LINCOLN AREA 3

OUTLINE DEVELOPMENT PLAN

REVISION I
ISSUED 18.11.09

INTRODUCTION

This Outline Development Plan (ODP) is for Area 3 as identified in plan change 7. This provides an overarching urban design framework to guide future development of the land. It provides the principles and design intent that will underpin development of the masterplan. Development applications will need to demonstrate consistency with the final ODP that is formulated for the area.

This ODP explains the design rationale behind the key structuring elements which underpin the ODP including the following:

- Road network: the interconnected road hierarchy of primary and secondary routes providing for vehicles, cyclists and pedestrians.
- Cycle and pedestrian network: the movement network for cyclists and pedestrians along road corridors and off-street linkages
- Stormwater network: Where ground conditions permit stormwater is to be discharged to ground, otherwise via ephemeral watercourses and swales along road networks.
- Open space network: reserves and parks offering a range of recreational opportunities and amenity for the site, as well as road corridors with significant tree avenues
- Development pattern: higher intensity development around a new neighbourhood node and system of open space and natural features, with lower intensity over the balance of the area.

Consistent with the Lincoln Structure Plan, the ODP supports the principles of strong connectivity to Edward Street, Birchs Road and Ellesmere Road, protection of valued drainage paths through the site and the provision for a future school/ community facilities site and neighbourhood centre.

URBAN DESIGN PRINCIPLES

The design principles that underpin this ODP are in line with the Ministry for the Environment's design guide for urban New Zealand "People Places Spaces" which is endorsed by the 'New Zealand Urban Design Protocol'.

Principle	Elements	Purpose
Consolidation and dispersal	■ Development patterns ■ Intensity	To promote higher-intensity development around existing or new nodes and lower density on the periphery. This allows local communities, businesses and public transport to be strengthened and resource efficiencies achieved, while reducing environmental impacts on peripheral areas.
Integration and connectivity	■ Movement networks ■ Building interfaces	To promote development that is integrated and connected with its surrounding environment and community. This facilitates ease of access, economy of movement and improved social interaction.
Diversity and adaptability	■ Mixes of uses ■ Flexibility of buildings	To promote choice through the provision of a diverse mix of compatible activities and uses, so built environments can adapt over time. This facilitates the ability to respond efficiently to social, technical and economic changes.
Legibility and identity	■ Town form ■ Visual character	To promote environments that are easily understood by their users, and that display a strong local identity and appropriate visual character. This facilitates an enhanced usage, enjoyment and pride in local places.
Environmental responsiveness	■ Ecosystems ■ Green network ■ Urban water ■ Waste ■ Energy	To promote urban environments that are responsive to natural features, ecosystems, water quality, reduced energy usage and waste production, and balance the spatial needs to achieve this with those required for urbanisation. This facilitates improved ecological outcomes.

ROAD NETWORK AND WATER SUPPLY PLAN

Primary route

Secondary route

Specific intersection design

OWNERS

1. Cooke Family Trust
2. Plant & Food
3. Fulton Hogan
4. Prattley Family Trust

ROAD NETWORK

A legible hierarchy should be created for roads within Area 3, providing integrated connections to adjacent neighbourhoods and future development blocks. The primary routes should be consistent with the Lincoln Structure Plan and support strong connectivity to Edward Street, Birchs Road and Ellesmere Road. The road network should provide efficient and convenient connections between destination points such as community facilities, including the proposed neighbourhood centre and school, and allow for public transport. A logical choice of direct routes should be provided to disperse traffic volumes and reduce travel distances.

Provision of primary and secondary routes will enable safe pedestrian and cycle movements through the site, movement paths for stormwater, and green corridor connections with large centralized areas of open space. Design strategies for these roads should be integrated while minimising conflict between vehicles, pedestrians and cyclists. Primary routes will create a ‘spine’ for the site with commercial and community areas having direct frontage to these routes.

The north-south oriented primary routes will cross the drainage corridor, while other routes will follow the edges of the centralised reserve areas, providing safe, memorable and legible movement patterns that relate to natural site features and vistas.

All other local streets are not included in the ODP to ensure that the layout remains flexible and responds to built form.

The length, location, geometry, width and overall design of these streets should reduce traffic speeds to allow for safe, pedestrian accessible environments. The patterns created by the streets and open space network should connect neighbourhoods, and in general this will mean that most roads will be through-routes, and any cul-de-sacs should be limited in number and length.

WATER SUPPLY NETWORK

Additional water supplies will be obtained from the installation of new bores. These bores will be located to suit the required pressures and flows. All water mains will follow the road network or pedestrian routes. There are a number of existing bores over the site that could be upgraded to potable standard.

