

Meridian Water Masterplan

Approved July 2013



LD&DESIGN



Contents

Foreword	4	6.0 Frameworks	99
Purpose of Document	5	6.1 The Frameworks	101
		6.2 Movement	103
1.0 The Vision	6	6.3 Homes	109
1.1 The Masterplan	8	6.4 Business and Employment	114
1.2 The big drivers for change	12	6.5 Shopping and Leisure	117
1.3 Guiding principles	14	6.6 Community	120
		6.7 Water	122
2.0 The Context	17	6.8 Public space	126
2.1 The context	18	6.9 Energy	130
2.2 The historical context	20		
2.3 A well connected location	22	7.0 Delivering Meridian Water	134
2.4 A link within the Lee Valley	24	7.1 Making it happen	135
2.5 The waterways of the Lee Valley	26	7.2 Development Guidance	146
2.6 The existing communities	28	7.3 Land use	152
2.7 Business, employment and retail	30		
2.8 The planning context	32	Contact Details	153
2.9 The physical history and a fractured site	34	Acknowledgements	154
3.0 The Masterplan	39		
3.1 The concept	40		
3.2 Masterplan	44		
4.0 The Causeway	45		
4.1 The Causeway	46		
5.0 The Neighbourhoods	55		
5.1 The neighbourhoods	56		
5.2 Meridian Angel	58		
5.3 The Gateway	64		
5.4 Meridian Central	70		
5.5 The Islands	76		
5.6 Canal-side West	82		
5.7 Meridian East	88		
5.8 The Parklands	94		



Cllr Doug Taylor
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Meridian Water is located in the London Borough of Enfield within the Lee Valley and is part of the London-Stansted-Cambridge Corridor. It is a huge investment opportunity that will provide up to 5000 new homes and 3000 new jobs. Meridian Water is only six miles from Junction 25 of the M25, 25 minutes from City Airport, 30 minutes from Westfield Stratford, 35 minutes from the O2 Arena, 43 minutes from Heathrow and two hours 50 minutes from Paris via Eurostar, creating an excellent and well connected location for development and growth in London.

This Masterplan sets out proposals to connect the east and west of the area using a new community spine, a pedestrian friendly route that joins Harbet Road to Glover Drive, which will strengthen linkages with Edmonton, Tottenham, Walthamstow, Chingford and beyond. This is important because Meridian Water is a plan for everyone.

The Masterplan sets out development principles for a new neighbourhood shaped around this link, creating development that will become part of the surrounding neighbourhoods and communities. A vibrant mix of uses will create a distinctive place that people will call home; quiet residential streets and busy waterside apartments will form attractive places to live.

Meridian Water also provides a unique location for business. With direct access to the North Circular, the Lee Navigation and the rail network, along with being a primary hub for the emerging Lee Valley Heat Network at the heart of London's second largest industrial corridor, the regeneration of Meridian Water provides a once in a lifetime opportunity for innovation, investment and transformation.

The Masterplan looks to create a shift in the employment profile of the area, diversifying from the traditional industries to provide space for a wider range of roles, from entry level jobs through to skilled technical roles, building on the existing strong green industry, food sectors and the area's strong history of industrial innovation and invention.

Through this shared vision and framework for the future, Meridian Water will create a neighbourhood that people are proud to call home, a place where residents have a sense of permanence and belonging, not only to Meridian Water but also to Enfield and North London.

Meridian Water will help to create a community where people can set down roots and take pride in where they live, and businesses can thrive and grow, reshaping and transforming this area of North London.

Cllr Doug Taylor – Leader of Enfield Council

Rob Leak – Chief Executive, London Borough of Enfield

Cllr Del Goddard – Lead Member for Business & Regeneration

Purpose of Document

Planning and Urban Design Guidance – Material consideration

Meridian Water is the largest regeneration priority area identified in the Council's adopted Core Strategy (2010) where a comprehensive approach to development will take place. This Masterplan expands on that guidance and provides a framework for managing change and development in the area. It was adopted as Planning and Urban Design Guidance on 17th July 2013 and is now a material consideration in the determination of all planning applications in this area.

This Masterplan is a spatial planning document that explains how the key objectives established in the Core Strategy for Meridian Water could be delivered, and provides further detail and guidance about the significant scale of change proposed.

It is not intended to be a blueprint for the area but a framework for change, providing the Council's overall vision and approach which it will seek to achieve through working closely with landowners and other partners.

Transformational change at Meridian Water is also a priority for the Mayor of London who has recognised the strategic importance of growth in the area to support the regeneration of the Upper Lee Valley as a whole.

This Masterplan should be read in conjunction with the Council's Core Strategy (2010), the Development Management Document (Submission Version March 2013), the Council's adopted Supplementary Planning Documents, the London Plan (2011), and the Mayor's Upper Lee Valley Opportunity Area Planning Framework (draft 2013).

Sustainability Appraisal

In line with the Council's statutory obligations and extant Government guidance, the Council has undertaken a Sustainability Appraisal (SA) to assess the environmental and sustainability impacts of the Masterplan.

Consultation on the SA Scoping Report was carried out from October to November 2011. This was followed by the publication of the SA accompanying the draft masterplan in May 2012 and the final version of the SA which accompanies this document.

The Meridian Water Sustainability Appraisal can be viewed on the Council's website or on www.meridianwater.co.uk

Consultation

The Council's adopted Statement of Community Involvement sets out how the community will be involved in planning matters and plan making. It highlights the importance of involving people early on in the preparation of plans. In accordance with this, informal consultation on the principles of the Masterplan and initial plans for the development of the area took place in the summer of 2011. This was followed by consultation on the draft masterplan from May to August 2012.

The Council received 36 individual responses within the consultation period, and one late response in July 2013. All of the matters raised were carefully considered by the Council, in its role of Local Planning Authority, and a number of changes were made to the Masterplan as a result. A summary of the consultation responses accompanied a report entitled 'Adoption of the Meridian Water Masterplan' which was considered at the Local Plan Cabinet Sub-Committee at its 3rd July 2013 meeting. This is available on the Council's website.

Central Leaside Area Action Plan

Meridian Water sits within a wider area of change in the south east of the borough, known as Central Leaside. This area stretches from Ponders End southwards to the borough boundary and is a major employment area. It includes the industrial estates stretching alongside the railway and significant infrastructure such as the Deephams Sewage Treatment Works and the Edmonton EcoPark. Its eastern boundary incorporates the waterways of the Lee Valley Regional Park and there is the potential for improved leisure facilities at Picketts Lock.

With the inclusion of the new community at Meridian Water, this wider area presents significant regeneration and redevelopment opportunities and in recognition of this, the Council is also bringing forward an Area Action Plan for the Central Leaside Area. Once adopted the Central Leaside Area Action Plan (AAP) will form part of Enfield's statutory Local Plan and will provide the planning policy framework for the area.

1 The vision



M25

1 The vision

1.1 The Masterplan

The vision for Meridian Water is transformational and inspirational. Up to 5000 new homes and 3000 new jobs will be created in a £1.3 billion redevelopment in a vast area of under utilised land in Enfield. Celebrating the Lee Valley's waterways, creating healthy living corridors and providing a framework for modern, low carbon lifestyles, the Masterplan fashions a new London destination that will become home to a vibrant and sustainable community.

Meridian Water, London Borough of Enfield, is located between the busy town centre of Edmonton Green and the peaceful waterways and parklands of the Lee Valley. Drawing on the distinctiveness of this location, the Masterplan defines a sense of place that is strongly rooted in its character and context to create a new waterfront eco-quarter. It includes a number of unique mixed-use areas creating fresh opportunities and sustaining true urban vitality, providing one of Capital's most significant opportunities for investment and regeneration.

The Masterplan ensures that Meridian Water is developed as a well-integrated extension of Edmonton. The wider community will share in the new resources and facilities, the improved access to the waterways and parklands of the Lee Valley and the new employment opportunities, ensuring that the positive benefits of the regeneration and investment reach beyond Meridian Water's boundaries. Meridian Water is a plan for everyone.

Meridian Water will deliver a wide variety of new high quality homes, comprising different types, sizes and tenure options. The Masterplan also provides for all the required supporting social and community infrastructure including a primary school, an all-through school, a University Technical College (UTC), a new local centre offering new health and library facilities, community rooms, a police presence and local shops.

The vision for Meridian Water is also focused on sustaining strong business and economic growth. It seeks to retain and improve the existing employment and retail provision on-site through supporting modernisation and renewal of facilities, improved accessibility and greater patronage. At the same time, the Masterplan creates new opportunities for higher density businesses and green industries, supporting a greater diversity of new jobs.

Meridian Water will benefit from the Masterplan's key aim of improving accessibility and promoting sustainable, low carbon means of travel. Improved rail services, renewed station, a new integrated transport hub and improved bus services will serve the area, alongside safe and attractive cycle and walking routes.

More importantly, the vision seeks to transform this part of Enfield by delivering an ambitious approach to sustainability in its widest sense, which is strongly embedded within every aspect of the Masterplan. It ensures that Meridian Water will sustain a very low carbon, ecologically responsible residential and business community.

Overall the Masterplan is a strategy for radical change in an area of extraordinary opportunity. Delivered by attracting inward investors and maximising opportunities for a range of new homes, jobs and opportunities for local people, it gives shape to a distinctive waterfront eco-quarter where development will be both sustainable and of the highest quality.



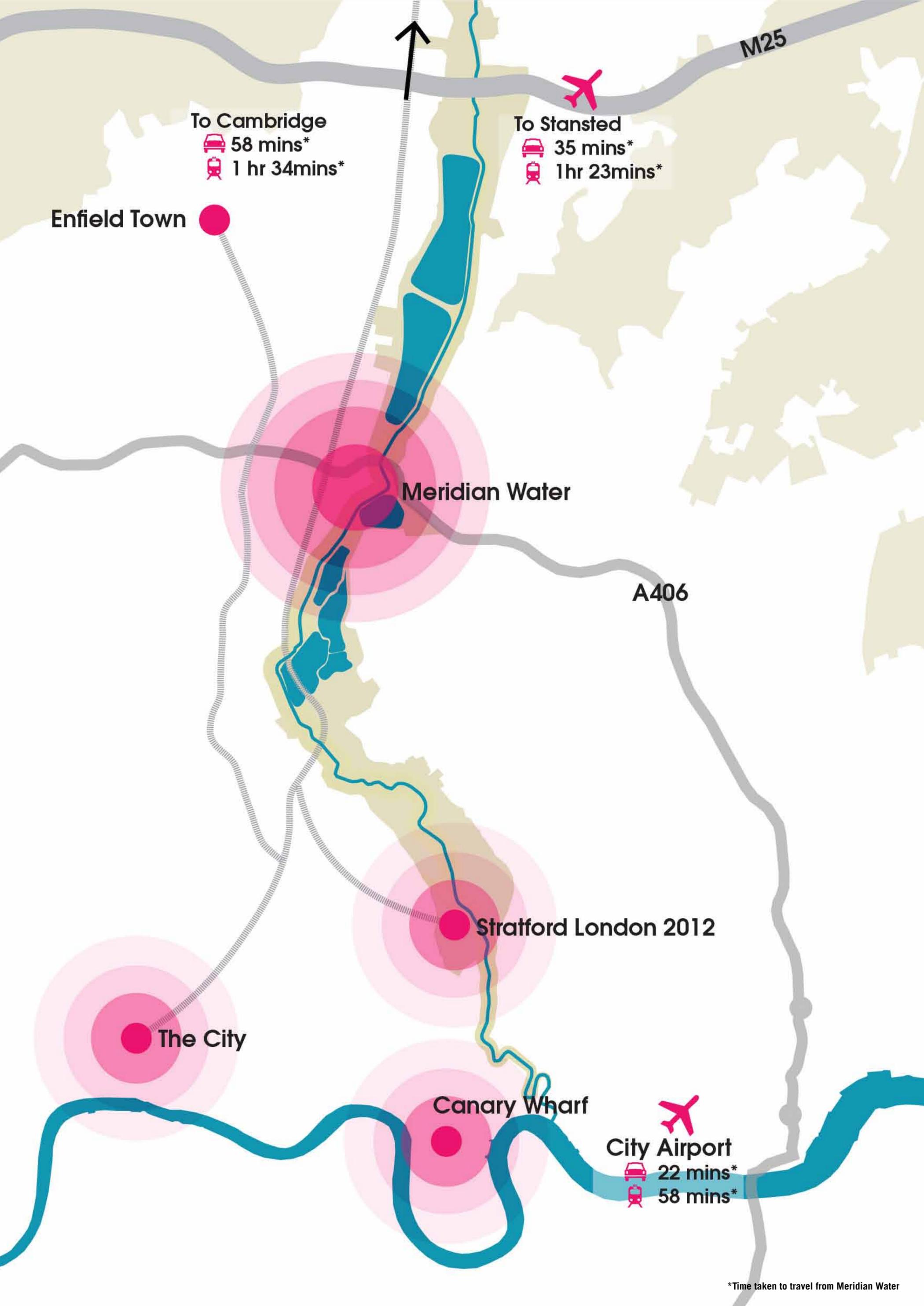
To Heathrow



43 mins*



1hr 16mins*



To Cambridge
🚗 58 mins*
🚆 1 hr 34mins*

To Stansted
🚗 35 mins*
🚆 1 hr 23mins*

Enfield Town

Meridian Water

A406

Stratford London 2012

The City

Canary Wharf

City Airport
🚗 22 mins*
🚆 58 mins*

*Time taken to travel from Meridian Water



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Figure 1-1 3D View of Meridian Water Masterplan

- 01. Banbury Reservoir
- 02. Lee Valley Regional Park
- 03. University Technical College
- 04. Pymmes Brook
- 05. Primary School
- 06. Ikea
- 07. Gateway Square
- 08. Central Square
- 09. Tesco
- 10. Angel Road Station & Transport hub
- 11. Salmons Brook
- 12. All-through School
- 13. Ravenside Retail Park
- 14. Extended Greenway to Edmonton
- 15. Edmonton Green
- 16. Angel Square
- 17. North Circular
- 18. River Lee Navigation
- 19. River Lee Diversion
- 20. Flood Relief Channel

1.2 The Big Drivers for Change

Development for a world city: Creating a new place in London

There are a number of factors that define London as one of the world's great cities, but one that sits foremost among them is the capital's great parks, green spaces and the timeless quality of the Thames and its tributaries. The Lee Valley has until very recently been one of the least celebrated and undervalued parts of London, but with the transformation arising from the London 2012 Olympic Games to the stretch of proposals along the Upper Lee Valley, this part of London is about to change in a dramatic way.

Meridian Water is a major development opportunity on the edge of the Lee Valley and opens a new chapter in the growth and regeneration of North East London. It will be a major destination and a new vibrant district, midway between the City, the Olympic Park, Stratford, and the open countryside of Hertfordshire and Essex to the north.

Plans to introduce three-tracking between Stratford, Tottenham and Angel Road Stations, which are supported by the GLA, will enable a four trains per hour service to be provided at Angel Road Station. This will transform the rail passenger experience and be a catalyst for investment and growth at Meridian Water as well as the wider Lee Valley.

Global challenges, local solutions

Fundamental changes are taking place across the globe. Climate change and an ever growing demand for finite fossil fuels are putting economies under strain. At the same time the internet is changing the way we shop and do business, while helping all of us to become more connected. Each challenge has profound implications, both positive and negative, for how Meridian Water is conceived. Implications that are exacerbated by the many uncertainties that remain for economies, societies and ecosystems.

The Masterplan aims to provide a robust framework that will enable developers and investors to see and realise the opportunities that Meridian Water provides, whilst having sufficient flexibility to accommodate change. The use of low carbon energy systems, adaptable buildings and attractive spaces will be key to its sustainability over time.



New ways of urban living

Sustainable development, a living concept which underpins the Masterplan, is all about enabling people today to enjoy a better quality of life, without compromising the ability of future generations to do the same. This will be facilitated by protecting and making careful use of the earth's resources. One of the challenges that the Masterplan embraces is the promotion of new neighbourhoods that combine the excitement and intensity of urban-living with access to green infrastructure, with all the health and lifestyle benefits that come from this. No other place in London can offer this opportunity.

