area.

Stormwater will be treated in a variety of ways depending upon its origin within the development. Stormwater runoff from house roofs will be disposed of via onsite soak pits, sized to ensure that flow from a roof in a 1 in 10 year storm event will not exceed the infiltration rate.

Soakage basins located within reserve areas will collect stormwater from the roads via low profile kerb and channel before providing treatment and detention and discharging to ground. Stormwater may also be treated at source using raingardens and passive infiltration areas on each allotment to capture stormwater from hardstand areas. In addition carriageway discharges may be transported and treated using swales and vegetated areas. Wherever possible, areas for stormwater treatment and disposal will be incorporated into the overall green network for the site, adding value to its amenity and character.



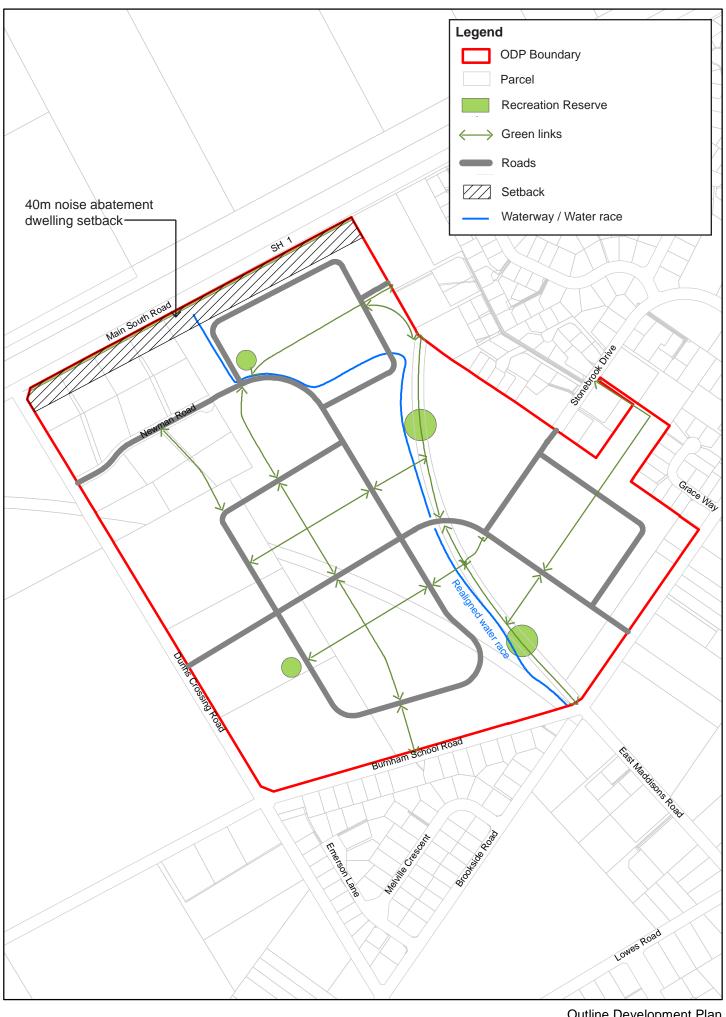


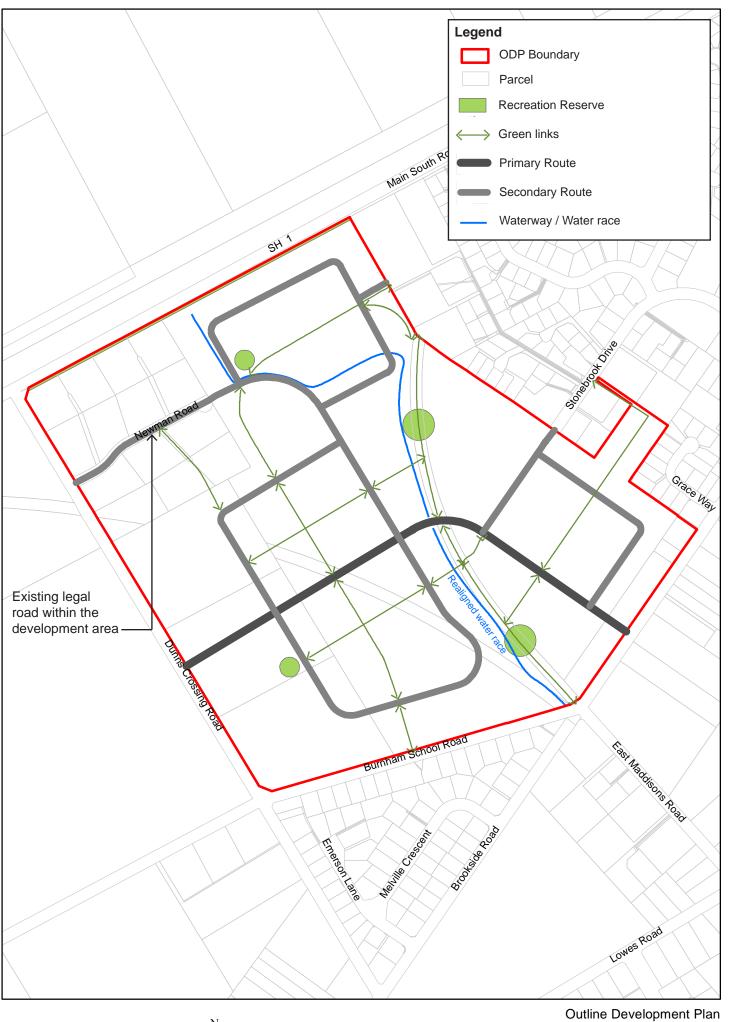


Outline Development Plan

Area 1 - Rolleston

Blue Network





#### INTRODUCTION

This Outline Development Plan (ODP) applies to that area of land in Rolleston which forms a triangle between Norman Kirk Way to the North, Rolleston Drive to the East and Markham Way to the South. The ODP of Area 2 provides a degree of certainty to all parties in the establishment of residential landuses across the site. The key elements of the ODP include the roading network, utilities and densities.

The proposal is consistent with the Greater Christchurch Urban Development Strategy and Proposed Change 1 to the Regional Policy Statement and provides an opportunity for residential infill in proximity to the Rolleston Township and its community facilities. The Area 2 ODP meets the objectives and policies of strategic planning documents and is in keeping with the Rolleston Structure Plan, which applies to this area.

The ODP has been broken down into four two plans. (Density and Movement Network, Green Network and Blue Network).

## **URBAN DESIGN**

The applied design principles seek to provide good Urban Design solutions with the integration of new housing into established neighbourhoods. This infill development is a way of enabling a choice of housing styles and a mixture of densities. The proposal promotes the following environmental objectives and visions:

- Creating a mixture of residential housing from medium to high density (in the form of comprehensive housing) as and where appropriate:
- The development meets District Plan policies to achieve an overall increase in residential density using infill as a sustainable method to create a density of 20hh per ha on existing residential zoned land;;
- Proximity to Rolleston Town Centre and its community facilities (shops) enables pedestrian and cycling activities and encourages walkable/cycle able neighbourhoods.