CYCLE AND PEDESTRIAN NETWORK PLAN

CYCLE AND PEDESTRIAN NETWORK

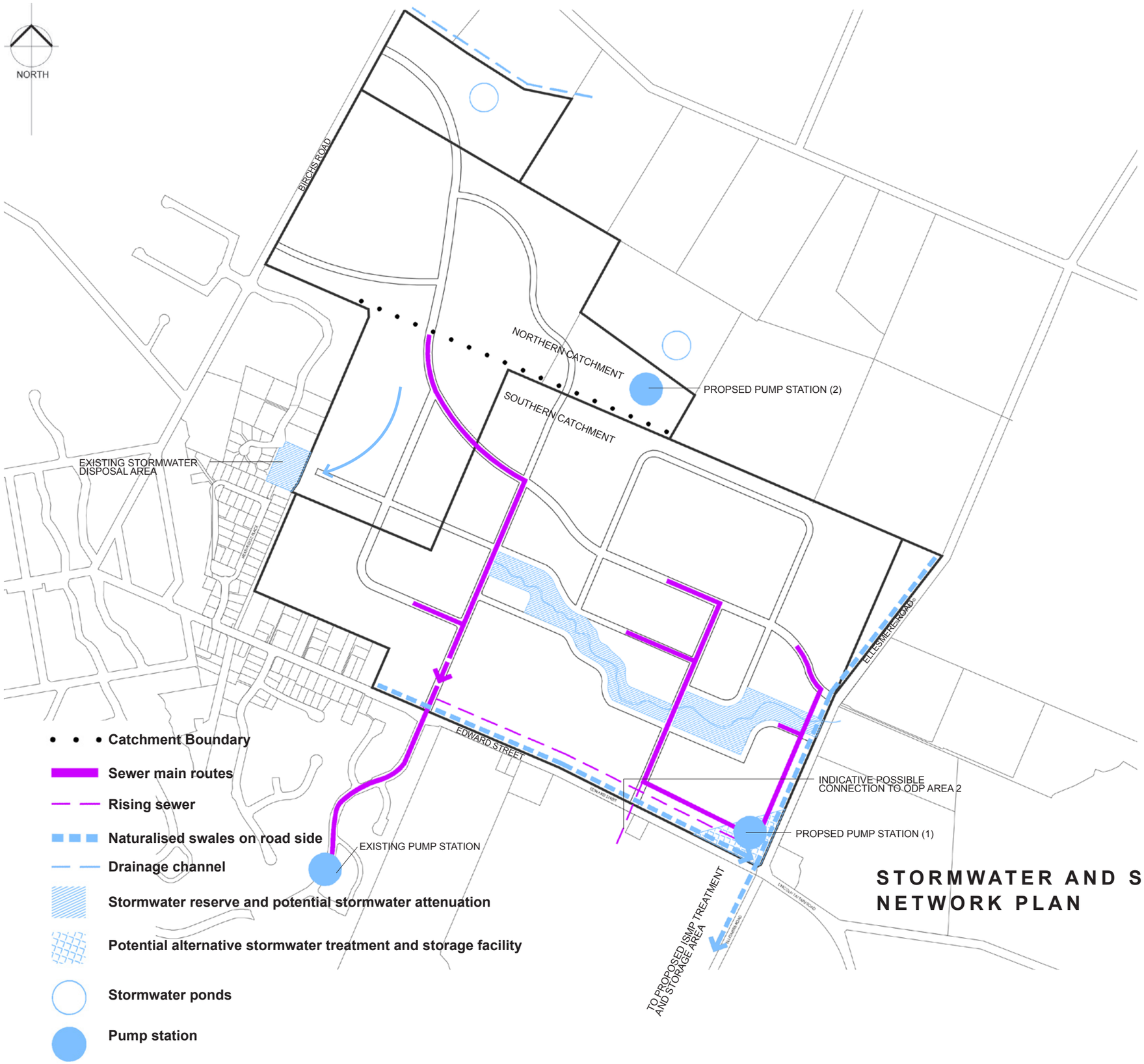
The cycle and pedestrian network has a relationship with the underlying road pattern and open space network. Safe and convenient access for pedestrians and cyclists should be provided for all routes, including footpaths and in some cases cycle lanes. Footpaths should be provided on all roads, and widths may vary depending on the road hierarchy and anticipated use. Barrier free access should be provided along and across all roads for all users including those with mobility restrictions. Along Ellesmere Road and Edward Street addtional road reserve may need to be vested in council to accomodate infrastructure positioning such as footpath / cycleway in relation to the appropriate design of these frontages.