Located in the Lee Valley, Meridian Water takes advantage of the Lee Valley Regional Park, green corridors and waterways, to provide an exceptional setting for the sustainable development of new homes, work-spaces and community facilities. At the same time, it makes best use of previously developed land and seeks to provide a framework within which energy efficient and low carbon generation, water and waste recycling, biodiversity, local food production and sustainable transportation can flourish.

Unlocking the potential for existing communities

The Masterplan provides a framework that will see the creation of new, attractive neighbourhoods. But at the same time, it responds to, and is part of, its surroundings. Meridian Water is a new place, but it is equally a place that welcomes the existing communities of Edmonton Green, Upper Edmonton, the Shires and beyond. Meridian Water is a place for everyone.

This is made possible by new gateways into the area, legible routes for pedestrians and cyclists, improved public transport and by the integration of Meridian Water with the Lee Valley Regional Park. The Masterplan also provides for new employment space, education and training facilities – all of which will serve existing communities as well as residents of Meridian Water itself. New, vibrant, welcoming and inclusive, Meridian Water will be the first choice in London.



Figure 1-2 Perspective illustration

1.3 Guiding principles

Delivering a sustainable place that responds to big challenges requires a comprehensive approach, guided by a set of principles that are able to be reflected across all phases of the development process as well as in the way the place functions in the long term.

Eight principles have been set out to guide how the Masterplan will deliver sustainable neighbourhoods that enable low carbon lifestyles, foster equality of opportunity and access, and respond to the effects of climate change.

Opportunities have been sought to design in sustainability features that add value to the development, attract investment and keep costs down. For example, green space and waterbodies will be integrated with the urban form to build long term resilience to climate change, while creating a more attractive living environment and supporting higher property values.

An over-arching theme for the Masterplan is the need for it to be deliverable, in practical and financial terms, supported by a range of stakeholders and to create the conditions for sustainable investment.

To some extent sustainable development is a technical challenge but it is also a way of life that contributes to health and wellbeing, builds social capital and ultimately results in the kind of place that people want to be. Achieving this necessitates the buy-in of everyone, from planners and developers through to future residents and businesses, which is why Meridian Water is a plan for everyone.

Putting the principles into practice demands that the themes are carried through the design, planning and construction process. Importantly, sustainability requires us to think differently and in some cases creatively about delivery and long term governance. A collaborative approach will be encouraged between the Council, developers, landowners, infrastructure providers and other stakeholders.

The following principles have helped to set the tone, shape and develop the frameworks in section 3.1.3.

1. Realising the scale of opportunity and the opportunity of scale

Covering approximately 85 ha, Meridian Water is one of the largest areas of developable land in North London and the most significant regeneration opportunity in the Upper Lee Valley.

The Masterplan vision recognises the huge opportunity to transform Meridian Water into a unique London destination.

This transformation is unique by virtue of the scale of development potential. The area already benefits from excellent public transport, energy and ecological links that maximise the potential of its location. This scale offers opportunities to stimulate a number of developments to come forward simultaneously.



2. Delivering new homes



The Meridian Water vision proposes to deliver up to 5,000 new homes, making a significant contribution to meeting London's acute housing need, one of the Mayor's key priorities.

The Masterplan will deliver new mixed-tenure, mixed type housing that will meet the Lifetime Homes and Code for Sustainable Homes standards, providing for both the private and affordable housing markets. Residential development should have regard to the minimum space standards and principles set out in the Mayor's London Housing Design Guide. This will ensure that development is energy efficient, tenure blind, and meets high quality design standards.

3. Facilitating economic growth

The Masterplan provides a framework to deliver up to 3,000 new jobs in the area. A new economy will be created, through diversification and intensifying existing facilities to sustain and create jobs for the area, so that Meridian Water becomes an attractive proposition for Inward Investment and business growth projects.

New opportunities for learning and skills development will be created, to promote Meridian Water as a place of learning and business. This will support diversification from traditional industrial based jobs to one that reflects broader growth sectors such as high tech and low carbon industries, and engineering.

The creation of a new city scale decentralised energy network passes through Meridian Water. It has the potential to provide affordable low carbon heat to businesses, industries and residents across the area. In turn, it has the possibility to strengthen the area's potential by creating improved conditions to facilitate inward investment, create new jobs and improve business performance.



4. Enabling movement and improving transport connections



The Masterplan breaks down existing barriers to create the transport opportunities needed for a safe, well connected, accessible community. Working with the existing public transport, energy and ecological infrastructure, the Masterplan delivers new, integrated public transport opportunities focused around an upgraded train station, and linked to improved cycle and pedestrian routes, to deliver a sustainable destination.

A new central east-west Causeway enables controlled vehicular movement across the area. A network of new streets, a remodelled underpass and new bridges will connect neighbourhoods. Whilst private cars continue to be important, they will not dominate. Sustainable modes of travel will be supported, including car clubs, electric vehicles and cycle parking.

5. Celebrating the Lee Valley waterways

The natural character of Meridian Water is defined by the Lee Valley Regional Park and the various waterways and culverts that flow through the area, which include the River Lee, Salmons Brook and Pymmes Brook.

The Masterplan maximises the potential of the waterways by creating a prime waterside location which benefits from views into the Lee Valley. Opening up access to the reservoir and other waterways will promote leisure and recreation opportunities, creating a high quality environment for residents, visitors and workers to enjoy.



1.3 Guiding principles

6. Building strong communities

Meridian Water will be a strong community, promoting sustainability, social inclusion and an improved quality of life for all.

Provision of new schools and a University Technical College (UTC) will provide high quality education and lifelong learning opportunities. It will be linked to developing the skills needed to maximise potential for people to access new employment opportunities.

Communities themselves will be at the heart of planning, delivering and managing this new part of London, from health and recreation to energy and even transport. To play this role they will have an integral part in the development process from the start and have a clear understanding of the contribution they can make.

The vision will also ensure that the area is well integrated with the surrounding areas, helping to spread opportunities and regeneration benefits beyond. To support a diverse multi cultural population, a range of social and community facilities will be strategically located to form the focus of civic interaction. Meridian Water is a place for everyone.



7. Improving access to healthy living corridors



Meridian Water benefits from its strategic position adjacent to the Lee Valley Regional Park. Its rivers and tributaries offer significant recreational and environmental benefits, as do the series of reservoirs immediately to the south of the area. The Masterplan recognises the importance and the potential of the Lee Valley Regional Park and its rivers in terms of their ecology and biodiversity value. It exploits the wealth of this potential by introducing improved east-west and north-south connections through a network of open spaces. Improved connections will help to deliver healthy living into the heart of the new development and also helps to reconnect surrounding communities with the Park.

Opportunities are created for formal and informal recreation and leisure, urban agriculture and outdoor learning. It draws the community and landscape together, combining healthy living into the daily structure and form of Meridian Water. Where possible, development will embrace an approach that combines biodiversity into healthy living lifestyles, whilst addressing local and regional environmental objectives.

8. Delivering high levels of sustainability

Meridian Water sets out an ambition to deliver the highest standards of sustainability, climate change mitigation and adaptability.

The Code for Sustainable Homes (CfSH) standards will be used on all housing developments and the BREEAM excellence standards will be incorporated in all non residential development. Development will utilise new technologies to reduce CO2 emissions, supply low carbon heat and power, turn waste into a local resource and make innovative use of materials on site.

Sustainable technologies will be used to reduce water demand and manage flood risk. Opportunities will be made to promote the waterways and enhance biodiversity to create attractive, vibrant and sustainable neighbourhoods.



2 The context



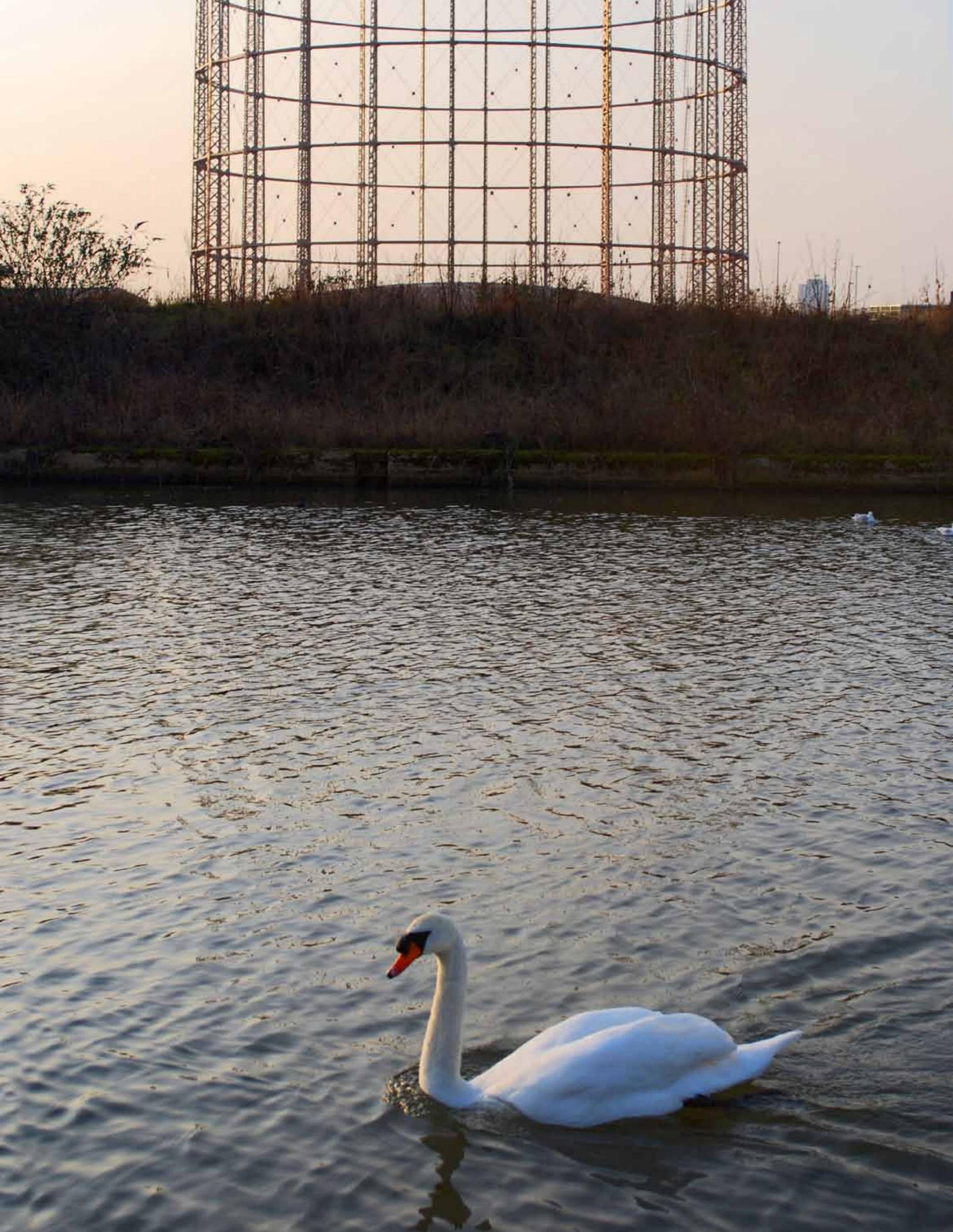
2.1 The context

This chapter sets out the overall context of the area today and describes the existing baseline conditions from which the Masterplan has evolved.

- ★ Historical – How physical, social and ecological factors have shaped the landscape at Meridian Water;
- ★ A well connected location – Describing the local and regional transport facilities;
- ★ A link within the valley – The evolution and role of the Lee Valley Park as a local and regional resource;
- ★ Waterways – How the confluence of the areas historical water ways influence the area today;
- ★ Communities – Outlining the existing surrounding communities and facilities;
- ★ Employment & Business – Reflecting on the historic and current industrial, retail and employment conditions ;
- ★ Energy Infrastructure – Describing the role of energy production within the Lee Valley and the future possibilities for Meridian Water; and
- ★ The physical history: a fractured site – How the history of the site has left its mark on the landscape at Meridian Water.



Figure 2-1 Surrounding Communities



The River Lee Navigation with the gasometers beyond

2.2 The historical context

Evolving from extensive marshlands, the natural systems that flow through the Lee Valley have been transformed through successive generations of urbanisation.

The area's importance to a growing London emerged as its channelled watercourses became conduits to trade. Initially the drained marshland of the river banks was famed for its market gardens, supporting one of the world's highest concentrations of greenhouses by the early 18th century.

As the economy transformed, and roads and railways connected the Valley, it evolved to form part of an industrial corridor that reached all the way down to the port of London.

On the edges of the Valley, Edmonton's residential community began to grow. Throughout, its life and history has been closely bound to its relationship to the changing character of industry and infrastructure on the site of Meridian Water.

2.2.1 The pre-industrialisation marshland landscape

The Edmonton Marsh, where the site sits, formed a half-mile stretch of marshland carved up by a rich tapestry of waterways which drained the area towards the River Lee. During the Middle Ages the marshy banks of the Lee prohibited navigation until the Lee was made navigable as far as Ware in 1571. 'The cut' was primarily used for transporting grain to London from Hertfordshire.

The two main tributaries of the Lee, the Pymmes and the Salmons Brooks, were widened and deepened in the late 1700s to accommodate flooding. By the late 1800s they had been straightened and confined to concrete. Over the course of time, the network of tributaries has almost entirely disappeared due to culverts or diversion into underground sewers.

By the 1800s the Upper Lee Valley was still largely undeveloped despite a few mills taking advantage of their location along the length of the river. The Eastern boundary of Edmonton followed the Lea and her tributaries formed the boundary with Enfield

The watercourses and remaining pieces of industrial infrastructure tell the story of where we find Meridian Water today. By tracing elements of the area's rich narrative, clues and opportunities for the future development can be unlocked

2.2.2 The growth of Edmonton

During the early 1800s transport facilities had rapidly improved with horse buses running half hourly from Edmonton to London. By 1840, the railway had arrived which opened the first section of the Lee Valley line from Stratford to Broxbourne.

With accessibility to coal supplied via the railways and canals and the water supply offered by the Lee Valley, the area was an attractive option for industry. Wharves and warehouses and later factories began to evolve near Angel Road, conveniently located between the railways and the River Lee Navigation.

In 1872 the Great Eastern Railway opened the present Edmonton Green station as part of its direct line from London to Enfield Town. With the support of the direct rail links, the late nineteenth century saw a vast influx of people into the Edmonton area attracted by the cheap workmen's fares to London. By the outbreak of the First World War there had been significant residential and high street development around Edmonton and industrial development within Meridian Water.

2.2.3 The rise of Industry

By the 1920s the town of Enfield had become part of the Greater London conurbation with residential development consolidating. From the late 19th century industrial uses that had previously been located in Central London began to relocate to more suburban locations in search of larger less contained sites. Residential development within Edmonton continued supporting the growth of employment opportunity within the evolving industrial corridor.

Manufacturing industries associated with gas were prevalent in the area and various industrial works continued to emerge, pausing only for the outbreak of war. After Angel Road became part of the North Circular Road (1924-7) factories multiplied on either side.

Urban expansion in the inter war period led to significant suburban housing development with large council estates constructed, on the western side of the Valley. The construction of the Victoria Line by 1971, plugged the Valley into the London Underground network, further enhancing the area's relationship to the rest of the Capital.

The Lee Valley is home to a number of innovative historic industries that promote the area, reflecting both its historic business success and its potential for the future. Achieving world wide renown for the design and manufacturing of the historic Lee Enfield Rifle, it is home to a number of other old significant businesses, including Johnson Matthey, a world leader in catalytic systems and exhaust emission control.

2.2.4 London's drinking water

Taking advantage of the Lee Valley floodplain, a plan, conceived in 1893, was put into motion to create a series of 13 reservoirs that would provide flood storage capacity and drinking water supply to London. In order to accommodate the construction of the Chingford and Banbury Reservoirs, which form part of the Lee Valley storage chain, the Lee Diversion was created to hold and divert water supplies towards the reservoirs. Similarly, the River Lee Flood Relief Channel was constructed following major flooding within the Lee Valley in 1947 and feeds water to the numerous reservoirs within this chain.

2.2.5 The picture today

Enhanced by the site's proximity to central London and the area's good connection, Meridian Water continues to serve as a good location for a range of businesses. The success of the Valley's industrial legacy lives on today and provides a positive backdrop to the area's potential and the rise of its green industries.