## RESIDENTIAL DENSITY

This ODP provides for the two residential uses 'Comprehensive' and 'Medium density' development. Both have been identified as appropriate landuses due to location and character of the site and its surrounds. Within these two types of residential development a variety of allotment sizes will create various densities of up to 20hh per ha. Sections with a minimum of  $450\text{m}^2$  and single storey houses are considered to be compulsory required (Recommendation 20) on the boundary with sections along Markham Way Drive (shown as A on the ODP). A 5m setback from this boundary minimises any potential privacy issues between established and new development. All development has to be in accordance with the Selwyn District Medium Density Guidelines. Height, setback and bulk and location elements need to be considered at a subdivision stage.

## MOVEMENT NETWORK

The majority of sites in this development will be accessed off an extension of Markham Way. This extension will most likely to be a cul de sac that is connected to Rolleston Drive via a Pedestrian/ Cycling link. A second pedestrian/cycle link will create a connection between the new residential housing, Rolleston School and the Council Headquarters. Limited access for up to 6 private vehicle access ways is proposed off Rolleston Drive. The access off Rolleston Drive is limited due to its classification and function as a Collector Road.

The intensification of the site is in accordance with the Rolleston Structure Plan and the minor increase in traffic volumes are not expected to give rise to any safety issues, or on the efficient operation of the road network.

## GREEN NETWORK (no ODP plan)

Due to the close distance to Rolleston Reserve, no open space is required for this ODP.

## BLUE NETWORK (no ODP plan)

All services, including water, sewer, power, and phone are available to the site via the existing road network. Connection to the Sewer lateral will be supplied in the roading network in Dryden Avenue.

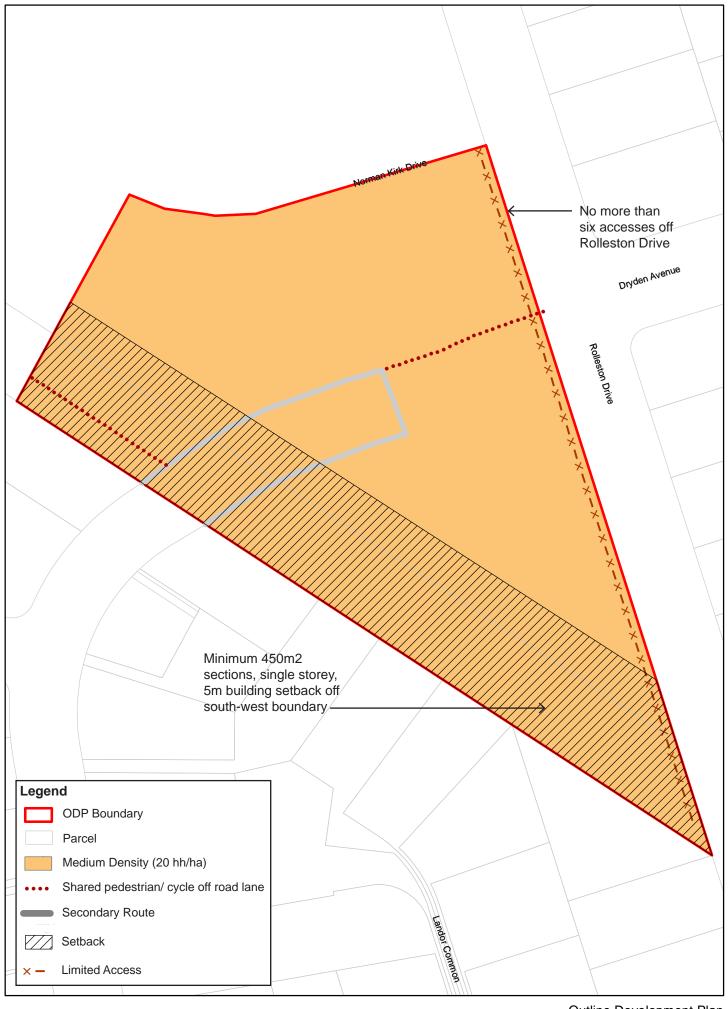
Existing servicing will be sufficient to service 20 households per hectare.

There is sufficient electricity and phone capacity to reticulate the proposed site.

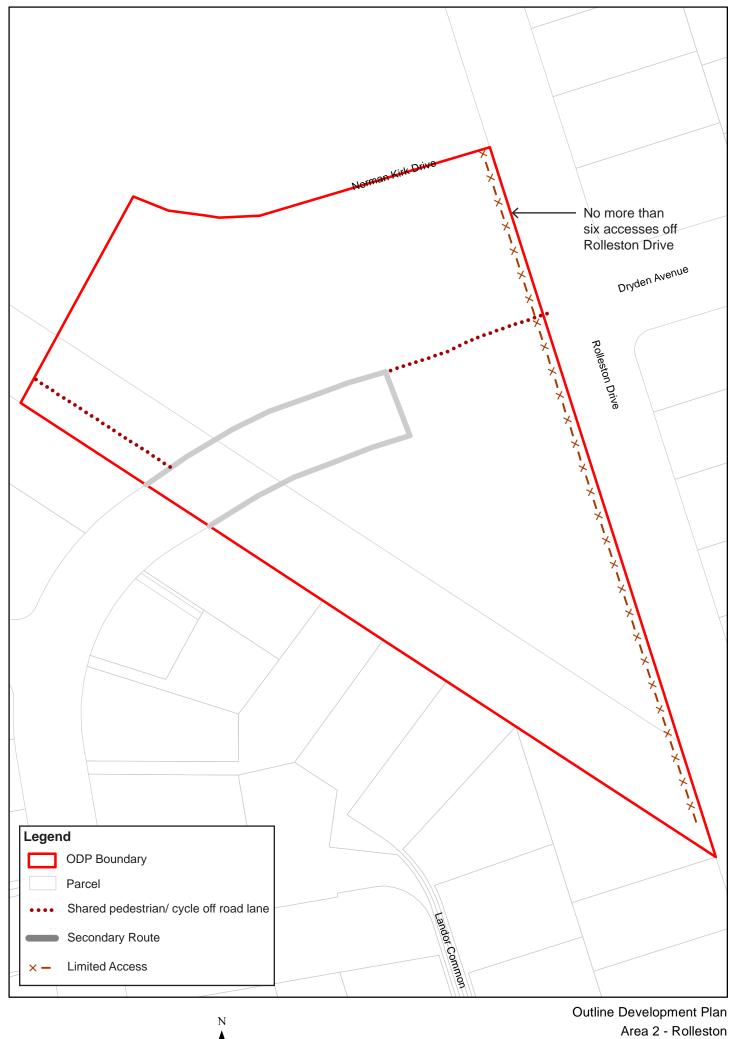
Stormwater will be treated in a variety of ways depending on its origin within the development. Runoff from house roofs will be disposed on site via soakage pits. Stormwater runoff from public road and private access ways will be disposed into the Council system via kerb and channel.

## SPECIFIC ODP STANDARDS (Refer to Rule 12.1.3.37):

- Only single storey houses shall be erected adjacent to the southwest boundary of ODP Area 2 with a minimum section size of 450m<sup>2</sup>.
- A 5 m building setback shall be provided between single storey houses and the southwest boundary of ODP Area 2. (Recommendation No.20)









Movement Network

## **INTRODUCTION**

This Outline Development Plan (ODP) is for the SR3 area as identified in Rolleston Structure Plan. It provides the design principles that will underpin development of the area. Development applications will need to demonstrate consistency with the final ODP that is formulated for the area.