Dedicated on-street cycle lanes should be provided for all primary routes. All other streets should be slow speed, low traffic volume environments which are pedestrian and cycle friendly, and create liveable public spaces for the community. In some cases these may be shared surfaces.

Roads edging open spaces should provide safe and direct alternative routes for night use that complement open space movement patterns. These roads also provide passive surveillance and multiple entry and exit points to open space areas. These roads should adequately provide for walking and cycling and have good lighting.

The street pattern should provide direct and convenient access so that a maximum 400m walking distance is provided between all dwellings and open space areas within the site.
An off- street cycle path is proposed along Edward Street in accordance with the Lincoln Structure Plan. Other off-street walkways and cycleways are proposed through Browns Lane and the connected open space network, including the central drainage reserve, as well as along Ellesmere Road. Pedestrian links should be provided from Edward Street and Ellesmere Road to connect to the street network, and pedestrian access should be provided to an existing walkway on the western boundary of the site.

Along the lane from Edward St (Browns Lane) as indicated on the plan fencing is to be restricted to a mximum height of 1m max height for a solid fence, or maximum 1.5m for a semi-transparent fence (i.e. pool style fencing) to provide for surveillance opportunities. Fencing will be along the rear of the adjoining properties so there is a need to retain some flexibility to design for privacy and security in outdoor yards as well as to maintain surveillance.



STORMWATER AND SEWER NETWORK PLAN

STORMWATER NETWORK

The stormwater network incorporates existing natural drainage patterns that meander east-west through the site, reserves and streets with above- ground stormwater management devices such as swales. Any requirements for stormwater detention and attenuation in the southern catchment should generally be accommodated within the proposed ISMP. The northern catchment is in the Halswell catchment and subject to specific other parameters dictated by Ecan. The southern catchment discharges to Lake Ellesmere.

Stormwater reserves should also be designed and used for recreational purposes such as walking and cycling, and integrated with the open space network. Along with riparian management techniques, these reserves can create valuable ecological corridors and habitats, as well as significant amenity and localized character for the neighbourhood.

Council are currently in the process of obtaining Regional Council consent for an Integrated Stormwater Management Plan (ISMP). An alternative facility may be available for the southern catchment of Area 3 at the corner of Edward Street and Ellesmere Road. Part of the southern catchment can drain to the Liftey Fields stormwater facility.

SEWER NETWORK

Sewer connection from the southern catchment to the Lincoln Storage Facility will be via the existing sewage pump station in Lincoln Dale.

The northern catchment will need to be pumped to the Lincoln storage Facility via proposed pump station (2). The route of the rising sewer from pump station (2) can be agreed at a later date as options exist.

OPEN SPACE NETWORK PLAN

OPEN SPACE NETWORK

The existing natural drainage patterns within the southern portion of the site underpin the connected system of accessible open space. Utilising and enhancing the natural features of the site will contribute to overall character and sense of place, offer more varied recreational experiences, and create a focal point for the community. Reserves should be consolidated around this central core to create large, well proportioned areas for a range of active and passive recreational activities. The location and orientation of the proposed school and playing fields should complement this extensive recreational asset.

In terms of the northern portion of the site, neighbourhood reserves will be developed as part of the overall subdivision design. These will integrate with drainage channels and natural features to provide for a high level of connectivity, recreational value and neighbourhood character.

For the site as a whole, open space areas (including the stormwater reserves) should be accessible from primary and secondary routes within the site, and within a 400m walking distance of all new dwellings.
In general, open space areas bounded by roads are more secure because of informal surveillance from passers-by and overlooking from windows and outdoor areas of nearby houses. Reserves that are clearly visible are likely to attract more users and be more valued by the community.

The design of streets will contribute to the overall character and connectedness of the public network of open space. Wide berms with footpaths and avenues of trees can create a boulevard effect to assist with navigation to open space areas. Vistas and key road junctions that terminate with open spaces and landscape features provide opportunities for good user legibility within the site. The junctions between primary routes should also be considered to ensure that long vistas terminate with landmark features such as trees within a landscape setback, and/or landmark buildings.

Integration with the surrounding green network should be provided, including the existing reserve to the west of the site.
Appropriate landscape setbacks should be provided along Edward Street and Ellesmere Road for trees and buffer planting, and to facilitate an off-road cycle and pedestrian connection.

Should the Ministry of Education establish a school within the ODP area then additional open space should be provided adjacent to the same. this additional open space is to be designed to provide opportunities for active recreational activities.