The Edmonton Eco Park is one of the capital's largest recycling and sustainable waste management facilities. Commissioned in 1971, it was built to handle municipal waste from seven North London boroughs, converting waste into electricity and other by-products.

Supporting a significant part of north and east London's electricity supply from the National Grid, a swathe of pylons are routed through the Lee Valley along the edge of the reservoirs.

A broad range of businesses find success in the area, from large distribution warehouses, large big-box retail, to smaller warehouse units and offices. Evolved from the area's rich industrial past combined with its geographical position the eastern end of the site, is a designated Strategic Industrial Location (SIL) contributing towards London's industrial capacity. It holds a strategic position as a business and employment centre within the London-Stansted-Cambridge corridor.



1. The Lee Valley's waterways played a huge part in defining industrial growth in this part of London
2. The rise of industry - decommissioned gas holders
3. The River Lee Navigation unlocked a vital trade route
4. Angel Works illustrates the site's industrial character



1920



1952



1975

2.2.6 Urban Form

Today's landscape reflects the historic industrial narrative of the area. Primarily supporting the transportation of the goods into London, industry has gradually developed between the waterways that dissect the site. Turning their back to these watercourses, industrial growth has prevented access to them and created isolated strips of land along their length. The regeneration of Meridian Water presents the opportunity to capitalise on water as an asset and enhance the waterways. Improved access and enhanced environment will positively impact on the quality of life and experience of residents and visitors.

The continued change in the needs of industry and business present a great opportunity for Meridian Water. Improved transportation, a new decentralised energy network, an improved environment and the fashioning of new identity will all make a positive contribution to businesses across the site. Together these changes will set the scene for improved business performance. They would also foster the conditions that would attract new investment to see the regeneration of existing facilities and the intensification of employment land use.

Most notably, the changes in the modern requirements of industry have released large tracts of brownfield land in the area. These large panels of land present an extraordinary opportunity suitable to meeting London's housing need in an attractive landscape context.

Reflecting on the Valley as the largest single piece of green infrastructure in London, the opportunity to reconnect people with the landscape should be encouraged. Creating growing spaces within developments could support an over arching vision for a sustainable eco community and also promote healthy lifestyles and inter neighbourly exchange.

A distinct grain and form has evolved with the industries. There is the opportunity to acknowledge this structure and retain the industrial character reflected in forms and materials in order to shape unique place bound identity and promote collective memory.

Building on the existing opportunities of the nearby Edmonton Eco Park, the delivery of the masterplan can support the growth of new green industries and integrate them into the working, living and future development of Meridian Water.

With increased access, shared facilities and improved transport, Meridian Water can grow into a dynamic eco development that supports and complements Edmonton's community and economy.

2.3 A well connected location

Meridian Water is advantageously located at a confluence of major road and rail infrastructure connecting the site with London and beyond. Its proximity to the capital, accessibility to a diverse transport network and connections to green space and water sets Meridian Water within an attractive context for investment. This is maximised further by its location within the London–Stansted–Cambridge Corridor.

To the south, the train lines that serve the Meridian Water area extend to London Liverpool Street and Stratford, and local bus routes create key connections to surrounding communities and spaces, whilst walking and cycling routes extend along the waterways and are within easy reach of Edmonton Green, Tottenham Hale and the Olympic Park.

2.3.1 Rail

Angel Road Station connects Meridian Water to the West Anglia Main Line (WAML). It is only 16 minutes from Angel Road station to Stratford International, and 20 minutes to London Liverpool Street to the south. It also offers a service to Stansted Airport and beyond to the north. Plans to introduce three tracking will greatly improve the frequency of the service, making Meridian Water an even more attractive location.

2.3.2 Strategic road network

North London's major inner ring road, the North Circular (A406) abuts the northern end of the site. A number of connections link Meridian Water to this significant east-west link. The close proximity to this strategic road network creates a prime location for business.

Meridian Way (A1055) passes through the site in a north-south direction. It connects the site with London's outer M25 near Waltham Cross. It provides a secondary level strategic north-south connection to Tottenham Hale and Central London beyond, as well as to North East Enfield.

2.3.3 Bus

Meridian Water already benefits from a number of bus services connecting to the transport hubs of Tottenham Hale and Edmonton Green. Most of the site is presently within a 5-10 minute walk of a bus stop.

2.3.4 London Underground

The London Underground is accessed from Tottenham Hale station served by the Victoria Line, which is located 8 minutes from Meridian Water by bus.

2.3.5 Walking and cycling

The Lee Valley Regional Park is a key area for walking and cycling. Dedicated paths provide an uninterrupted network across the Valley and are well used

National Cycle Network route 1 runs north-south through the Valley and its path offers a connection for commuters between Meridian Water, Tottenham Hale and London Docklands.

Cycle Superhighway 1, running from Tottenham to the City is due to open by 2015 and will provide a safer, faster and more direct route into the city with improved road surfaces and junctions.

2.3.6 Waterways

Water is a significant feature in the Upper Lee Valley. The River Lee and the River Lee Navigation together form the backbone of the Lee Valley Regional Park and provide opportunities for leisure and commercial activity. They connect Meridian Water and other growth areas with the River Thames and rail infrastructure and could be used to transfer some trips, particularly freight, from road to the river in line with the findings of recent feasibility studies. The canal system is almost entirely accessible via towpaths, providing valuable opportunities for informal recreation, walking and cycling.

2.3.7 Opportunities

Through the introduction of new transport services combined with the enhancement of existing facilities and access, the Masterplan has the opportunity to create a fully connected and firmly integrated site that locks into surrounding local communities and connects with the wider context.

An increased frequency of trains with the three tracking of the London – Stansted line will create more efficient connections with the capital transforming the residential, retail and employment outlook for the site.

An integrated bus and rail transport hub with improved station accessibility will further enhance Meridian Water's public transport network, making it an even more attractive place to live, work and play.

Taking advantage of the local surrounding road network, there is opportunity to create new road links that create connections between existing and new communities and facilitate new bus routes.

A network of walking and cycling routes would further improve connections with surrounding neighbourhoods. Safe, useable routes connecting homes and facilities will help to strengthen a strong sense of community and encourage the movement of people into, through and around Meridian Water.

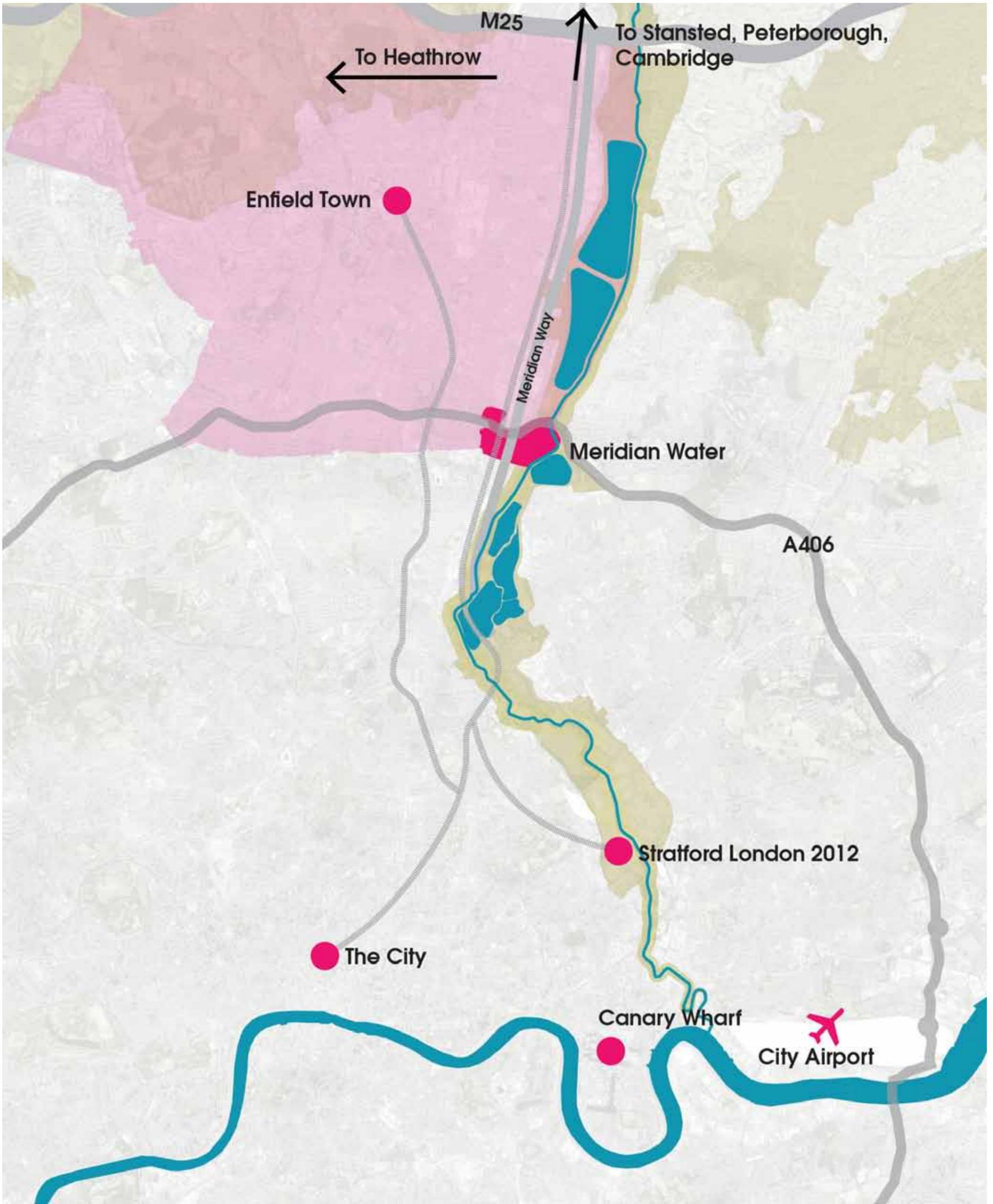


Figure 2-2 Surrounding Context

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2.4 A link within the Lee Valley

Meridian Water is located within the heart of the historic Lee Valley. As the largest single piece of green infrastructure in London, this exceptional resource offers vast environmental, ecological and recreational opportunities.

The site's eastern edge connects directly with the 10,000 acre Lee Valley Regional Park that stretches from Ware in Hertfordshire, 26 miles south to the East India Dock Basin in London. Meridian Water will form part of this chain of unique green spaces alongside the 2012 Olympic Park to the south.

Meridian Water also benefits from its proximity to a number of surrounding urban open spaces as well as the railway line which forms an important wildlife corridor through the Valley.

2.4.1 The River Lee corridor

Originating in the Chiltern Hills, the River Lee flows south-east towards London, becoming a major tributary of the Thames. Passing through diverse countryside, urban green spaces, heritage sites, nature reserves, lakes and riverside trails, these spaces collectively form the uninterrupted chain of linear green spaces, the Lee Valley Regional Park. Reaching from Ware in Hertfordshire to the East India Dock Basin in London, it is an invaluable recreational and ecological corridor that passes through and connects with Meridian Water.

2.4.2 Lee Valley Regional Park

Meridian Water falls within the central zone of the Lee Valley Regional Park's three character areas. This zone is most significantly influenced by the presence of the large reservoirs and its intensive urban and industrialised surroundings.

The vision for the area is to create and maintain an 'area for nature, conservation and sporting and leisure excellence based on the three reservoirs and supplemented by the surrounding land. The eastern end of Meridian Water extends into London's Green Belt, at a narrow pinch point forming the junction between the boroughs of Haringey, Waltham Forest and Enfield.

2.4.3 Community access

Despite the prominence of the Lee Valley Regional Park, the central zone currently suffers from significant levels of inaccessibility. Severed by the North Circular and surrounding developments both access and visibility to the extraordinary asset is limited. The Lee Valley Regional Park Authority's Park Development Plan suggests that the whole valley should entwine the natural and urban characteristics into one continuous landscape. The extension of the landscape and connections into local parks and other open spaces is encouraged.

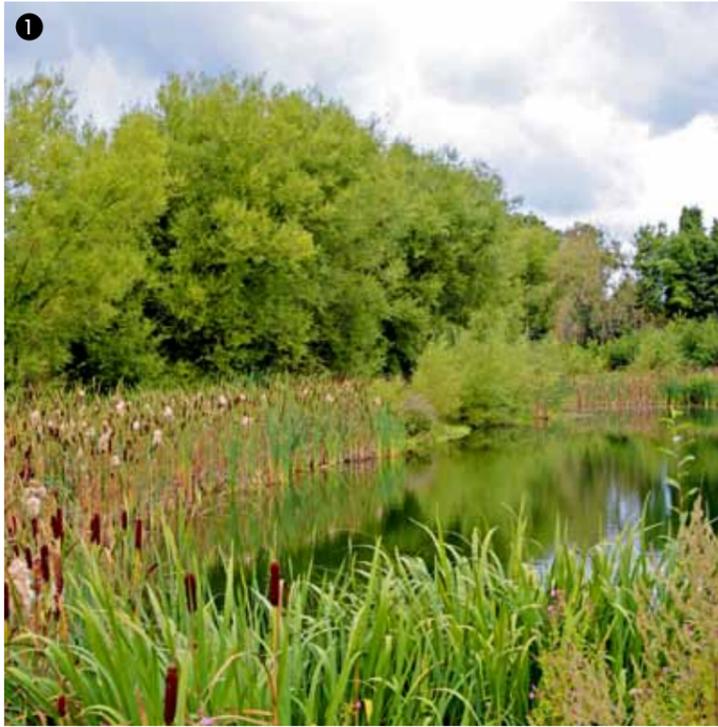
2.4.4 Leisure and Sports facilities

The Lee Valley plays host to a range of sport and leisure facilities, promoting active lifestyles through the area. A number of these are located close to Meridian Water, playing an important role within their surrounding communities and enhancing the quality of life for the people who live and use them. The Lee Valley Leisure Complex north of Meridian Water offers a range of leisure facilities taking advantage of the regional park. The Frederick Knights Sports Ground offers more local recreation opportunity whilst both the Regional Park, Banbury Reservoir and other associated facilities present an opportunity entirely unique to this area of London.

2.4.5 Opportunities

The aim of the Upper Lee Valley Landscape Strategy is to bind the Valley's natural and urban assets into a single valley space that connects to spaces beyond. Meridian Water has the opportunity to create connections from surrounding communities through to the Lee Valley Regional Park unlocking the vast resource for new and existing residents. Green routes, new urban parks, spaces for ecological benefit, recreation and leisure will evolve throughout Meridian Water, drawing the benefit of the park into the heart of the new development and allowing it to grow into a unique resource along the Lee Valley Corridor.

Meridian Water has the opportunity to offer a diversity of green spaces, ranging in scale, form and function. The masterplan can not only unlock the existing potential of the Lee Valley Regional Park but also connect and extend into new and existing communities.



1,2,3,4 . Lee Valley Regional Park
5. Greenway to Edmonton Green



Figure 2-3 Surrounding Green Space

2.5 The waterways of the Lee Valley

Evolving over the course of time to drain the original marshlands, a network of waterways pass through Meridian Water and extend along the Lee Valley Corridor. They provide ecological, recreational and functional value for the locality and further afield.

Each waterway has its own characteristics, varying in quality, form and potential, with each creating strong features within the landscape. The watercourses include the River Lee Navigation, canalised tributaries, a diversion channel and flood relief channel. Their routes carve the site into distinct islands.

Abutting the site, the elevated Banbury Reservoir forms part of London's 'Lake District' - a chain of 13 reservoirs running through the Lee Valley, responsible for storing the majority of London's drinking water.

2.5.1 A Complex System of Waterways

Dominated by a matrix of water bodies, the Lee Valley forms London's second largest river network and forms a considerable contribution towards the Capital's Blue Ribbon Network. This network places water at the heart of London's development to ensure its evolution into an exemplary, sustainable world city.

2.5.2 Lee Valley Navigation

The River Lee is canalised and runs north-south through the eastern side of the area. It forms the principle watercourse passing through Meridian Water. Maintained at a constant level by a series of locks, this waterborne transportation channel connects the area to the Thames. It is semi-rural and tranquil in character with a towpath running alongside its entire length makes it a valued regional asset and a key feature of Meridian Water.