The design principles that underpin this ODP are in line with Policy 7 (Development Form and Design and Policy 8 (Outline Development Plans and Changes of Zoning in District Plan) of Plan Change1 to the Regional Policy Statement and the Development Principles of the Rolleston Structure Plan. Subdivision development of SR3 will need to provide a contextual analysis of this area as outlined in Section 3 of the SDC Subdivision Design Guide.

The ODP has been broken down into four plans. (Density, Movement Network, Green Network and Blue Network).

## **DENSITY PLAN**

Over the ODP area a minimum net density of 10 households per hectare is to be achieved (with a minimum of 484 households). Lots along the rural periphery and Levi Road have an area greater than 1000m<sub>2</sub> and in total, the average lot size shown on the ODP is 750m<sub>2</sub>.

## MOVEMENT NETWORK

A legible road hierarchy providing integrated connections throughout SR3 and to existing subdivisions in Rolleston is to be achieved, as follows.

Primary access to SR3 from Levi Road through planted wide "Avenues". The avenues provide a connection between the local roads and main collector/arterial roads, eg Levi Road. The proposed treatment of these avenues will accommodate swales and tree planting in a central reserve and generous berms to provide an attractive landscaped entry to the area.

"Local Area Streets" will structure the subdivision area and connect it to the adjacent residential area to the west. These roads are able to accommodate on street car parking and tree planting on both sides. The carriageway width is sufficient to accommodate swales where required and a bus route.

"Neighbourhood Streets" provide access to the remaining pattern of neighbourhood and residents streets. In addition, where necessary, private right of ways are used to access up to 6 lots.

A potential bus route can be accommodated along the large local roads and connect through to the adjacent residential subdivisions. The vast majority of the proposed residential lots would be within 200m of a potential bus route. Dedicated cycleways have been included along the avenues and cyclists can be accommodated within the carriageways of other large local and local roads. The principle of walkability has been incorporated through the use of a connected road pattern, additional pedestrian links and the location of open spaces.

## **GREEN NETWORK**

A number of neighbourhood parks are included within SR3. These are located to ensure open space is provided irrespective of the sequencing of development and the pattern of land ownership. All properties within SR3 will be within five minutes walk or 400m radius of a neighbourhood park.

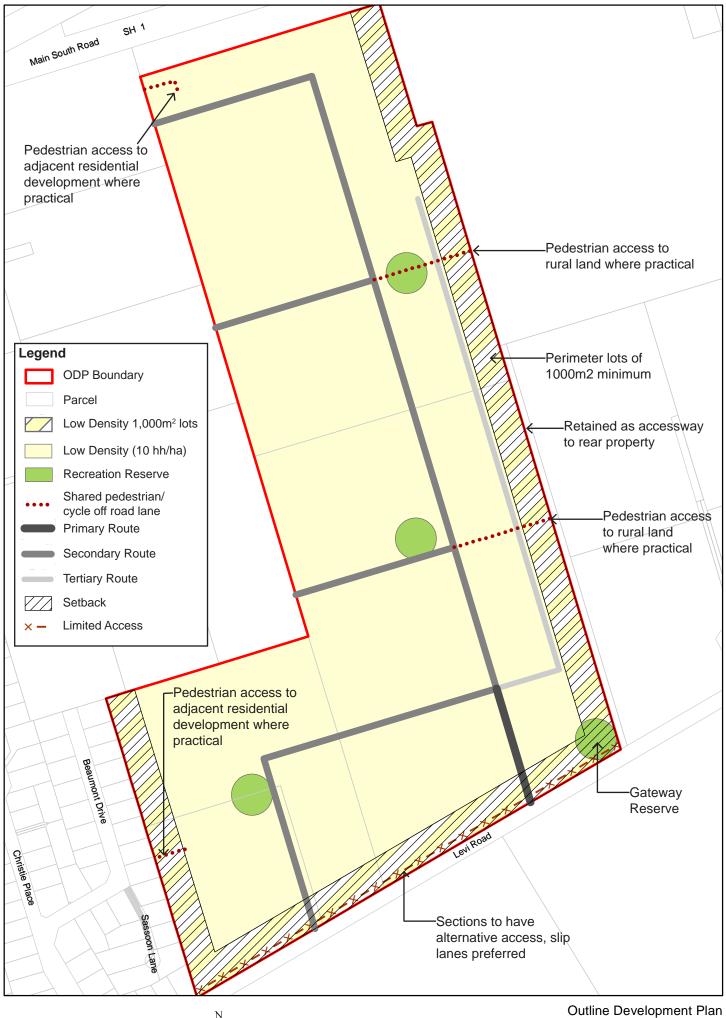
The neighbourhood parks are located such that pedestrian links can be made to the potential future greenbelt along the eastern side of SR3 and/or the surrounding rural area. These neighbourhood parks measure just over 2000m<sub>2</sub> each in area, are overlooked by adjacent housing and are appropriate for children's playgrounds and passive recreation.

The location of the reserves is such that they are surrounded by active fronts, namely the front boundaries of residential properties. This ensures passive surveillance and increased security.