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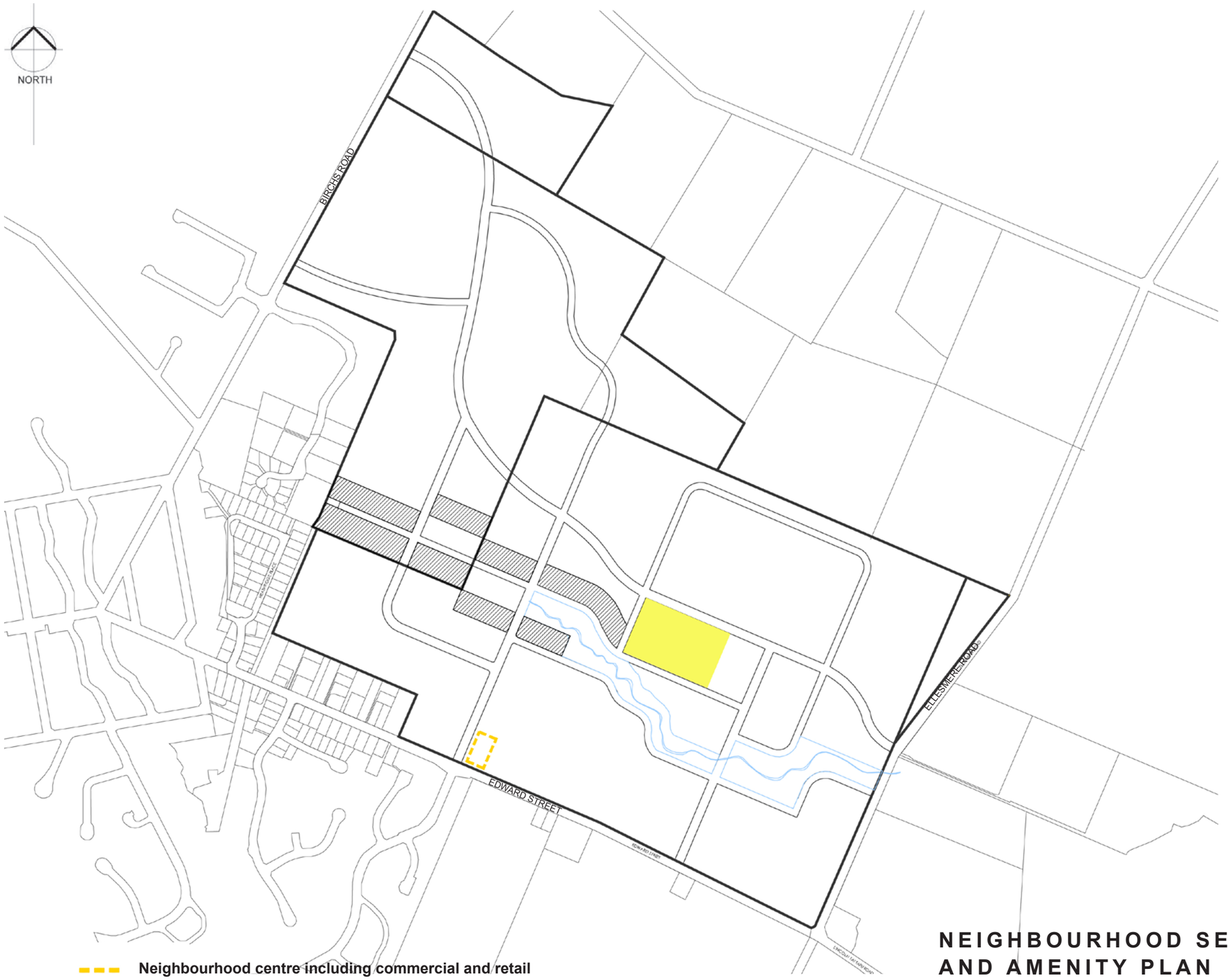

NEIGHBOURHOOD SERVICES AND AMENITY PLAN

DEVELOPMENT PATTERN

Higher intensity residential development with smaller lots, should be located near proposed open space areas that intersect with primary roads, and in close proximity to walkway / cycleway links to Edward St, which in turn provides access to the town centre. This allows for more compact development in the areas where services and amenities are accessible. Lower intensity with larger lots on the periphery will allow for greater setbacks and landscaping along the northern boundary and the Ellesmere Road and Edward Street boundaries.

More intensive density development concentrated around a central open space network will provide greater amenity and high quality development in these areas.

The neighbourhood centre (new commercial/ retail node) should be located with frontage onto the primary route, and in close proximity to Edward Street to maximize potential patronage from existing surrounding residential areas. The proposed school should also be located with frontage onto the adjoining primary route, with the playing fields potentially contributing to the overall open space network.

Over the ODP area a minimum net density of 10 households per hectare is to be achieved.