2.5.3 River Lee Diversion

The Lee Diversion Channel was created in order to accommodate the construction of the Chingford and Banbury Reservoirs that form part of the Lee Valley storage chain. The River Lee Flood Relief Channel flows alongside it through the site. This steep, concrete banked waterway flows north-south through the area. Despite being largely inaccessible due to the combination of steep walls and the fast-flowing water at times of flooding, both the Flood Relief Channel and River Lee Diversion form an important visual and ecological resource for the site.

2.5.4 The Brooks

Two canalised tributaries of the River Lee, Pymmes Brook and Salmons Brook, also bisect the site. These hard-edged channels contain bank planting which screens the water's edge. They flow parallel with the River Lee Navigation and further define islands of space across the site. Work undertaken by the Environment Agency upstream is set to improve the water quality.

2.5.5 The Banbury Reservoir

Although visually concealed by its elevated height above the ground level, Banbury Reservoir is an extraordinary asset located immediately adjacent to the site. Designated as a Principal Site of Nature Conservation Importance in Waltham Forest's Local Plan, it has an important ecological role within the Lee Valley Regional Park. With potential to permit public access, it could form a unique recreational resource for Meridian Water.

2.5.6 Flood Risk

Strategic Flood Risk Assessments (SFRAs) for the borough as a whole, and more specifically for Meridian Water, have been completed to inform the Masterplan. These map the distribution of flood risk across flood zones and consider the role and condition of existing flood defences. The River Lee Flood Relief Channel was a response to severe flooding in 1947. However there remains a residual flood risk in parts of the Masterplan area. The Meridian Water SFRA provides guidance on future site-specific Flood Risk Assessments and the application of sustainable urban drainage systems. It concludes that with appropriate measures it is feasible to redevelop the area in a way that will reduce flood risk both on and off site. Development will therefore be subject to reasonable and appropriate flood mitigation measures.

2.5.7 Biodiversity and Water Quality

Significantly affected by the industrial and developmental growth of the area, the biodiversity of the waterways has changed significantly over the course of time. The unwanted waste from riverside industries combined with misconnected pipes from residents' houses, littering and fly tipping has had significant effects on the waterways throughout the Lee Valley.

The Olympics have proven to be a catalyst for change with significant steps having been made to clean and protect the green corridor that runs through East London. This work by the Environment Agency will bring continuing benefit to the waterways and support the growth of the existing fish and bird communities.

2.5.8 Opportunities

Meridian Water has the potential to reconnect new and existing communities with the system of waterways that flow through the site. By creating increased and improved access, the benefit of the waterways can be drawn into the heart of Meridian Water. There is significant potential to develop these courses into corridors of recreation, leisure and new habitats, reinstating their presence as an unique resource and defining new character within Meridian Water.

Adding to Meridian Water's resilience to climate change, there is the opportunity to incorporate the role of water right into the heart of the scheme. Moving forward as a pioneering, sustainable development, Meridian Water can entwine these historical waterways into a fully integrated sustainable urban drainage system.



1- 4. River Lee Navigation

5. A historic relationship with Pymmes Brook

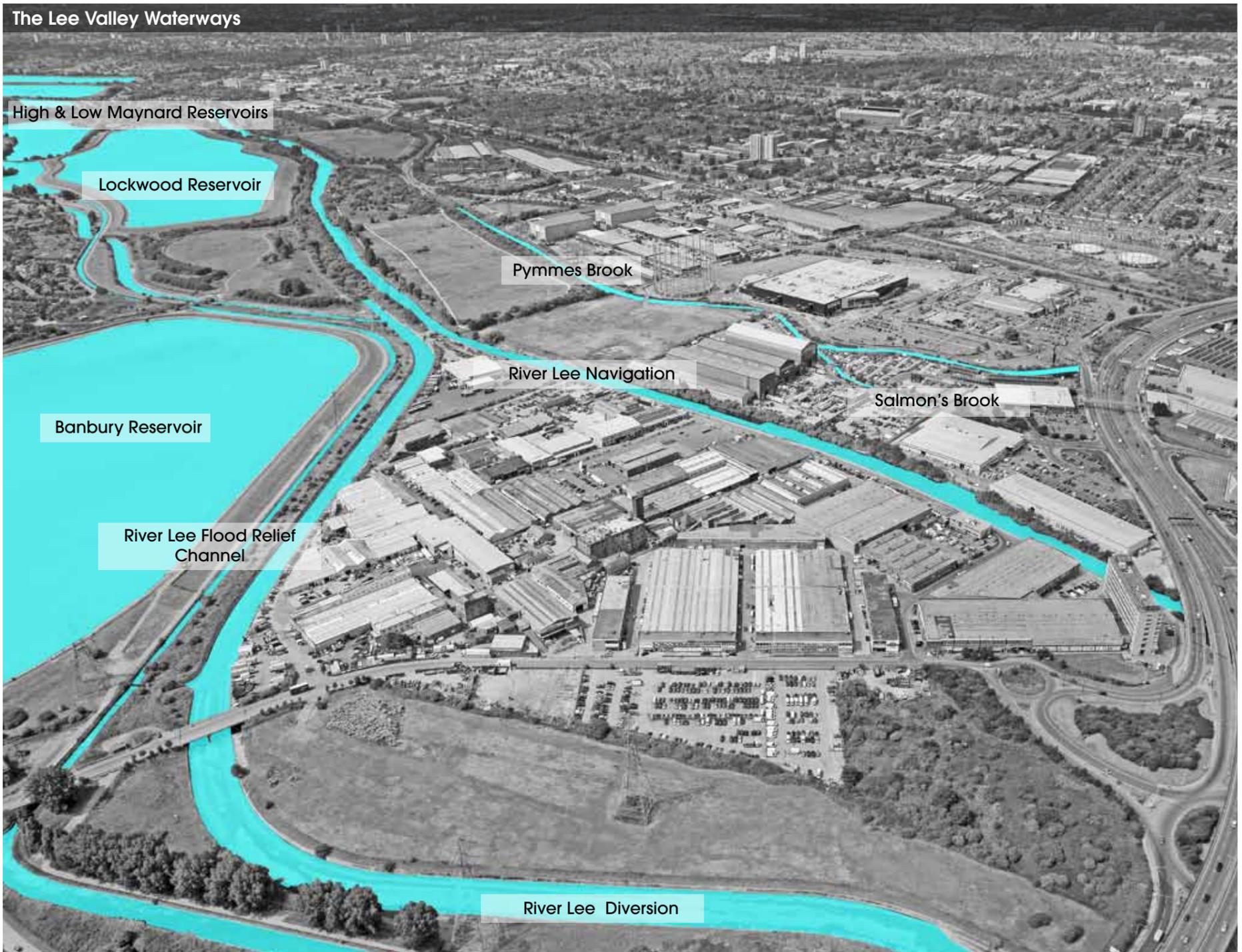


Figure 2-4 Lee Valley Waterways

2.6 The existing communities

A series of neighbourhoods each with strong, distinctive identities support the communities surrounding Meridian Water. Their layout and character have evolved with the change and flux of economy and communities over the passage of time.

A rich multi-cultural society has evolved throughout the surrounding communities bringing diversity to the region and resulting in the opportunity for Meridian Water to have a wide-spread positive impact.

2.6.1 Identity

Today Edmonton is celebrated as a multicultural area with various community groups within it. Numerous initiatives, local groups and fora have been established reinforcing strong community bonds. The Shires Estate also reflects a diverse community and small shops within the estate have helped shape a sense of identity.

Regeneration will bring benefit to the diverse multicultural communities that surround Meridian Water. Currently identified within the five per cent of most deprived areas of England, development at Meridian Water has the opportunity to bring significant benefits.

New schools and community facilities, a broader range of new jobs, improved public transport, enhanced environment and significant investment will help drive local economies, reduce levels of unemployment and improve the lives of surrounding residents.

2.6.2 Structure

Developing alongside the adjoining industrial area, Edmonton has a mix of typical Victorian street patterns along with more modern higher rise blocks. Its character includes terrace housing with deep rear gardens within a grid street pattern. The Shires Estate, to the north west of the site interrupts this form and stands with unique identity. Built to meet the demand for post war social housing, its own sense of community has evolved. In a similar way to Edmonton, the suburban neighbourhoods of Northumberland Park, Higham Hill and South Chingford have grown and changed significantly over the last century.

Typical of London, the area has evolved in stages with the distinct Victorian terraces supporting the initial rise of industry. With the heavy influx of workers through the 1960's into the industrial suburbs, the physical fabric of the area reflected the shift in demand. Through the 1960s and 1970s neighbourhood renewal schemes saw the redevelopment of housing estates.

Evolving as two separate towns, Upper and Lower Edmonton have undergone significant structural transformation in recent years in order to address the areas increased deprivation levels. The area is identified as an Area of Regeneration in the London Plan, reflecting the acute and persistently higher than average levels of deprivation concentrated here. Today

it is seeing significant ongoing improvements to provide the community with a wide range of shops and public facilities. Development at Meridian Water has the opportunity to complement the new facilities at Edmonton Green.

Industrial development follows the course of the Lee River corridor and forms a physical barrier between neighbourhoods east and west of Meridian Water. Bounded by industrial warehouse development, sports pitches and the railway, Northumberland Park and other Tottenham communities are divided from the community of Edmonton to the north and more significantly separated from the neighbourhoods to the east of Meridian Water.

Contained between the Lee Valley Regional Park and the North Circular, Higham Hill and Chapel End are disconnected from their neighbouring communities of South Chingford and collectively disconnected from the neighbourhoods to the east of Meridian Water.

2.6.3 Inter-relationships

Physical and natural barriers constrain the area's east-west connections resulting in divided communities with few shared resources between them. The waterways, railway, North Circular and reservoir disconnect communities, which are seemingly close, from one another. At the same time however, connections and links between the communities to the west of Meridian Water present the opportunity for Meridian Water to bring significant benefit to wider communities of Edmonton.

Industrial development dominates a central island of land running north-south along the River Lee. Abutting the river warehouses, industrial units, retail and distribution centres create dominant physical, visual and psychological barriers between the east and west. The industrial estates have grown over time. There are few pedestrian links through them. Many of the smaller industrial units within Harbet Road Industrial Estate support small local employment and a local working community has evolved. Meridian Water has the opportunity to build on the existing working community, promoting active frontages and creating a more dynamic and interactive working environment.

2.6.4 Opportunities

There is a wealth of opportunity at Meridian Water to help integrate new and existing communities. Meridian Water will help to strengthen and extend existing bonds and relationships by creating new routes and connections to and between community facilities. Shared resources will bind the community together and overcome neighbourhood barriers. By establishing dialogue with local communities, Meridian Water will look to reinforce existing social structures that can create new communities.

Moving forward in this way, a small school of 20 pupils has been created within St Johns Church on Dysons Road. St Matthew's CE Primary School currently serves local residents. It was established with the view of the children being transferred to a new primary school in the West of Meridian Water during the first phase of the development. This positive integration of new and existing communities serves as a precedent for further community initiatives in the area, which brings people of all ages together.

The Lee Valley has played a significant industrial and manufacturing role in the history of London. Supported by its location, connections and waterways, the Valley's industries have sustained the growth of the local communities and will continue to play a significant part in the future of Meridian Water and surrounding communities.

Located within the heart of the industrial growth corridor, combined with a range of transport connections, Meridian Water has distinct employment opportunities to offer



1. Upper Edmonton's Victorian terraces
2. Families take advantage of the Lee Valley's facilities
3. The Shires
4. Canalboat community
5. St John's Church

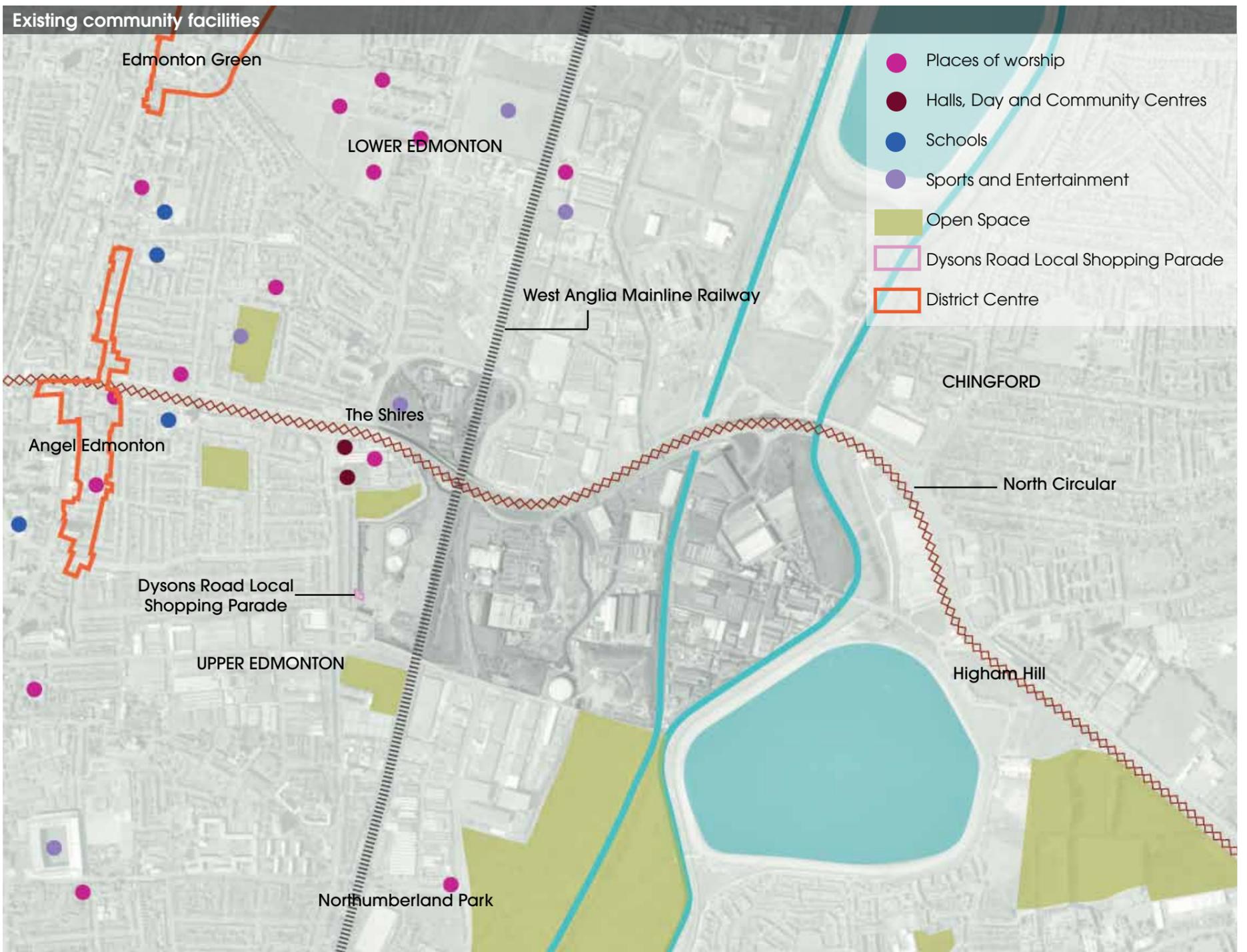


Figure 2-5 Existing Community Facilities

2.7 Business, employment and retail

The Lee Valley has played a significant industrial and manufacturing role in the history of London. Supported by its location, connections and waterways, the Valley’s industries have sustained the growth of the local communities and will continue to play a significant part in the future of Meridian Water and surrounding communities.

Advantageously located within a national industrial growth corridor, with a range of transport connections and an existing SIL designation, Meridian Water has distinct employment opportunities.

2.7.1 The existing situation

The range of retail and industrial businesses at Meridian Water make a significant contribution to London’s economy. Their success is underpinned by the site’s good road connections as well as drawing on the benefits of co-location.

The area is located within the London Stansted Cambridge corridor, and falls more locally within a significant industrial growth corridor within the Upper Lee Valley.

The most easterly portion of the site is Harbet Road Industrial Estate. It is safeguarded as Strategic Industrial Location (SIL) within the London Plan and Enfield’s Local Plan. This designation provides for a broad range of different businesses supporting important local employment and businesses needs and will be safeguarded.