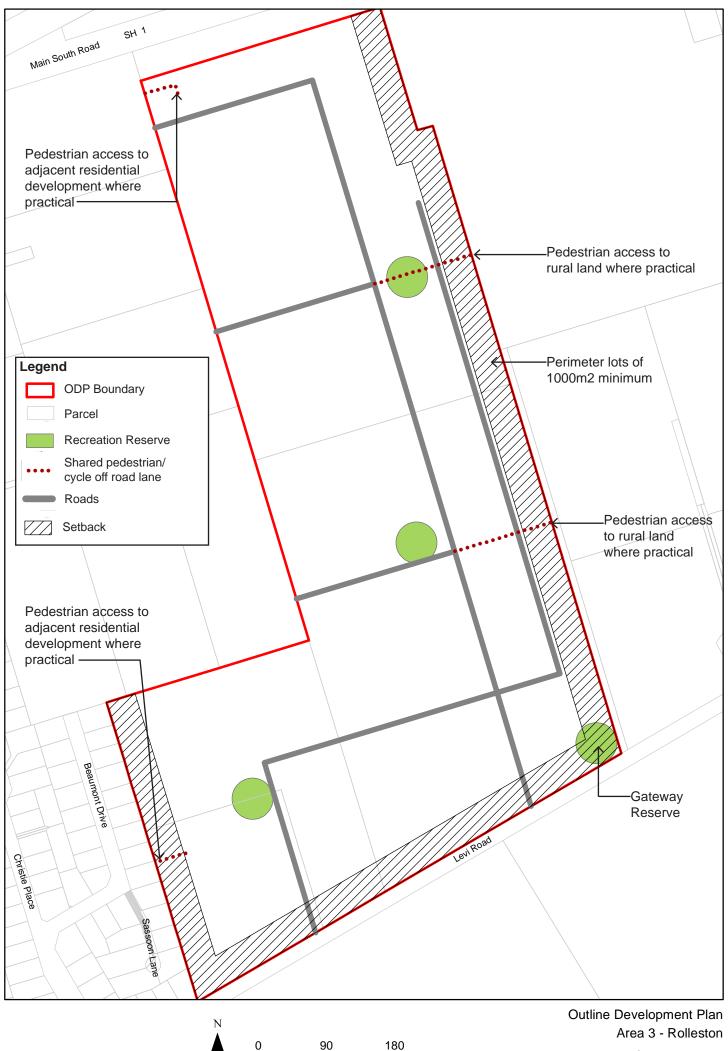
#### **BLUE NETWORK**

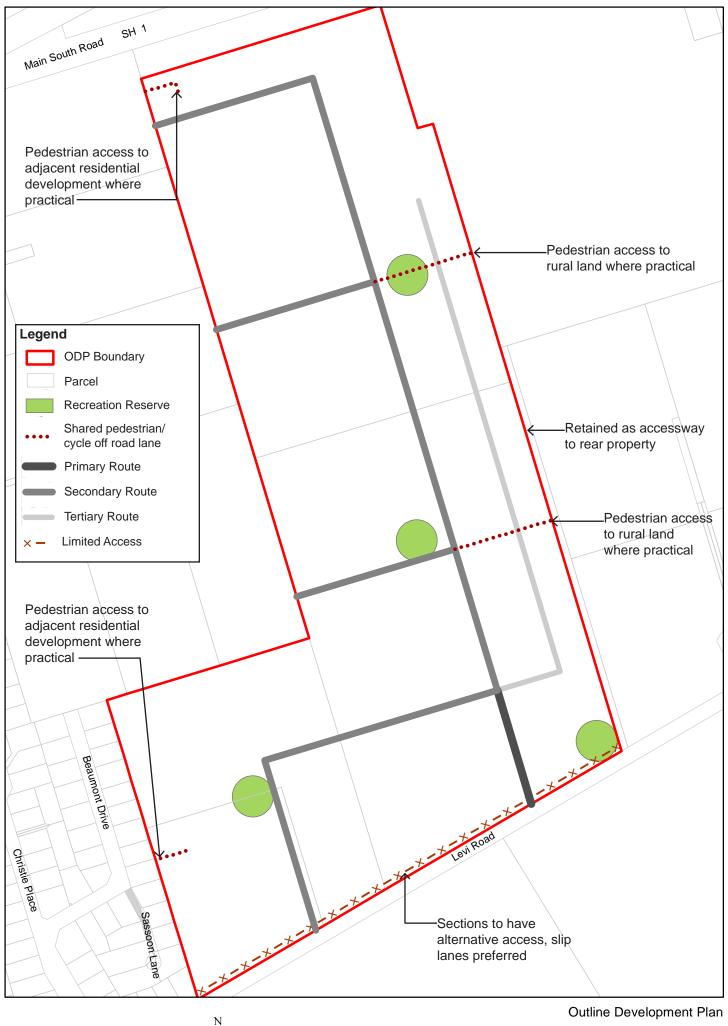
Water connections will be supplied through the existing water supply in Rolleston. All water mains will follow the road network or pedestrian routes. Within SR3, stormwater is to be accommodated through a combination of swales and below ground management and treatment devices, accommodated within the road reserves.

Sewer connections will require an extension of the existing sewer main in Levi Road into SR3. This will enable sewage for these properties to connect in to the existing sewer network via gravity. A new pump station will be required to collect the follow and pump it into the existing sewer network.









## **INTRODUCTION**

This Outline Development Plan (ODP) is for Development Area 6. Area 6 comprises 83ha and is bound by Dynes Road to the North, Goulds and East Maddisons Roads to the West and areas recognised by Council as future residential growth areas to the south and east.

The ODP embodies a development framework and utilises design concepts that are in accordance with:

- Policy B4.3.7 and B4.3.68 of PC7
- Canterbury Regional Policy Statement
- The Rolleston Structure Plan
- The Greater Christchurch Urban Development Strategy (UDS)
- The Ministry for the Environment's Urban Design Protocol

The ODP has been broken down into four plans. (Density, Movement Network, Green Network and Blue Network).

#### **DENSITY PLAN**

The ODP provides for a variety of allotment sizes from density residential areas of 15 to 20 households/ha through to larger 'standard' residential properties. Generally the density is higher within the northern part of the site and around key amenity areas and decreases towards the southern edge. The highest density housing is to be located in direct proximity to the proposed neighbourhood and Local Centres and larger open spaces such as the proposed adjacent recreational precinct, green corridors and neighbourhood parks. The ODP Area shall achieve a minimum net density of 13 households/ha.

A Neighbourhood Centre will be located in the vicinity of the Goulds Road/East Maddisions Road intersection. The Centre will make provision for approximately 1000m² gross retail floor area to cater to local weekly and day-to-day retail requirements, though other non-retail uses (such as other business and/or community facilities) may also be appropriately located in the Centre. Additional land is also required for associated carparking and landscaping to service the eventual activities established in the Centre.

Approximately 2,500m² of the Centre's total land area will be located within ODP Area 6 and its primary frontage will address East Maddisons Road. To avoid the potential negative effect of the centre 'turning its back' onto the adjoining eastern residential areas, a neighbourhood park will be located directly east of the centre to provide a community hub and a secondary active frontage. Two east-west connections through the centre will allow for a high level of pedestrian permeability and encourage interaction between the Centre and the adjacent residential areas.

A smaller Local Centre of roughly 1,000m² (land area) on Dynes Road provides local shopping amenity and opportunities for small business and community facilities to serve the immediately adjacent area. In total, the Centre will provide for roughly 450m² of gross retail floor space. As with the Neighbourhood Centre, the Local Centre will comprise land in addition to that required for retail uses to allow for carparking and landscaping.

The Local Centre has been located so as to generate a 'dialogue' with the proposed future recreation precinct to the north, and to enhance amenity values for the local residential environment.

## MOVEMENT NETWORK

The ODP provides for a range of transport options, including:

- vehicular connections linking to Goulds Road, East Maddisons Road, Dynes Road and Springston-Rolleston Road;
- active transport connections at the site boundaries to adjacent areas and internal pedestrian and cycle corridors to encourage viable alternatives to individual motor vehicles; and
- roads which will enable the provision of public transport routes through the site should such services be deemed appropriate:

Roading connections have been designed so as to balance the permeability of the site against the requirements to minimise the number of new intersections and maintain appropriate intersection spacing. The ODP employs a roading hierarchy that allows for Primary, Secondary and Tertiary Roads; however only the more significant roads (Primary and Secondary) have been shown on the ODP. As the Tertiary Roads' primary function will be to service the residential areas, their eventual layout will respond to the detailed subdivision design of those areas.

Goulds Road and East Maddisons Road provide primary road corridors on the Area's western periphery. Internally, the site contains one primary collector road which links the Neighbourhood Centres envisaged by the Rolleston Structure Plan at East Maddisons and Springston-Rolleston Roads. Though the collector is envisaged to cater for a large portion of through vehicle movements, it is not a high-speed corridor and rather, should provide direct access to adjoining sites. To this end, it is envisaged that the collector will interact with the adjacent neighbourhoods, rather than creating severance between them.

The proposed north-south and east-west secondary road connections perform similar functions to the primary roads, providing ample access throughout the site as well as good external links and connections to the immediate neighbours. Notwithstanding this similarity in function, secondary roads will assume a form which is of a more residential nature, and cater less to through vehicle traffic. In addition to the proposed internal secondary routes, Dynes Road will perform a secondary function along the site's northern boundary.

An integrated network of tertiary roads will facilitate internal distribution of traffic, provide access to properties, connect open spaces within the site and offer future links to the immediate neighbours. The tertiary roads will provide a narrower carriageway to encourage slower speeds and to maintain a residential character.

The overall aim of the pedestrian and cycle network is to encourage active transport use within the site and to enable good connections to the wider Rolleston area. Primary and Secondary Roads will provide footpaths and cycle routes, including designated cycle lanes where appropriate. Tertiary Roads will also provide adequate space for cyclists and convenient pedestrian movements. Shared off-road pedestrian and cycle connections will be provided to achieve safe, attractive active transport corridors and recreational amenity.

## **GREEN NETWORK**

The ODP reflects and adds to the green network anticipated in the Rolleston Structure Plan. A range of reserve types and sizes are proposed to create a connected open space network, whereby parks will be linked via green corridors formed along existing sewer stockwater races and along new roading corridors.

To reflect the identity and character of Rolleston as a rural town, future development could retain portions of existing shelter belts where practicable or incorporate similar landscape design elements along green corridors (This issue will be addressed during the subdivision content stage). (Recommendation 23)

Incorporating new structural vegetation, stormwater swales and 'green' streets, four green corridors and green links will contribute generously to the area's sense of place and overall amenity. The green corridors, as well as the proposed neighbourhood parks, are located immediately adjacent to higher density residences to compensate for reduced private open space on individual allotments. In addition, co-locating green spaces alongside residential sites will allow passive surveillance for enhanced safety and security.

Neighbourhood parks will be located to ensure that an open space is within 400m walking distance from any new dwelling. The parks will be of varying sizes to reflect both their purpose and their neighbourhood's character and will include both active and passive functions.

Portions of the green network will also perform a stormwater conveyance and treatment function, particularly for runoff from roads and hardstand in public spaces. Opportunities for pedestrian and cycle paths will also be realised in the design of future reserves and green links to ensure a high level of connectivity is afforded to residents and visitors, and to maximise the utility of the public space.

Council's open space requirements cited in the LTP and Activity Management Plans should be referred to during subdivision design. Where any additional reserve areas may be proposed at subdivision stage over and above the requirements of Council, alternative arrangements may be made for any additional open space land that the Council does not take towards reserve contributions. These arrangements may include purchase by the Council with a corresponding targeted rate, gifting the land to the Council, or other mechanisms as may be agreed at subdivision stage.

No specific mitigation treatment is required for Area 6 to address potential reverse sensitivity effects. Adjoining land uses to the south and east are not of a nature that would require specific effects management at the rural/residential interface over and above the decreased residential density in this portion of the ODP Area.

Moreover, as these adjoining areas are anticipated by Council strategic planning policy for future urban use, ODP Area 6 makes provision to integrate with them, rather than become isolated from them.

## **BLUE NETWORK**

The underlying soils are relatively free-draining (mostly gravels) and infiltration to ground is generally the most appropriate means of stormwater disposal. The public stormwater system will primarily only be required for runoff generated from within the road reserve, as individual buildings will be able to dispose roof water directly to ground within private properties. Where there is potential for the stormwater to be

contaminated (e.g. road runoff), treatment will be incorporated in the stormwater system prior to disposal.

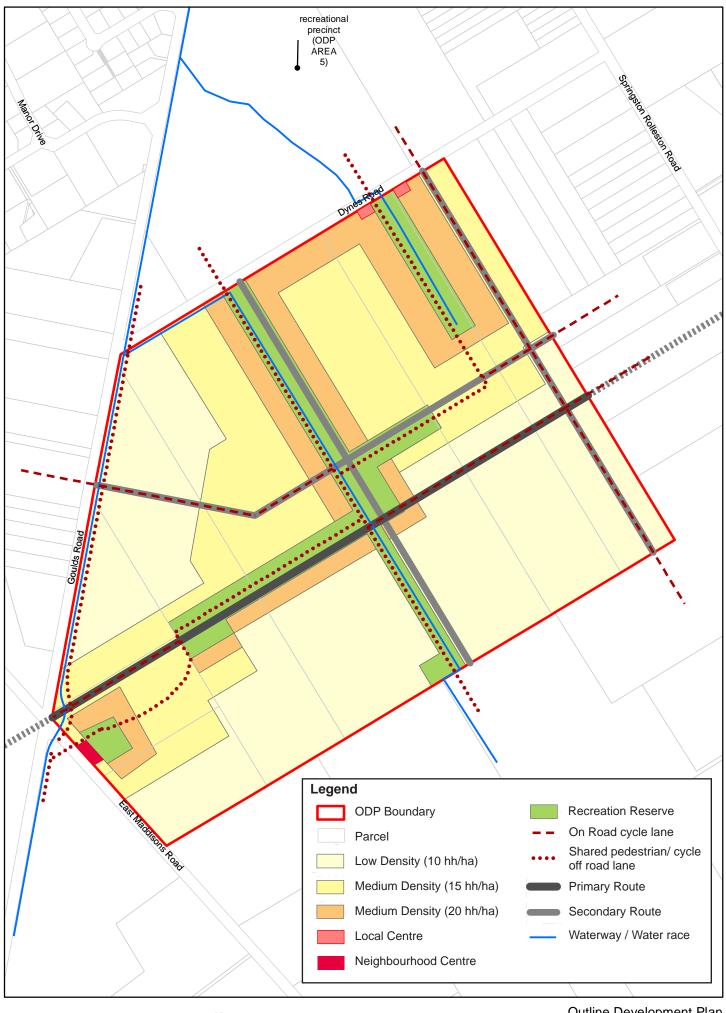
There are a range of options available for the collection, treatment and disposal of stormwater. Final treatment solutions will be determined through detailed site investigations during subdivision stages; however, common themes will be achieved throughout the area, including that systems will be designed to integrate into both the roadway and reserve environments. The ability to add amenity value, beyond a pure stormwater function, will also be key component to the overall design.

The stormwater conveyance and disposal systems proposed for this site will be consistent with other effective stormwater systems commonly used within Rolleston. The relatively flat nature of the site necessitates the management of stormwater treatment and disposal to be undertaken as a number of discrete catchments, rather than conveying stormwater from the entire site to one central treatment location. However, to minimise on-going maintenance costs and maximise integration potential, the number of these treatment areas will be minimised and main stormwater treatment areas will be located within the major open spaces.

Ground levels slope naturally to the south, making a primarily gravity wastewater network entirely feasible. The area immediately adjacent to Dynes/Goulds Road intersection is currently able to connect, via gravity, to the existing wastewater network. Further expansion of the existing wastewater network will be required to enable the remaining majority of the site to connect. The Council's East Selwyn Sewer Scheme outlines how the existing wastewater network will be expanded to service this area. As anticipated by the Scheme, wastewater from this site will connect into the extended SDC trunkmain system along Springston Rolleston Road. The alignment of these connecting pipelines will follow proposed road and pedestrian connections to Springston Rolleston Road. These connections pass through the land immediately to the east of ODP Area 6.

If the staging of development is such that this land between ODP Area 6 and Springston Rolleston Road is not initially available for a piped route, then a temporary pump station(s) could be constructed to divert flows around this land.