Alongside the SIL area, relatively large retail and distribution units exist. Tesco, Ikea and Ravenside Retail Park take advantage of their exposure and proximity to the North Circular and provide employment for nearby communities and serve as an important resource.

2.7.2 Opportunities

Meridian Water provides a unique location for business. The area has direct access to the North Circular. It is within 5 minutes from the A10 and 5 miles from the M25. The area is in the heart of London’s second largest industrial corridor and is located in close proximity to the primary hub for the emerging Lee Valley Heat Network. This has the potential to provide affordable low carbon heat from energy to waste facilities, to supply it to buildings and industry across the area for use in space heating and hot water production.

The redevelopment and regeneration of Meridian Water provides a once in a lifetime opportunity for innovation, investment and transformation.

The Masterplan creates a shift in the employment profile of the area, diversifying from the traditional industries to provide space for a wider range of roles, from entry level jobs through to skilled technical roles, building on the existing strong green industry and food sectors and the areas strong history of industrial innovation and invention.

The Council will work closely with its partners to support investment and job creation across a number of sectors in Meridian Water, particularly in the Meridian East area:

- ★ Renewable energy research and manufacturing;
- ★ Food packaging;
- ★ Energy innovation;
- ★ High tech manufacturing;
- ★ Pharmaceuticals;
- ★ Recycling innovation; and
- ★ Businesses capitalising on the Decentralised Energy Network opportunity.

Beyond the use of its planning powers, the Council is looking at opportunities to encourage investment in these areas, reducing regulatory and financial burdens wherever it can, bidding for joint funding wherever appropriate and leveraging in assistance from partner organisations and groups.

In order to drive the local economy forward and create jobs for new and existing communities, Meridian Water presents an opportunity to expand on the existing area’s assets. There is a significant opportunity to expand, upgrade, regenerate and/or intensify existing facilities in the area.

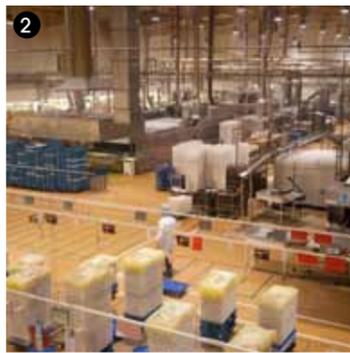
With direct access to the North Circular, Meridian Water is ideally located to meet a range of business needs. Its close proximity to existing residential neighbourhoods supports employment opportunities to develop within the area and throughout. Furthermore, the planned public transport improvements, increases employment opportunities.

The existing quantum of SIL is safeguarded. However, there is the opportunity to reconfigure the allocation to meet the overall aspirations of the vision. This would include identifying improved SIL locations, stimulating employment land regeneration and intensification and releasing waterfront and park front land better suited to residential use.

Any revision to the current retail component including Ikea, Tesco and Ravenside Retail Park, as well as any new high street retail provision should have regard to Edmonton Green’s role as a district centre which must be supported in the first instance.

Employer	Existing job numbers
Strategic Industrial Land	1036*
Ikea	400-450
Tesco	400-450
Ravenside Retail Park	175*
Total	2011-2111

* This calculation relies upon the average employment densities provided within the document 'Employment Densities Guide', 2nd Edition (2010) produced by Drivers Jonas Deloitte for use by the Homes and Communities Agency and their project partners.



1. Ikea
2. Food production
3. Edmonton Eco Park
4. Warehousing
5. Car mechanics

Existing employment

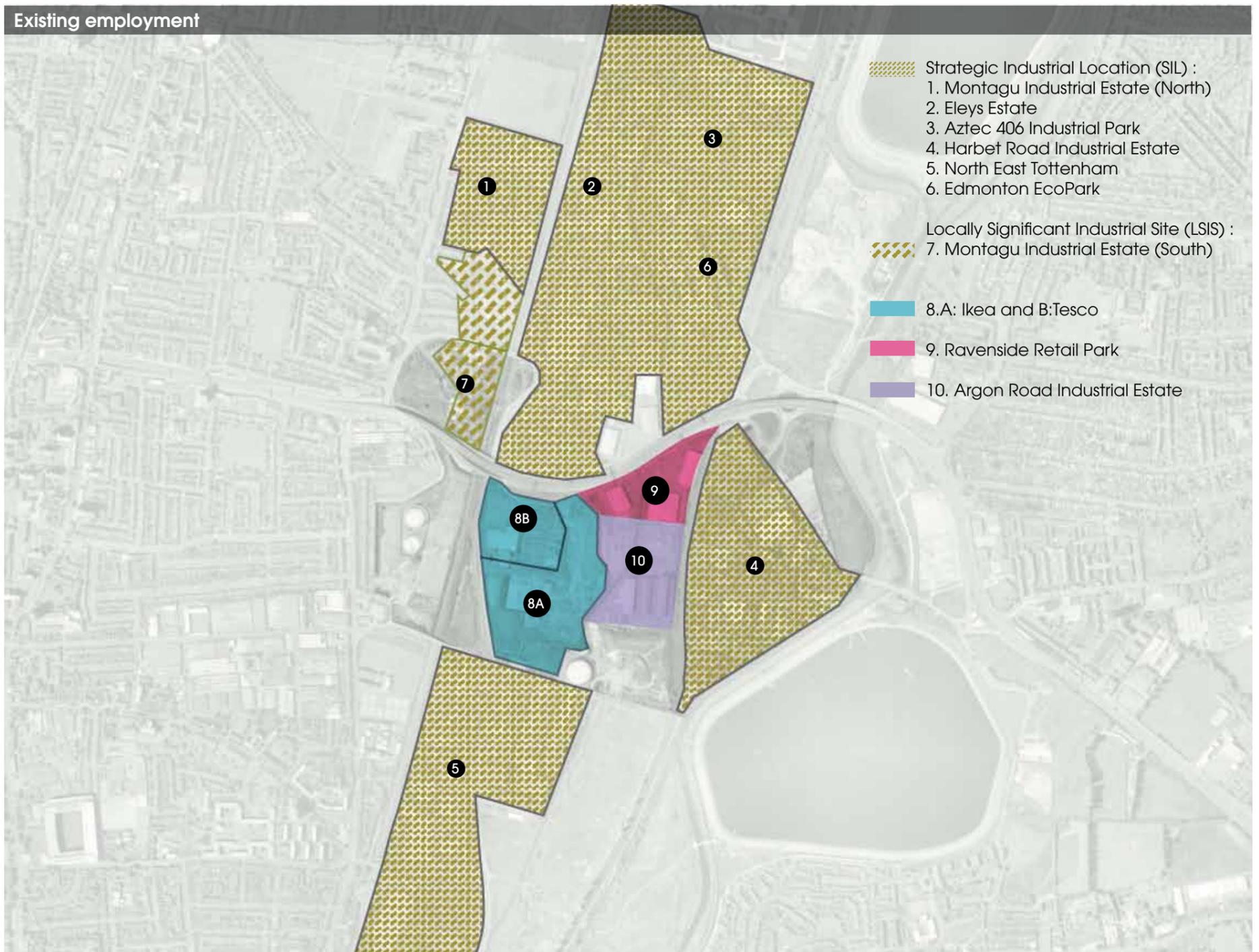


Figure 2-6 Existing Employment

2.8 The planning context

The transformation of Meridian Water is both driven and supported by a range of planning policies at the national, regional, sub-regional, and local levels.

As Planning and Urban Design Guidance, the Meridian Water Masterplan provides further detail on the implementation of adopted development plan policies. It sets out the opportunities for development based on assessment and consultation (engagement and collaboration) and the infrastructure needed to support growth. In line with national guidance the Masterplan is aspirational but also realistic and does not place unsustainable or unsupported burdens on development.

The planning context is discussed below, with reference to those policies which are particularly relevant to the delivery of the Masterplan, and in the determination of individual planning applications.

2.8.1 National planning context

The National Planning Policy Framework (NPPF) (March 2012) sets out the Government's planning policies for England and how these are expected to be applied. It is a material consideration in planning decisions.

The Framework states that the purpose of the planning system is to contribute to the achievement of sustainable development, to which there are three dimensions: economic, social and environmental. These dimensions give rise to the need for planning to perform a number of roles namely:

- * An economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;
- * A social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and
- * An environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

To achieve sustainable development, economic, social and environmental gains should be sought jointly and simultaneously through the planning system, in order to achieve positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life. Plans and decisions need to take local circumstances into account, so that they respond to the different opportunities for achieving sustainable development in different areas.

Core planning principles

The Framework makes clear that local councils should be positive and proactive in encouraging sustainable growth and addressing barriers to investment. It sets out twelve core land-use planning principles which should underpin both plan making and decision taking, stating that planning should:

- * Be genuinely plan-led;
- * Be a creative exercise in finding ways to enhance and improve the places in which people live their lives;
- * Pro actively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs...Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities;
- * Always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;
- * Take account of the different roles and character of different areas;
- * Support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources and encourage the use of renewable resources;
- * Contribute to conserving and enhancing the natural environment and reducing pollution;
- * Encourage the effective use of land by reusing land that has been previously developed;
- * Promote mixed use developments, and encourage multiple benefits;
- * Conserve heritage assets in a manner appropriate to their significance;
- * Make the fullest possible use of public transport, walking and cycling, and focus significant development in

locations which area or can be made sustainable; and

- * Take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs.

The Framework confirms that local plans are the key to delivering sustainable development that reflect the vision and aspirations of local communities. Plans should be realistic but aspirational and plan positively for the development and infrastructure required in the area. Local planning authorities should seek opportunities to achieve each of the economic, social and environmental dimensions of sustainable development, and net gain across all three.

Planning decisions must be taken in accordance with the development plan unless material considerations indicate otherwise. Supplementary planning documents should be used where they can help applicants make successful applications or aid infrastructure delivery, and should not be used to add unnecessarily to the financial burdens on development

2.8.2 Regional and sub-regional planning context

The London Plan (July 2011)

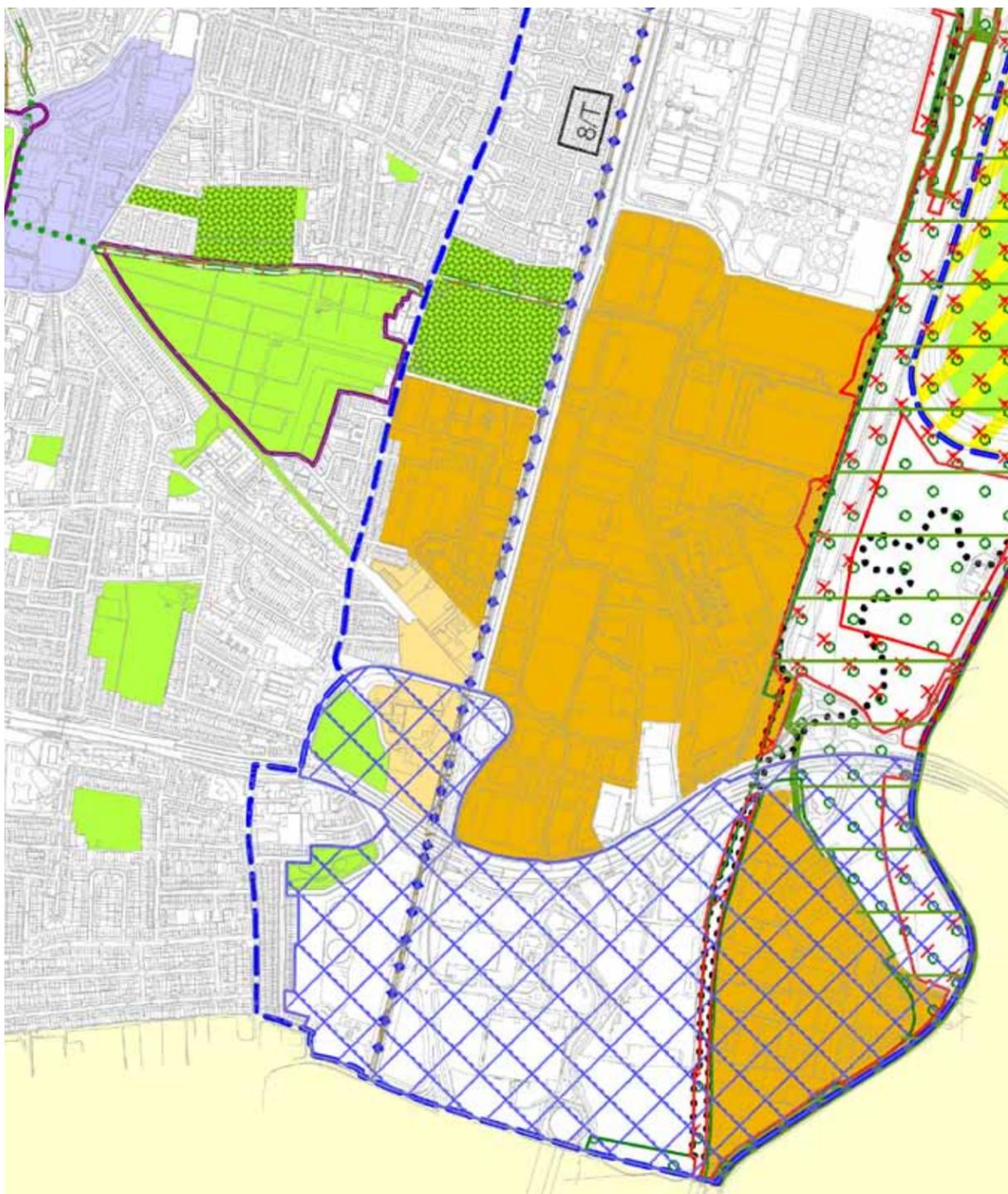
Meridian Water occupies a strategic location within the Government's London-Stansted-Cambridge Corridor. It is also situated within the Upper Lee Valley, which is designated as an Opportunity Area within the Mayor of London's 'London Plan' (July 2011).

Opportunity Areas are the Capital's major reservoir of brownfield land with significant capacity to accommodate new housing, commercial and other development linked to existing or potential improvements to public transport accessibility. The Upper Lee Valley is the largest Opportunity Area in London with the potential for 15,000 new jobs and 16,000 new homes by 2031, together with significant investment and improvements to transport and other infrastructure.

London Plan Policy 2.13 (Opportunity Areas) states that development proposals within opportunity areas should seek to optimise residential and non-residential output and densities, provide necessary social and other infrastructure to sustain growth, and, where appropriate, contain a mix of uses.



1. Aerial view of Meridian Water
2. Provision for children
3. Mixed use opportunities
4. Work space provision
5. Leisure opportunities



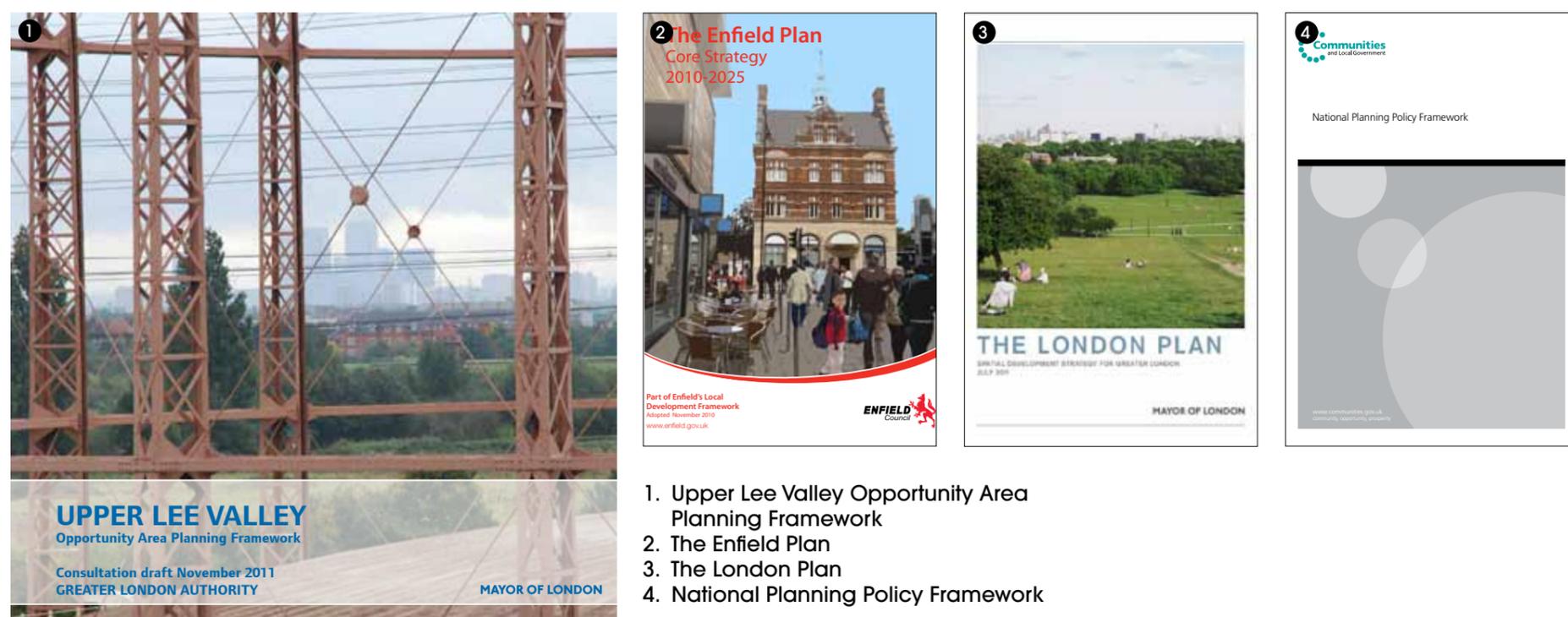
**Enfield Local Development Framework
Proposals Map
Adopted 10 November 2010**

To be read in conjunction with Core Strategy document
and relevant parts of the 1994 Unitary Development Plan
(includes saved and altered UDP designations)

- Greenbelt (UDP & CS)
- Major Developed Site in the Greenbelt (CS)
- Crews Hill Defined Area (UDP)
- Lee Valley Regional Park (UDP)
- Metropolitan Open Land (London Plan)
- Local Open Space (CS)
- Green Chain Corridor (UDP)
- Green Chain Missing Link (UDP)
- Green Chain Associated Open Space (UDP)
- Site of Metropolitan Importance for Nature Conservation (CS)
- Site of Borough Importance for Nature Conservation (CS)
- Site of Local Importance for Nature Conservation (CS)
- Site of Special Scientific Interest (Wildlife & Countryside Act 1981)
- Wildlife Corridor (UDP) (diagrammatic)
- Conservation Area as at November 2010 (UDP & CS)
(Planning (Listed Buildings and Conservation Areas) Act 1990)
- Area of Special Character (UDP)
- Major Centre (CS)
- District Centre (CS)
- Primary Shopping Frontage (CS)
- Core Retail Frontage (UDP)
- Strategic Industrial Location (CS)
- Locally Significant Industrial Site (CS)
- Land covered by Area Action Plan (CS)
- Place Shaping Priority Area (CS)
- Area of Special Advertisement Control (Town and Country
Planning (Control of Advertisements) Regulations 1992)
- Unimplemented UDP Site Proposals (with Proposal no.) (UDP)
(diagrammatic route)
- Land not in Enfield Borough

Figure 2-7 Enfield Local Development Framework Proposals Map

2.8 The Planning Context



1. Upper Lee Valley Opportunity Area Planning Framework
2. The Enfield Plan
3. The London Plan
4. National Planning Policy Framework

Other London Plan policies that are particularly relevant to the development of Meridian Water are listed below:

Policies 2.6 and 2.7 (Outer London) recognise the need for a joint approach to realise the potential of Outer London and to enhance and promote its distinct economic opportunities and transport requirements.

Policy 2.17 (Strategic Industrial Locations) seeks to safeguard London's main reservoirs of industrial land and related capacity, including general and light industrial uses, logistics, waste management and environmental industries (such as renewable energy generation), utilities, wholesale markets and some transport functions.

Chapter 3 (Housing) recognises the pressing need for more homes in London and includes policies for increasing housing supply (Policy 3.3). Policy 3.4 (Optimising Housing Potential) seeks to optimise housing in accordance with local context, transport capacity and other density parameters within Table 3.2 of the Plan.

Policy 3.7 (Large Residential Developments) states that larger housing developments should be progressed through a plan-led process to coordinate the provision of social, environmental and other infrastructure. Policy 3.8 considers housing choice.

Chapter 5 sets out a comprehensive range of policies to underpin London's response to climate change, including sustainable design and construction (Policy 5.3)

Chapter 7 focuses on London's living places and spaces. Policy 7.1 (Building London's Neighbourhoods and Communities) states that development should be designed so that the layout, tenure and mix of uses interface with surrounding land will improve people's access to social and community infrastructure (including green spaces), the Blue Ribbon Network, local shops, employment opportunities, commercial services and public transport.

Policy 7.2 (An Inclusive Environment) requires all new development in London to achieve the highest standards of accessible and inclusive design.

Policy 7.4 (Local Character) states that buildings, streets and open spaces should provide a high quality design response. In areas of poor or ill defined character, development should build on the positive elements that can contribute to establishing an enhanced character for the future function of the area. Policy 7.7 (Tall Buildings) states that tall and large buildings should be part of a plan-led approach to changing or developing an area.

Policy 7.19 Biodiversity and Access to Nature) highlights the importance of planning for nature from the beginning of the development process (Policy 7.19).

Upper Lee Valley Opportunity Area Planning Framework (OAPF) (November 2011)

The Mayor of London is working with Enfield Council, adjoining local authorities, the Lee Valley Regional Park Authority and other stakeholders to prepare an over arching planning framework for the Upper Lee Valley. The Opportunity Area Planning Framework (OAPF) will supplement and apply existing London Plan policies to the area, setting out the Mayoral and borough priorities and long term vision for the evolution of the Upper Lee Valley as a sustainable and successful part of London. Where appropriate, the OAPF will be amplified by boroughs own planning documents for specific areas.

The draft Framework was published for consultation in November 2011. It sets out a number of objectives for the Upper Lee Valley which are based upon making the most of the areas existing assets. These include Lee Valley Regional Park, the large concentration of industrial land within the area and its connections into central London, using them as a catalyst for economic and physical regeneration.

Section 7 recognises that Meridian Water is one of the key redevelopment opportunities in north London with the opportunity to create a new mixed use neighbourhood of 5,000 new homes and up to 3,000 new jobs, along with new schools and other supporting facilities. Growth at Meridian Water will be supported by significant investments and improvements to transport infrastructure, including four trains per hour on the West Anglia Main Line. It will create the conditions for development to unlock the existing potential of the Lee Valley Regional Park whilst also connecting and extending to existing and new communities.

The Upper Lee Valley Opportunity Area Planning Framework is expected to be formally published by the Mayor and endorsed by the Upper Lee Valley boroughs, including Enfield Council, in summer 2013

2.8.3 Local planning context

Enfield's Core Strategy (November 2010)

The Core Strategy sets out the spatial planning framework for the long term development of the Borough for the next 15 to 20 years. It is a strategic document providing the broad strategy for the scale and distribution of development and the provision of supporting infrastructure. It states that new residential led mixed use development will be concentrated in a number of priority areas, the largest of which is Meridian Water, within the Central Leaside Strategic Growth Area.

Core Policy 37 sets out the Council's overall approach for the Central Leaside area as a whole. Further detail on the Meridian Water priority area is contained within Core Policy 38 which is repeated in full below:

Core Policy 38 (Meridian Water)

Based on the evidence of initial growth scenarios in the Meridian Water Place Shaping Priority Area (see boundary in Map 9.3 of the Core Strategy), the objectives of new development will be to create a new community by 2026 with up to 5,000 new homes, 1,500 new jobs and all the necessary infrastructure to support the community and attract families and new employers to the area, including:

- ★ Two new two form entry primary schools, a new secondary school (including Sixth Form), a new local centre offering a new health facility, a library, community rooms, a police presence and local shops (see Core Policies 7, 8 and 17);
- ★ Approximately 80% of the area should comprise a mix of residential, retail, community uses and open spaces, with 20% of the area as revitalised employment uses, integrated into the wider development;
- ★ High quality public realm and development of an exemplar quality at a human scale with buildings that are flexible, adaptable and responsive to the environment in which they sit;
- ★ A reduction in flood risk through the appropriate location, layout and design of new development and mix of land uses;
- ★ A development that pioneers new environmental technologies. New housing will aspire to achieve the greatest levels of energy-efficiency, incorporating renewable power and using locally produced energy;
- ★ Higher density development close to Angel Road station and in waterfront locations;
- ★ New development will maximise the opportunities offered by the waterfront location, with routes and spaces along the water edge;
- ★ A new spine running through the area, connecting all parts of Meridian Water, linking new and existing communities, the station and the Lee Valley Regional Park;
- ★ Improved connectivity, both north-south and east-west;
- ★ Integration with immediately adjacent employment areas, in particular Harbet Road Estate, where there is an opportunity to upgrade employment uses on the western fringe to complete transformation in the Meridian Water area;
- ★ A mix of housing types, sizes and tenures and affordable homes to support a new sustainable community, which will enable residents to remain in the community throughout their lifetimes;
- ★ New open space at the heart of the new community, designed to connect the currently disjointed part of the

Lee Valley Regional Park either side of the North Circular Road;

- ★ A co-ordinated strategy to managing flood risk in accordance with Core Policy 28 and a co-ordinated strategy for the decommissioning of gas holders and other contaminated land in the area in line with Core Policy 32;
- ★ Restoration of the waterways which run through the development site as part of an integrated approach to water management in Meridian Water; and
- ★ Development should achieve efficiency target of 105 l per person per day in line with the Code for Sustainable Homes.

In addition to Core Policy 38 and those policies referred to within it, other Core Policies which are particularly relevant to development in the Meridian Water area include:

Core Policy 3 (Affordable Housing) seeks to achieve a borough-wide target of 40% affordable housing units.

Core Policy 4 (Housing Quality) requires high quality design and sustainability for all new homes, stating that account should be taken of the London Plan design and construction policies and sustainable design and construction guidance.

Core Policy 5 (Housing Types) seeks a range of housing sizes to meet housing need and provide choice.

Core Policies 11 and 12 identify the need for new recreation, leisure, culture and arts facilities in Meridian Water.

Core Policy 14 (Safeguarding Strategic Industrial Locations) and Core Policy 15 (Locally Significant Industrial Sites) set out the Council's approach to the safeguarding of employment land within the area.

Core Policy 22 (Delivering Sustainable Waste Management) states that opportunities for local energy provision to support new development at Meridian Water will be explored.

Core Policy 26 (Public Transport) confirms that the Council, working with its partners, will seek to secure a comprehensive, safe, accessible, welcoming and efficient public transport network, capable of supporting the development proposals for the Borough and providing attractive alternative travel options. Proposals to upgrade the West Anglia Rail line in the Lea Valley to enable a four trains per hour service will be supported

Core Policy 29 (Flood Management Infrastructure) states that opportunities for removal of culverts, river restoration and naturalisation should be considered as part of any development adjacent to a watercourse. Innovative responses to flood risk will be encouraged and explored as part of the transformation of Meridian Water and Central Leaside.

Core Policy 34 (Parks, Playing Fields and Open Spaces) requires the creation of new open space at Central Leaside as part of the regeneration of Meridian Water and which provides effective links to the Lee Valley Regional Park.

Core Policy 35 (Lee Valley Regional Park and Waterways) confirms that the Council will work with the Lee Valley Regional Park Authority, British Waterways, riparian owners, the Environment Agency and other partners to improve access to the Lee Valley Regional Park.

Core Policy 46 (Infrastructure Contributions) provides a list of provisions to be considered in obligations to contribute to infrastructure and community facilities. Further details are set out in the Council's S106 Supplementary Planning Document published in November 2011. In the medium to long term the Council intends to introduce a Community Infrastructure Levy which will set out a clear charging schedule for developers' contributions towards local and strategic infrastructure. The Council's Preliminary Draft Charging Schedule for Enfield's

Community Infrastructure Levy was published for consultation in June 2013.

An extract of the Proposals Map accompanying the adopted Core Strategy which illustrates the planning policy designations relating to Meridian Water is shown on page 36.

Emerging Plans

Given that the Meridian Water area is expected to be developed over the course of a number of years, it is important to bear in mind the emerging local planning policy which is expected to come forward in the next 12 months which will in time be adopted as part of the statutory Local Plan.

- Development Management Document (Submission draft March 2013)

The draft Development Management Document (DMD) sets out the Council's proposed development management policies to be used in the determination of individual planning applications in the borough, in conjunction with policies contained in the Core Strategy. It will replace existing "saved" Unitary Development Plan Policies relating to detailed standards for new development, particularly residential uses. The draft DMD was approved by the Council for submission to the Secretary of State for examination in March 2013. It is anticipated the Development Management Document will be formally adopted in Autumn 2013.

Development guidance specifically related to the delivery of the Masterplan is contained with Section 7 of this document.

- Central Leaside Area Action Plan

Meridian Water lies in the heart of a wider growth area known as Central Leaside which is the name given to the land that lies on the border between the south-east of Enfield and the north east of Haringey. In addition to growth at Meridian Water, significant regeneration and redevelopment opportunities in the Central Leaside area include:

- ★ Intensification and diversification of the existing employment offer and industrial land which is of strategic importance to London's economy;
- ★ Future redevelopment of the Edmonton Eco Park to provide the next generation of waste services and to support the provision of a Lee Valley Decentralised Heat Network;
- ★ Opportunities for high quality sport and recreational facilities at Picketts Lock; and
- ★ Upgrade works to the existing Deephams Sewage Treatment Works.

The Council is preparing an action plan to provide a planning framework for development in the area. Consultation on the emerging Central Leaside Area Action Plan was completed in 2012 and the draft Area Action Plan is due to be published later in 2013. Once adopted it will form part of the Council's statutory Local Plan. A Planning Brief for the Edmonton Eco Park site was approved by the Council as a supplementary planning document in Spring 2013.

Further details on the Council's Local Plan and emerging documents are available on the Council's website.

2.9 The physical history and a fractured site

The existing character of Meridian Water is defined by the area's rich industrial heritage. The network of waterways, energy and transport infrastructure and industrial units grew from the demand of industrial growth in the area and the necessity for the landscape to accommodate it.

Alongside the changing shape of industry, the landscape evolved over time resulting in a divided geography that is dominated by industrial forms and infrastructure. Although it is rich with potential for redevelopment, it is disconnected from surrounding communities and isolates the rich water and landscape assets that lie within it.

Re-connecting the resulting fractured site is at the core of realising the objectives of the masterplan and unlock the site's extraordinary potential.

2.9.1 Barriers to movement

The waterways and railway create a series of linear obstructions through the landscape, forming impermeable islands with few connections between them. Collectively, these islands form a block of land which is isolated and disconnected from existing surrounding communities.

Historically supporting the growth of industry through the Lee Valley Corridor, the River Lee Navigation is a unique asset running north-south through the site. The existing industrial development along its banks however, currently restricts the quality of the experience of the river and limits access and connections to it. The Lee Valley Diversion Channel, Pymmes and Salmons Brooks are largely inaccessible and further divide the site, inhibiting movement from east to west. The current lack of bridges results in the divisive character of the waterways and is a key issue that the masterplan seeks to address in order to open up both pedestrian and vehicular movement.

Similarly to the waterways, the railway divides part of Meridian Water. The disconnected Angel Road Station is currently underused and the closed underpass and lack of a bridge across the railway line creates a physical and psychological barrier for surrounding residents. Improving accessibility to the station and across the railway line are critical issues for the masterplan in addressing the fractured nature of the site.

2.9.2 Views and perceptions

Views of industrial forms, service and transport infrastructure heavily influence the experience and character of Meridian Water. Dominating much of the skyline these elements are distinct and create a sense of absence of a human scale and natural environment.

The North Circular dominates the northern edge of the site. It creates a visual and psychological barrier between neighbourhoods. However, as an important strategic route it provides the site with a strong visual frontage and multiple points of access. Through the considered distribution of land uses, the masterplan seeks to overcome the visual and psychological constraints of the North Circular and strives to maximise the opportunities offered by its close proximity.

To the west of Meridian Water are views of two large gasometers, with a third sited centrally in the southern part of the site. These structures are no longer in use and will be removed to free up important development land. Similarly to the distinct character of the Angel Works brick pumping station, these structures provide cues for future design. They serve as references of the sites industrial legacy and draw on the distinctive character of the place.