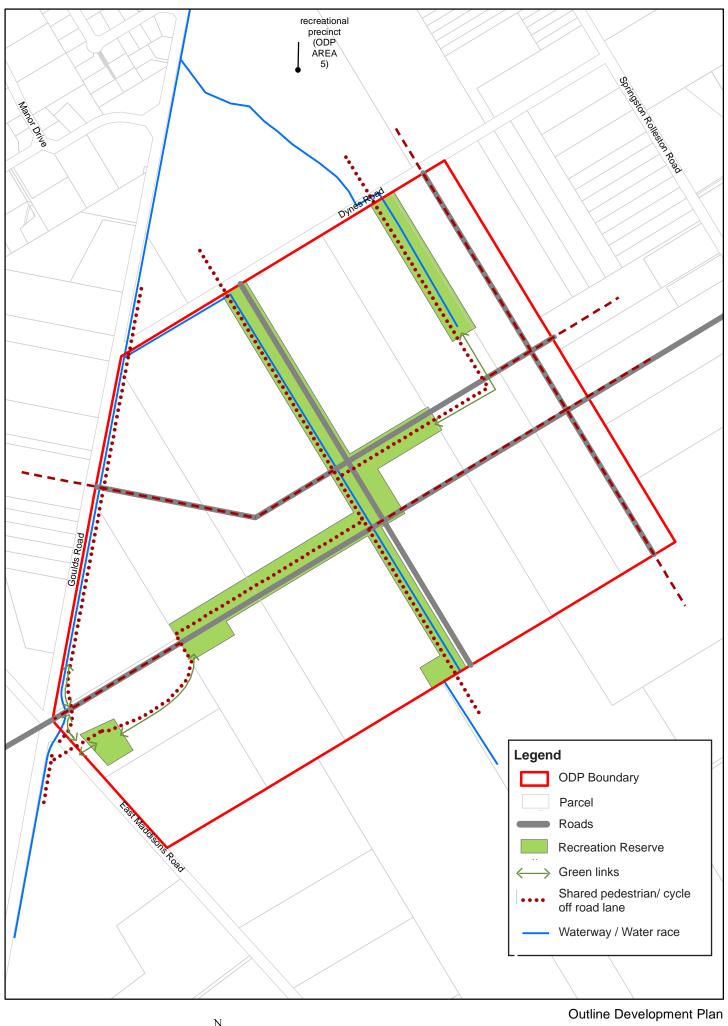
The water reticulation will be an extension of the existing water supply in Rolleston. Selwyn District Council currently has plans to commission additional water bores, to match the expected increase in water demand from the identified growth areas. If required, an additional bore field could be incorporated within the development of this site to assist servicing requirements for the southern development areas.

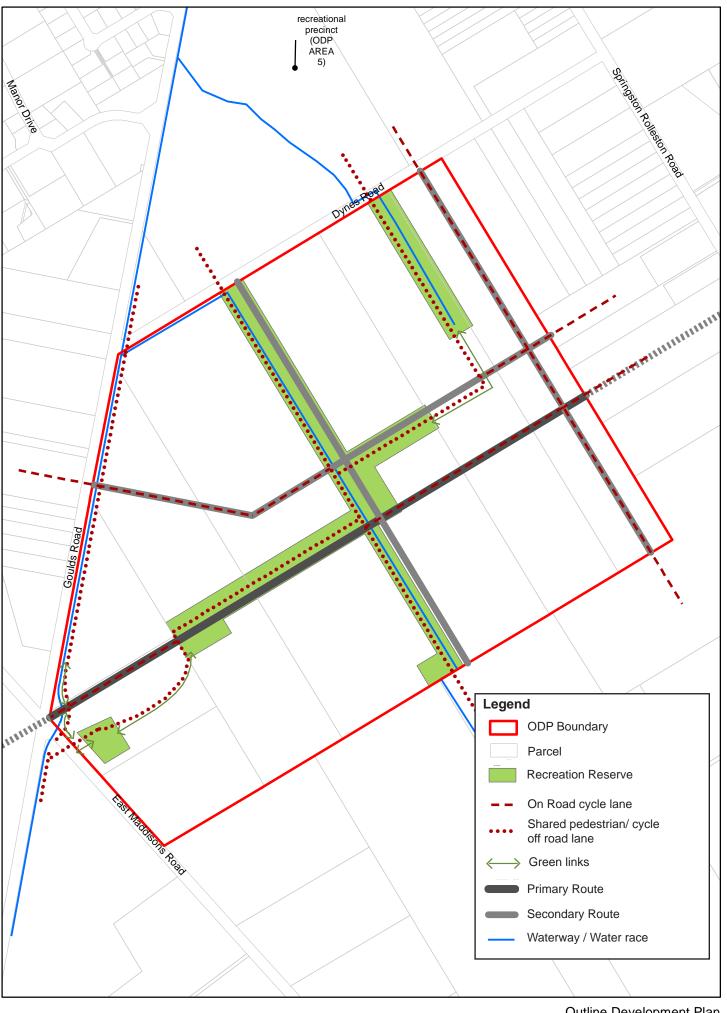




240 \_\_\_m

120





## INTRODUCTION

The Outline Development Plan (ODP) is for an area of land located in Rolleston situated at the intersection of SH1 and Rolleston Drive with the only access being from dual entry points on Overbury Crescent.

This ODP (known as Park Grove Mews) uses urban design principles to set the general patterns of development over the area to guide future development and provide a degree of certainty for all parties in the establishment of land uses across the site. It provides a design rationale for the key structure elements including the roading network, cycle and pedestrian network, and access to open space of the area.

Consistent with the Greater Christchurch Urban Development Strategy and Proposed Change 1 to the Regional Policy Statement , the ODP provides an opportunity for the creation of an integrated high density development which meets the objectives of those planning documents as well as being in keeping with the strategy set out in the Rolleston Structure Plan.

The ODP has been broken down into **four three** plans. (Density, Movement Network, Green and Network **Blue Network**).

## **URBAN DESIGN**

Design principles that underpin this ODP are in line in the New Zealand Urban Design Protocol and promote the following environmental outcomes:

- An urban form which creates a distinguishable sense of place and encourages a community to develop.
- A safe, comfortable and healthy living environment (CPTED Crime Prevention through Environmental Design principles applied).
- Integration of the roads within the neighbourhood area with existing state highway and arterial roads and public transport routes.
- Installation of all the necessary services within the zone, and the connection of those services to all external infrastructure networks.
- Provision of a network of cycle and pedestrian routes.
- Access to an existing recreational reserve for recreational and amenity purposes (located around Dryden Avenue and McCauley Street).
- Opportunity for high density buildings which relate well to each other and are strategically located in relation to open space and amenities.
- Opportunities for a higher density residential development which will provide a use not currently provided for in the immediate surrounding area and offer a living opportunity from difference economic and social groups of future residents.
- Master Planned development integrating house design, colour palette, façade, and front yard landscaping integrated with the street scene.
- A development that meets District Plan policies to achieve an overall increase in residential density, urban consolidation and a compact urban form.
- Protection of groundwater resources from contamination.

## **RESIDENTIAL DENSITY**

The ODP provides for a Master Planned high density development with individual allotments averaging approximately 400 m<sup>2</sup> per lot.

Each individual site will have a house specifically designed which will form part of the Resource Consent process to enable the site to comply with all required set backs.

recession planes and site coverage provided in the District Plan. The ODP provides a net density of 19.19 households per hectare on a total area of 3.596 ha.

## MOVEMENT NETWORK

A specific transport assessment completed by Traffic Design Group Ltd (TDG) has been carried out, which describes the existing transport environment, provides an assessment of the traffic generation associated with the proposed ODP, considers the development in terms of the local, regional and national planning documents, and assesses the potential traffic effects. The assessment also takes into account the Christchurch Rolleston and Environs Transportation Study (CRETS) formalised within the Canterbury Transportation Regional Implementation Plan (CTRIP).

Access into the site is from two existing frontages from Overbury Crescent. The internal road links will use these frontages as the entry points to create the primary spinal traffic road. This primary road will give direct access to the property at the north eastern and south western sections of the property.

A secondary "Living Street" services the majority of the lots to the northern part of the property and will provide for slow two way traffic with a higher level of landscaping linking the street landscaping with that associated with the front yard of individual sites. A pedestrian linkage will be created between the primary and secondary road..

At the south western side of the block, a Comprehensive Development of higher density living is provided and is serviced by a local cul de sac providing on site car parking complementing that of the high density accommodation.

Noise attenuation has been achieved with an established bund along the SH1 boundary which complies with the **Council's relevant** noise control rules, with any houses constructed within a 40m set back of the highway being required to have noise attenuation.

Pedestrian footpaths will be provided on at least one side of each internal road with a linkage incorporated between the main internal road and the secondary road.

A low speed traffic environment will create pedestrian cycle public friendly spaces.

All lots as a result of the cycle and pedestrian network will have direct access to the existing adjacent reserve to the west linking through to Rolleston Drive.

## **GREEN NETWORK**

The south western access is adjacent to an existing reserve with which the property has a common legal boundary. This reserve also links through to a main open space area (containing a playground) around Dryden Avenue and McCauley Street.

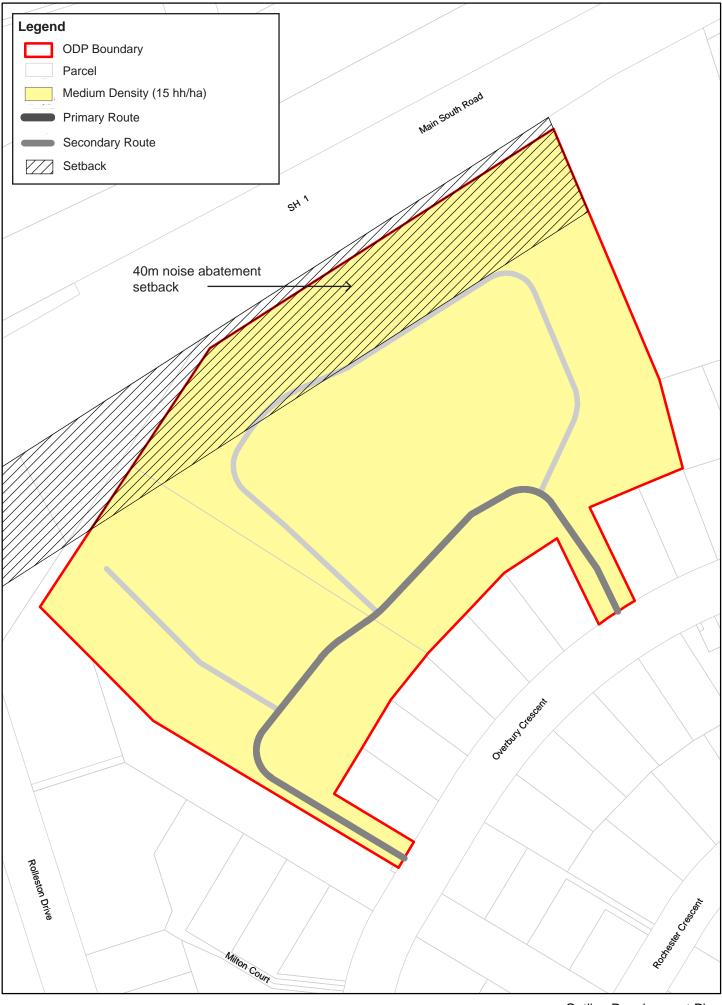
#### BLUE NETWORK (no ODP plan)

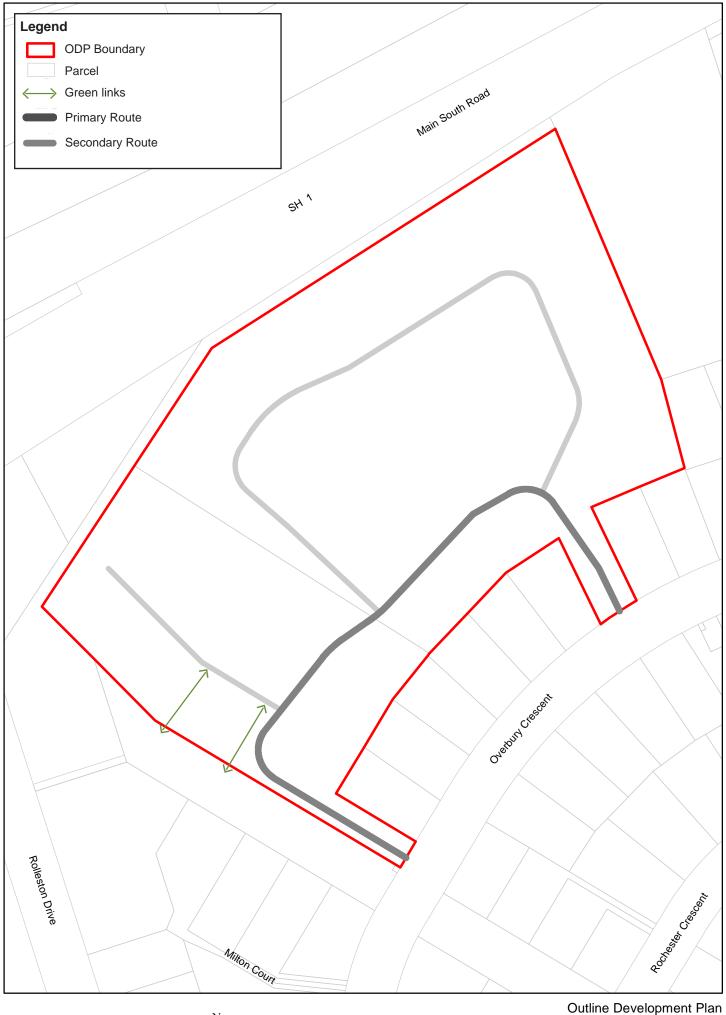
All services including water, sewer, power, and telephone are available to the boundary of the site via the existing roading network. These will be extended into the site via the proposed roading network to provide those services to all individual allotments.