The line of pylons and cables that sweep around Meridian Water through the Lee Valley Regional Park presently dominate over an open area of low quality scrub and grassland floodplain. Through an intensity of development and carefully structured layout and street views, the masterplan will ensure that the impacts of these elements recede.

The edge of the elevated Banbury Reservoir serves as a backdrop to the site. The masterplan seeks to address this edge through creating views from taller buildings towards the water. Future plans to create access to it will transform the perception and value of this important site asset.

2.9.3 Reimagining the site's threshold

The re-imagining of the metals and waste recycling facility, currently located adjacent to Angel Road station, is critical to ensuring site-wide viability for the scheme. It is a visual and noise pollutant, and in its current state, this facility undermines the masterplan's progressive, forward thinking vision; and compromises the site's desirability to potential investors and future home buyers. In the medium to long term, it needs to be re-located.

However, given the potential cost associated with relocating this land-use, the Masterplan provides recommendations for short-term mitigation, in advance of long-term redevelopment ambitions. In the short and medium term, consideration should be given to one of two screening options – structural planting or acoustic screening. The former, offers a softer edge to the site and helps integrate the use with an adjacent park, itself benefiting from an improvements programme; whilst the latter, provides a more urban edge and benefits from an ability to carry signage to subsidise its cost. As development moves forward, it is envisioned that the site might later become an enlarged bus depot, creating a central hub to the benefit of both Enfield and Haringey Boroughs

Although the site's flood risk (Level 3) should be noted, this zoning remains compatible with such employment uses. Moreover, the area's public open space contributes positively to mitigating this challenge.





1. Angel Works
2. Industrial infrastructure
3. The Lee Valley Navigation
- 4 & 5. A rich historical narrative within the Lee Valley Regional Park

The first island is located to the north of the A406, adjacent to Angel Road Station. It is bounded by Montagu Road and Conduit Lane to the west and south and the railway to the east. It is the part of the site closest to the facilities at Edmonton Green

One of the largest islands contains Tesco and Ikea, and is located at the heart of Meridian Water. Access is provided from Meridian Way via Glover Drive. It is bounded to the west by Pymmes Brook

The largest island is located to the east of the Lee Navigation and is made up of Harbet Road Industrial Estate, which is safeguarded as SIL in Enfield's Local Plan and the London Plan. This part of Meridian Water forms a triangular shape, with Harbet Road and the River Lee Diversion Channel forming the remaining boundaries. The island lies adjacent to Banbury Reservoir.

One of the smallest islands is a relatively narrow strip defined by the Salmons and Pymmes Brooks, bounded to the north by the North Circular. Mothercare (part of Ravenside Retail Park) is located here.

The island immediately to the west of the railway line is known as the 'Teardrop' due to its shape. It is separated from the main part of the site to the east by Meridian Way

The final island is located to the north-east of Harbet Road, and forms an area predominantly covered by low grade open land, designated as Green Belt in Enfield's Local Plan. The island is connected to the north underneath the North Circular flyover to the Lee Valley Regional Park

The most westerly island lies to the west of the railway line and sits adjacent to an existing residential community. It benefits from an existing park at Ladysmith Road and its proximity to Angel Road Station

The remainder of the retail park is located in the adjacent island, which sits between the Salmons/Pymmes Brooks and the Lee Navigation. The southern part of the island links directly to the Lee Valley Regional Park

Figure 2-8 The Fractured Meridian Water Site

2.9 The physical history and a fractured site



6. A view of the gasometers.

A historical link to energy

The Council is working with the GLA and the London boroughs of Haringey and Waltham Forest to explore the potential for a new-city-scale decentralised energy (DE) network. Known as the Lee Valley Heat Network, it has the potential to capture affordable low carbon heat from waste to energy facilities, to supply it to buildings and industry across the area for use in space heating and hot water production.

The Lee Valley Heat Network will initially use heat and steam from the Energy from Waste (EfW) facility at the Edmonton EcoPark. This facility is located to the north of Meridian Water and already generates enough heat to kick-start a strategic network to serve Meridian Water.

A resilient and secure energy system will be critical to the sustainability of Meridian Water. It will help to provide affordable low carbon heat to businesses, industries and local residents across the area through a system of pipes that move energy in the form of hot water and/or steam from where it is created, to where it is needed, much like an electricity network.

The existing supplies of energy to Meridian Water are grid electricity and gas. Their cost has increased rapidly in recent years and the security of supply and environmental problems of fossil fuels that generate much of our electricity is being brought more and more into question. As a consequence, low carbon energy generation is becoming commonplace. The Mayor includes the creation of 'decentralised energy' networks across the Capital as one of his priorities.

A bright future

The Lee Valley Heat Network is an ambitious scheme, which needs to be able to stand alone but also have the capacity to expand and integrate easily with neighbouring London heat networks.

The case is clear for public and future private investment. With confident and ambitious local leadership by the London Boroughs of Enfield, Haringey and Waltham Forest, combined with the backing of the Greater London Authority, the Lee Valley will become a key location for meeting London's future heat needs.

The market and policy context mean that a commercial company would not be able to finance the infrastructure required to kick start the network. This is why the public sector is leading in planning for and delivering the initial phases of the Lee Valley Heat Network.

Over time the network has the potential to deliver heat across a range of sites in the Lee Valley. These sites would be focused on a number of clusters, including new developments in Meridian Water that are likely to be built in the coming years and where there are higher building densities. The benefits will be spread across the public and private sectors.

The initial phases of the Lee Valley Heat Network will be developed around the existing Edmonton EcoPark, located to the north of Meridian Water, by accessing a portion of the waste heat generated there. This will provide a combination of low temperature hot water (LTHW) to heat residential, commercial and public sector buildings, as well as a high temperature steam link for industrial uses. This mixed facility gives the area the ability to attract industries to the area as well as support existing ones.

The Edmonton EcoPark will be redeveloped over the coming years, providing an opportunity to host a long-term source of heat to supply the Lee Valley Heat Network.

3 The Masterplan



3.1 The concept

Meridian Water is an ambitious masterplan that will see the radical transformation of this vast area to deliver up to 5000 new homes and 3000 new jobs.

Underpinned by a clear understanding of the current and historic contexts, the vision identifies and integrates solutions to ensure the future benefit of Meridian Water is to its residents and surrounding communities.

The Masterplan responds to the physical constraints of the area and reflects the comprehensive evidence base and consultation process. The resulting plan is robust and deliverable.

Celebrating the Lee Valley’s waterways, creating healthy living corridors and providing a framework for modern, low carbon lifestyles, the masterplan fashions a new London destination that will become home to a vibrant and sustainable community.

The Masterplan delivery concept comprises 3 components. These are the:

- Causeway
- Neighbourhoods
- Frameworks.

They outline a strong concept that sweeps through individual neighbourhoods of defined character. Finally a series of frameworks, stitch meaning, form and function into Meridian Water and guarantee a holistic sustainable future.



3.1.1 The Causeway

A grand civic Causeway forms the backbone of Meridian Water, sweeping across the site from west to east. It is the core masterplan arrangement around which the rest of the masterplan is both structured and delivered. It is the central feature running through the heart of the scheme.

As it moves through the site, the Causeway becomes a vibrant community focus that is animated by a series of squares and public spaces at key points along its length. From the central square, the Causeway frames views down towards the waterfront, reasserting its centrality to the vision.

A new integrated transport hub, a landmark bridge and a refashioned high street form key features of this central element of the masterplan.

Diverse and lively in nature, the Causeway realises a number of simultaneous objectives:

- ★ Stitching communities together;
- ★ Connecting the site;
- ★ Providing a place of social interaction;
- ★ Facilitating a sustainable public transport, pedestrian and cycling corridor with priority over vehicular through traffic;
- ★ Providing a 21st century low carbon corridor; and
- ★ Enabling a delivery corridor.

The Causeway is described in Section 4.

3.1.2 The Neighbourhoods

The character of the Causeway changes as it moves through the site. Its nature is shaped by its immediate context and informed by the variety of spaces and activities it hosts. This shifting aspect to the Causeway in turn informs the character of the area through which it passes, creating a series of diverse neighbourhoods across the masterplan.

Each distinct neighbourhood celebrates its unique characteristics and identity, creating diversity across the masterplan and fostering a strong a sense of place.

The neighbourhoods comprise:

- ★ Meridian Angel;
- ★ The Gateway;
- ★ Meridian Central;
- ★ The Islands;
- ★ Canal-side West;
- ★ Meridian East; and
- ★ The Parklands.

The Neighbourhoods are described in Section 5.

3.1.3 The Frameworks

The masterplan is held together by a series of independent layers that, when overlaid, create a robust and fully integrated neighbourhood.

Identifying 8 major principles, the frameworks provide a detailed strategic approach into the workings of the masterplan.

The frameworks are inter dependent but work collectively to deliver a high-quality, efficient and sustainable masterplan, ensuring the future success of Meridian Water.

The frameworks comprise:

- ★ Movement;
- ★ Homes;
- ★ Business and Employment;
- ★ Shopping and leisure;
- ★ Community;
- ★ Water;
- ★ Public space; and
- ★ Energy.

The Frameworks are described in Section 6.

Meridian Water within context

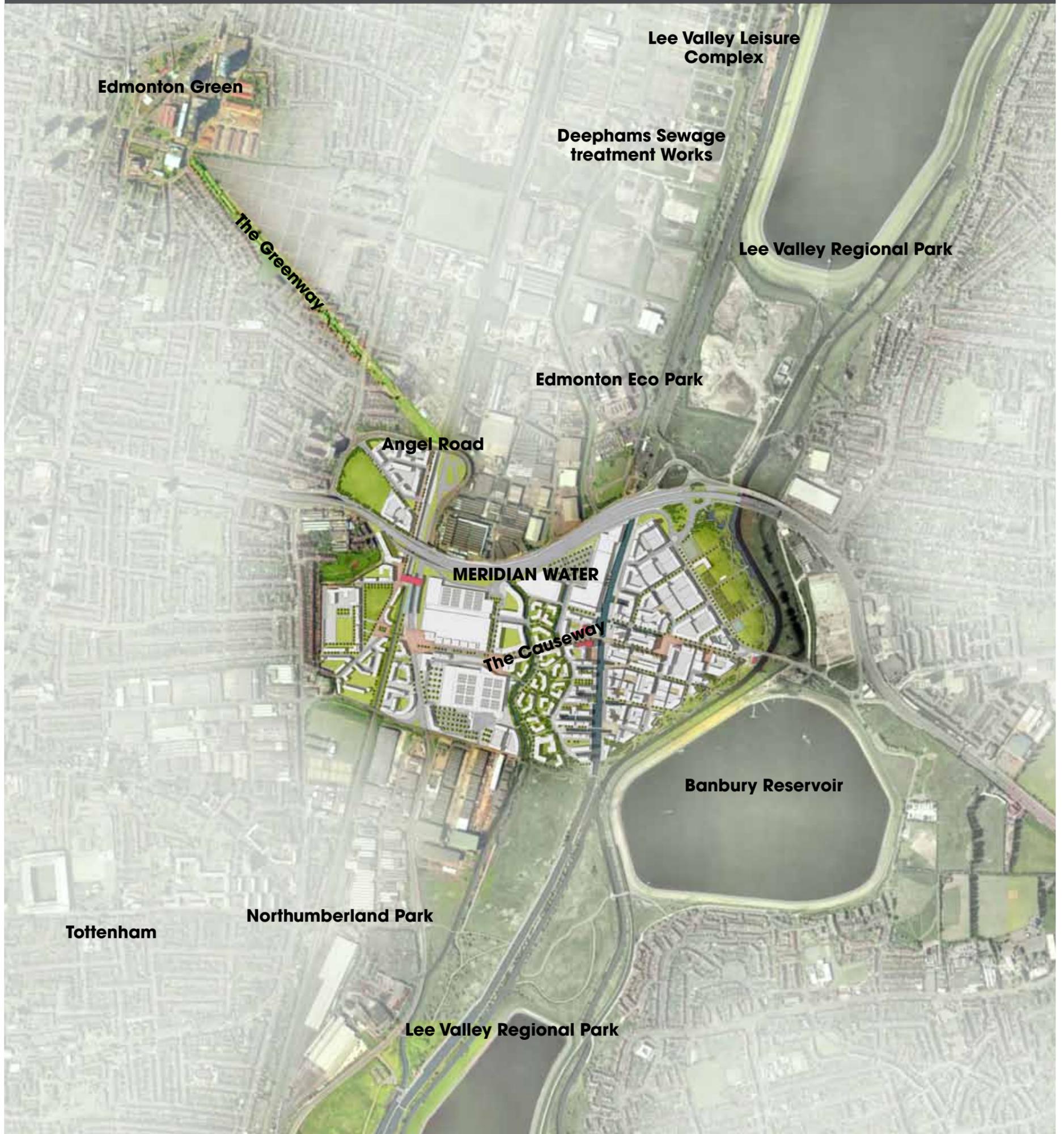


Figure 3-1 Meridian Water - local context



Looking north towards Angel bridge along the River Lee Navigation



3.2 Masterplan

- 1 The Causeway
- 2 Extended railway station platform
- 3 Transport Hub

- A1 Greenway to Edmonton Green
- A2 Conduit Lane
- A3 All-through school
- A4 Montagu Road
- A5 Business Uses
- A6 Aberdeen Road
- A7 Albany Road
- A8 Hotel/employment/social
- A9 Dysons Road
- A10 Kimberley Road
- A11 Station drop-off point
- A12 Community park
- A13 Western Square
- A14 Primary school
- A15 Leaside Road
- A16 Frederick Knight Sports Ground

- B1 Gateway Square
- B2 Meridian Underpass
- B3 University Technical College (UTC)
- B4 A1055 Meridian Way

- C1 Multi-storey car park with solar panels on roof
- C2 Tesco
- C3 Petrol station
- C4 Salmons Brook
- C5 A406 North Circular
- C6 Ravenside Retail Park
- C7 Advent Way
- C8 Argon Road
- C9 High Street
- C10 Central Square
- C11 Community hub
- C12 Ikea with Solar Panels on Roof
- C13 Car Park

- D1 Pymmes Brook

- F1 Angel Bridge
- F2 River Lee Navigation
- F3 Harbet Road Towpath
- F4 Angel Square
- F5 Angel Works
- F6 The Causeway
- F7 Pedestrians and cycle route

- G1 Guided busway
- G2 Lee Valley Regional Park
- G3 River Lee Diversion Channel
- G4 River Lee Flood Relief Channel
- G5 Banbury Reservoir
- G6 Community agriculture and playing fields

4 The Causeway



4.1 The Causeway

Running through Meridian Water, the Causeway provides a strong, attractive and welcoming spine. Its alignment reconnects a once fractured site, opens up new connections and draws in the areas' communities.

More than a transport corridor, it provides a route for future low carbon energy infrastructure, links all the neighbourhoods together and underpins the delivery of the Masterplan.

It will become a place of social interaction. The Causeway's path contains a series of community spaces stitched together by a dynamic, high quality urban landscape connecting communities, binding people to place and defining the essence of Meridian Water.

4.1.1 Connecting the site

The Causeway reconnects the area's currently fragmented components, and helps to link Meridian Water with the wider area, inviting in existing residents and communities. Its provision will also help to unlock Meridian Water's development potential.

Transcending the barriers of the railway line, roads and waterways, it gives shape to a cohesive Masterplan, opening up links to the rich landscape and water context and fostering good connections between its elements. Traversing significant physical boundaries, the Causeway also breaks psychological barriers created by the existing infrastructure. The noise, traffic, form and lack of safe crossing points has resulted in the North Circular and railway line restricting easy access to either side thus preventing possible connections. The Causeway unlocks connections and new paths of opportunity, connecting facilities, spaces and communities. It will draw and connect people through the area.

The Causeway includes two key linking elements. The first is the rejuvenated Meridian Underpass that stretches beneath the railway line connecting the western edge and the existing communities with the rest of the site. Once connected, activity and life spills onto the Causeway from adjoining buildings ensuring a diversity of activity.

A landmark bridge forms the second link, spanning the River Lee to connect the east and western sides of Meridian Water.