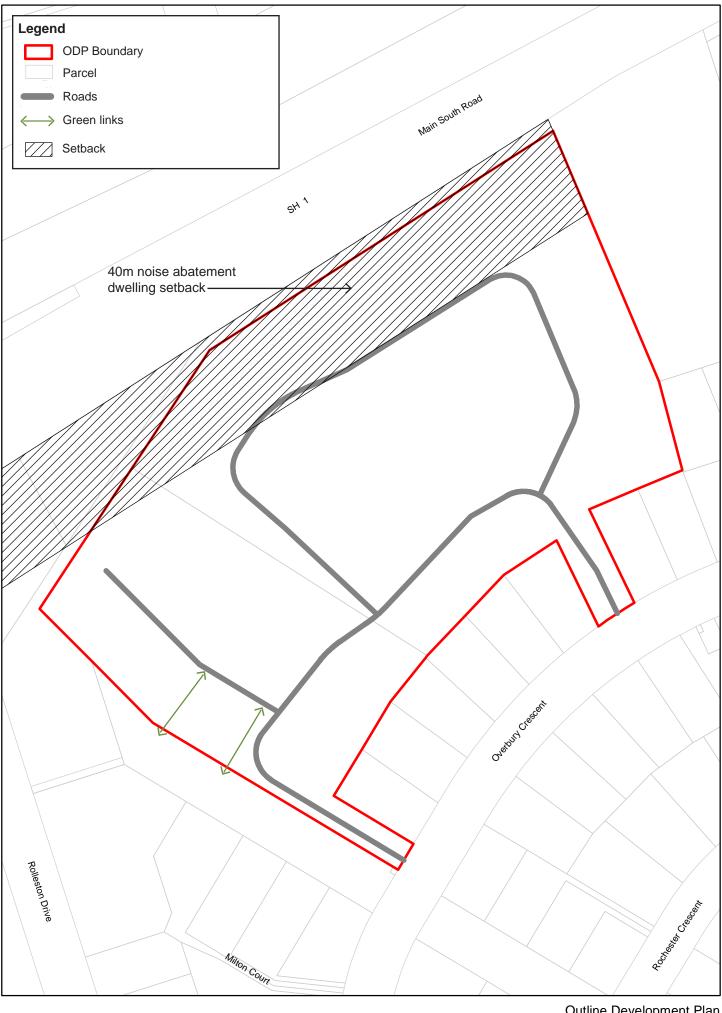
Sewerage capacity is available at the Rolleston Sewerage Treatment Plan via the existing reticulation.

Potable water capacity is available from the existing Rolleston water supply.

Stormwater will be treated through Regional Council requirements.	stormwater	systems	complying	with the	Canterbury







## INTRODUCTION

The Outline Development Plan (ODP) is for an area of land located in Rolleston currently being serviced by a current Right of Way known as Park Lane which has access from SH1.

This ODP (known as Park Lane) and uses urban design principles to set the general patterns of development over the area to guide future development and provide a degree of certainty for all parties in the establishment of land uses across the site. It provides a design rationale for the key structure elements including the roading network, cycle and pedestrian network, and access to open space of the area.

Consistent with the Greater Christchurch Urban Development Strategy and Proposed Change 1 to the Regional Policy Statement, the ODP provides an opportunity for the creation of an integrated development which meets the objectives of those planning documents as well as being in keeping with the strategy set out in the Rolleston Structure Plan.

The ODP has been broken down into four plans. (Density, Movement Network, Green Network and Blue Network).

#### **URBAN DESIGN**

Design principles that underpin this ODP are in line in the New Zealand Design Protocol and promote the following environmental outcomes:

- An urban form which creates a distinguishable sense of place and encourages a community to develop.
- A safe, comfortable and healthy living environment (CPTED Crime Prevention through Environmental Design principles applied).
- Integration of the roads within the neighbourhood area with existing state highway and arterial roads and public transport routes.
- Installation of all the necessary services within the zone, and the connection of those services to all external infrastructure networks.
- Provision of a network of cycle and pedestrian routes.
- Access to the existing recreational reserve and provision for recreational and amenity purposes.
- Opportunities for the provision of residential development at a density of a minimum of 10 lots per hectare for which there is current strong demand in the general Rolleston area.
- A Master Planned residential development integrating the roading network with the existing environment and connecting with proposed sub-divisions linking roading, pedestrian, and walking access and linkages to the main local arterial roads.
- A development that meets District Plan policies to achieve an overall increase in residential density, urban consolidation and a compact urban form.
- Protection of groundwater resources from contamination.

## **DENSITY PLAN**

The ODP provides for a variety of allotment sizes resulting in a yield of 10 household lots per hectare. The density plan has been calculated taking into account the multiple ownership that currently exists throughout the total ODP area.

## MOVEMENT NETWORK

The ODP provides numerous transport options including:

- Restricting access to SH1 as required by NZTA.
- Linkage from Park Lane through to Beaumont Drive through to Levi Road to link with the arterial roads into and out of Rolleston.
- Provide secondary roads that link to the adjacent rezoned land to the east as zoned on ODP Area 3.
- Linkage integral to provide pedestrian, cycle and green linkages within the multiple ownership.

The ODP sets out the roading pattern taking into account the development in terms of the local, regional and national planning documents and assesses the potential traffic effects. The network takes into account the Christchurch Rolleston Environs Transportation Study (CRETS) formalised with the Canterbury Transportation Implementation Plan (CTIP).

The roading network is also in accordance with existing Resource Consents issued by the Selwyn District Council and provides for no alteration to the current traffic network as approved by the Council, other than a minor addition in the north eastern corner of the property.

Access to the site will be from the currently formed and legalised Marlowe Road to the north through Park Lane to Beaumont Drive and Shadbolt Lane to the south. Access to SH1 will be formally stopped both legally and physically once the extension of Marlowe Road is formed, the latter being required to be constructed firstly to enable the balance of the land in the ODP area to be sub-divided.

The roading network provides three connections into ODP Area 3. The secondary and tertiary roading connections are also shown on the ODP.

Legalised pedestrian linkages are shown to coincide with the ODP for ODP Area 3 noting that the location of the pedestrian linkage will be site specific once Resource Consent applications are made for land in and around this area. Servicing the areas of land in between the neighbours and local area streets will be undertaken by small neighbourhood roads or cul de sacs complying with the Council's sub-divisional design rules for such roads.

Noise attenuation will be achieved by extending the bund adjacent to the present Park Lane entrance to SH1 to the eastern boundary of the property outlined in blue on the ODP. Landscaping of the bund will be consistent with that already planted and established with the balance of the bund from this point up into Rolleston Drive.

There will be no dwelling erected in a 40 metre set back from the edge of the present seal on SH1.

Pedestrian footpaths will be provided on at least one side of each neighbourhood and local street. The road designed will provide for a cycleway on to the main neighbourhood and local roads as shown on the ODP.

## **GREEN NETWORK**

The ODP identifies the general locality of some small local neighbourhood open space areas which will be site specific upon the lodgement of a Resource Consent. The size and location will be agreed with the land owner and the SDC at Resource Consent stage.

Green linkages are incorporated in the ODP to provide connection between streets and areas within the ODP.

## **BLUE NETWORK**

All services including water, sewer, power, and telephone are available to the boundary of the site by the existing roading network. These will be extended into the site via the proposed roading network to provide those services to all individual allotments.

Sewerage capacity is available at the Rolleston Sewerage Treatment Plan via the existing reticulation.

Potable water capacity is available from the existing Rolleston Water Supply and there is available if the SDC desire, connection to a suitable additional potable water supply well located on the site.

Storm water will be treated through storm water systems complying with the Canterbury Regional Council requirements.