This iconic piece of infrastructure prioritises pedestrians, cyclists and buses but will also allow for vehicular access for local residents. To promote sustainable transport, a vehicular recognition system or similar measures will be employed to prevent unauthorised vehicles using this route as a rat run.

At the central crossing point over the River Lee there is an intensity of activity, forming a lively mixed-use node on the waterfront.

4.1.2 Bringing communities together

The Causeway reaches out to connect with Meridian Water's adjoining communities. New development, routes and spaces lock into its path creating a continuous corridor of life and activity. The Causeway opens up connections to the employment and retail, the waterfront and the Lee Valley Regional Park as well as a host of new services, resources and facilities.

It is a strong urban feature that fully integrates the new and existing communities and ensures the benefits of development spread across the area.

Clear connections through the new neighbourhoods draw people to meet the Causeway, and its range of spaces and places encourages the ebb and flow of communities along its length. By breaking existing barriers, the Causeway reveals opportunities to bind together new and existing communities. It enables the possibility for social and economic relationships to develop and the identity of Meridian Water to evolve as one.

4.1.3 A place of social interaction

The Causeway is a place where people come together. It serves an important role in building a strong community, promoting enterprise, culture and social interaction. As such, the narrative of spaces along the length of the Causeway tells the story of Meridian Water. It connects key open spaces at the heart of each neighbourhood, every one with a unique character and program of use so a constant journey of experience unfolds along its length.

Internally structured, development faces onto the Causeway framing the route and creating a focus for the masterplan. The robust and defined form of the Causeway creates a strong heart and sense of place running through the scheme.

It is populated with a broad range of activities that include retail, housing, and employment alongside other social, community and cultural enterprises. A mix of activity along its length keeps life on the street through the day and night, drawing people through Meridian water and transforming the Causeway into a place in its own right. Together, the combination of this diverse mix of uses and the varied programme of high quality, vibrant public spaces ensures that the Causeway will come to function as the hub of the community.

The Causeway

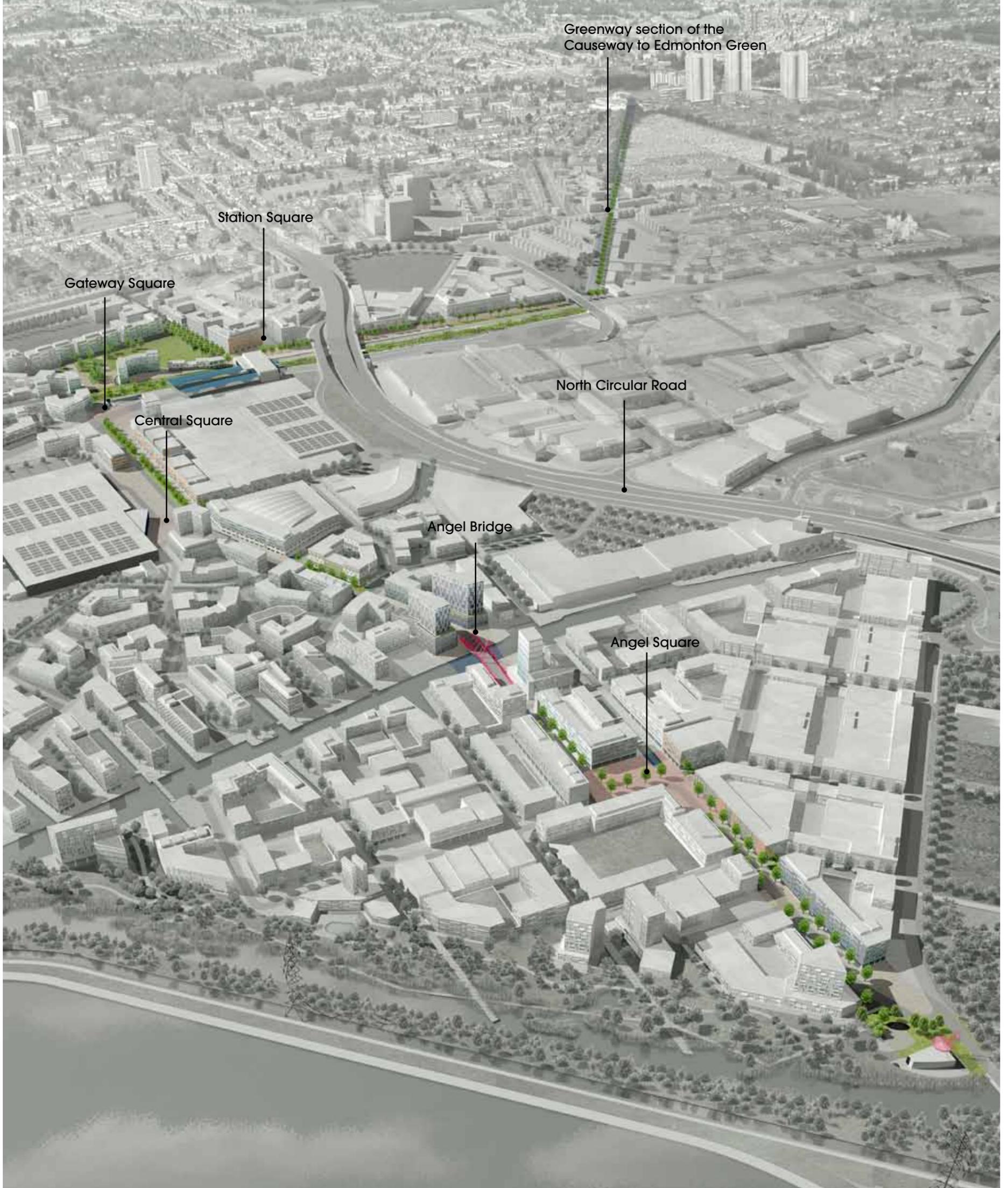


Figure 4-1 The Causeway

4.1 The Causeway



Station Square

Station Square supports activity around the transport hub and hotel/employment/social uses at the edge of a neighbourhood park. It is a space for meeting and passing through, creating a connection with the green link up to Edmonton Green. A clear and inviting route for pedestrians and cyclists runs from this square to the remodelled underpass.



Gateway Square

As a key point of arrival into the scheme, Gateway Square welcomes people from the transport hub. Dynamic spaces around the Meridian Underpass support flexible, temporary and changing uses. Activated by the shared surface of Meridian Way and the range of users throughout the day and night both residents, visitors, shoppers and workers the square is constantly animated.



Central Square

At the core of Meridian Water, Central Square celebrates the focus of the new community hub. Markets, concerts, events, and temporary events animate the space throughout the day and night. A vibrant working, meeting, sitting and gathering destination for both the locality and visitors to the retail destination.



Western Square

Encased within Meridian West, the Western Square is a community hub supporting small events, market stalls, and activity. It is a busy, interactive, dynamic space enclosed by active frontages.



Underpass

The underpass is retained and significantly improved to continue the east-west connection. It is re-imagined as a welcoming threshold, where the steps will be replaced by a gently sloping gradient, increasing accessibility, and allowing the underpass ceiling to float above pedestrians. This sense of space and security should be reinforced by a creative public art commission and creative lighting strategy.



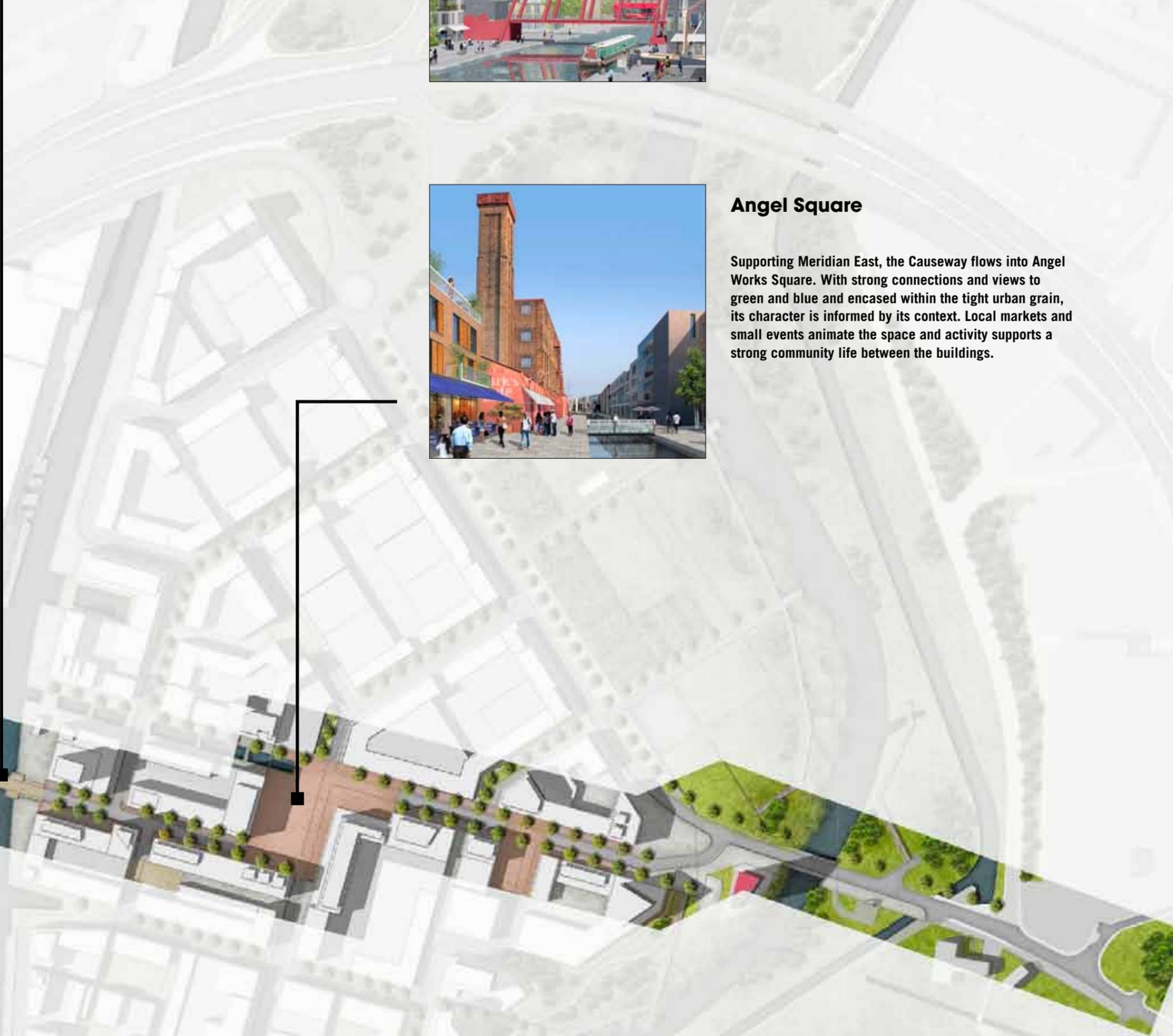
Landmark Bridge

The landmark Angel Bridge celebrates the meeting point of the Causeway with the waterway. As the Causeway crosses the Lee Valley Navigation there is an intensity of activity and the waterside is animated by restaurants, bars and cafés that maximise the potential of their location.



Angel Square

Supporting Meridian East, the Causeway flows into Angel Works Square. With strong connections and views to green and blue and encased within the tight urban grain, its character is informed by its context. Local markets and small events animate the space and activity supports a strong community life between the buildings.



4.2 The Causeway Alignment

Two stages of the alignment of the route west of the Lee Navigation have been considered in the design allowing for the sequential redevelopment of the area. Stage 1 is aligned to minimise the amount of demolition of existing structures in order to open up the route; Stage 2 incorporates more substantial redevelopment once completed.

Three options at Stage 1 and Stage 2 were presented in The Causeway Statement with Option 2 selected, after consultation, as the most appropriate alignment.

4.2.1 Outline Principles

The alignment options were informed by a number of criteria:

- ★ **Providing Connections:** The main role of the Causeway is to connect Harbet Road to Meridian Way via Glover Drive. This sets a spatial boundary between these roads for the proposed location of the Causeway.
- ★ **Pre existing infrastructure:** In order to minimise costs, the alignment of the Causeway route east of the Lee Navigation

is required to have the least possible impact on existing employment facilities.

- ★ **Central Location:** Locating the Causeway centrally within the scheme will ensure the greatest level of accessibility for inhabitants to local shops, transport etc. whilst also allowing the route to act as a spine for development to radiate out from.
- ★ **Bridge:** The bridge must be a fixed bridge as opposed to swing bridge- an operational requirement of Transport for London. Pedestrian accessibility requirements dictate a minimum slope of 1:21. Sufficient space will need to be provided either side of the bridge for such a ramp to be accommodated

The above options have created three alignment options east of the Lee Navigation. A connection needs to be forged between these end points and the end point at Glover Drive. This determines the alignment of the Causeway across Dwyer land holdings.

4.2.2 Two Stage Delivery

Each of the proposed alignments were designed to be deliverable in two distinct stages.

The **Stage 1** alignments, without exception, provide for the delivery of a functional central corridor, capable of sustaining the site's crucial bus routes and supporting development throughout. This is achievable with minimal demolition.

Stage 2 alignments, thereafter, represent an aspirational future straightening of the Causeway. This is not recommended during Stage 1, due to the disruption that this alignment would infer to existing employment uses in the area.

4.2.3 Preferred Alignment

The alignment of option 2 is presented below

Proposed route

To the west of the Lee Navigation the Causeway creates a new route across Harbet Road Industrial Estate before it connects with the existing Greyswood Avenue.

Proposed Alterations

In order to accommodate the western bridge approach slope, the Heavy Goods Vehicle Testing Centre, would need to be demolished. This will also allow for the required reconfiguration of the existing road network to accommodate the restricted access on Towpath Road.

At the western end of Silvermere Drive, a portion of an existing structure on its southern side and the derelict and disused structure on the northern side of would need to be demolished to enable a connection.

Landownership

The alignment passes through a number of different land holdings.



Figure 4-2 Proposed Route Stage 1



Figure 4-3 Buildings that may need to be demolished



Figure 4-4 Proposed Route Stage 2



Figure 4-5 Landownership

4.2.3 Causeway Section

Central to the vision of Meridian Water, an animated Causeway has been designed as a key organising structure for movement and social exchange. The following cross-section illustrates those principles which will bring life to this area, including:

- ★ **The Human Scale:** Designed at a 1:1, height:width ratio, the Causeway exists as a 26m wide surface, flanked by five/six storey mixed use buildings. Pleasing to the eye, this decision infers a distinct scale to the Causeway elevating it within the site's movement hierarchy and contributing to site wide legibility ambitions.
- ★ **Active Ground Floor Uses:** Breathing life and vibrancy to the streetscape, it is proposed that the ground floor frontages be utilised for commercial and employment purposes. Such a decision acts to animate the area, transferring energy and security to the scene.
- ★ **Sustainable Public Transport Corridor:** Crucial to sustaining the density of building in this area, the Causeway provides space for two-way designated bus lanes alongside the two-way vehicular routes. This decision provides the supporting infrastructure necessary for the emergence of frequent public-transit connections and thus eases private vehicular demand within the scheme.
- ★ **Secure Pedestrian and Cycleway Provision:** The Causeway design provides generous space for both cyclists and pedestrians. Broad pavements, sitting alongside a raised two-way cycle route (on one side), should be separated from the road by regular, structural planting. This decision bestows a sense of security to users and allows the pavement to emerge as an active actor in the street scene.
- ★ **A Link Between Residential Areas:** Designed as a usable, shared resource, the Causeway forms a vibrant connective route between Meridian Water's diverse residential areas. Animated and secure, it is believed that the Causeway will emerge as a key social hub for the development.
- ★ **Primary Utilities Trunk Route:** Specially designated as a utilities trunk corridor, the Causeway exists as Meridian Water's mainline for utilities. Offering conventional utilities as well as high-speed fibre-optic internet, Envac waste disposal and district heating this route, given the correct surface and public realm treatment, represents a maintainable utilities hub for the entire site.
- ★ **Planting Strategy:** Designed with an eye on climate change adaptation, the Causeway is framed by a regular, structural planting strategy. Particularly prominent on the northern edge, this planting offers shade to pedestrians and buildings during summer months. Moreover, the strategy delivers a visually pleasing, readable streetscape for residents and visitors alike.

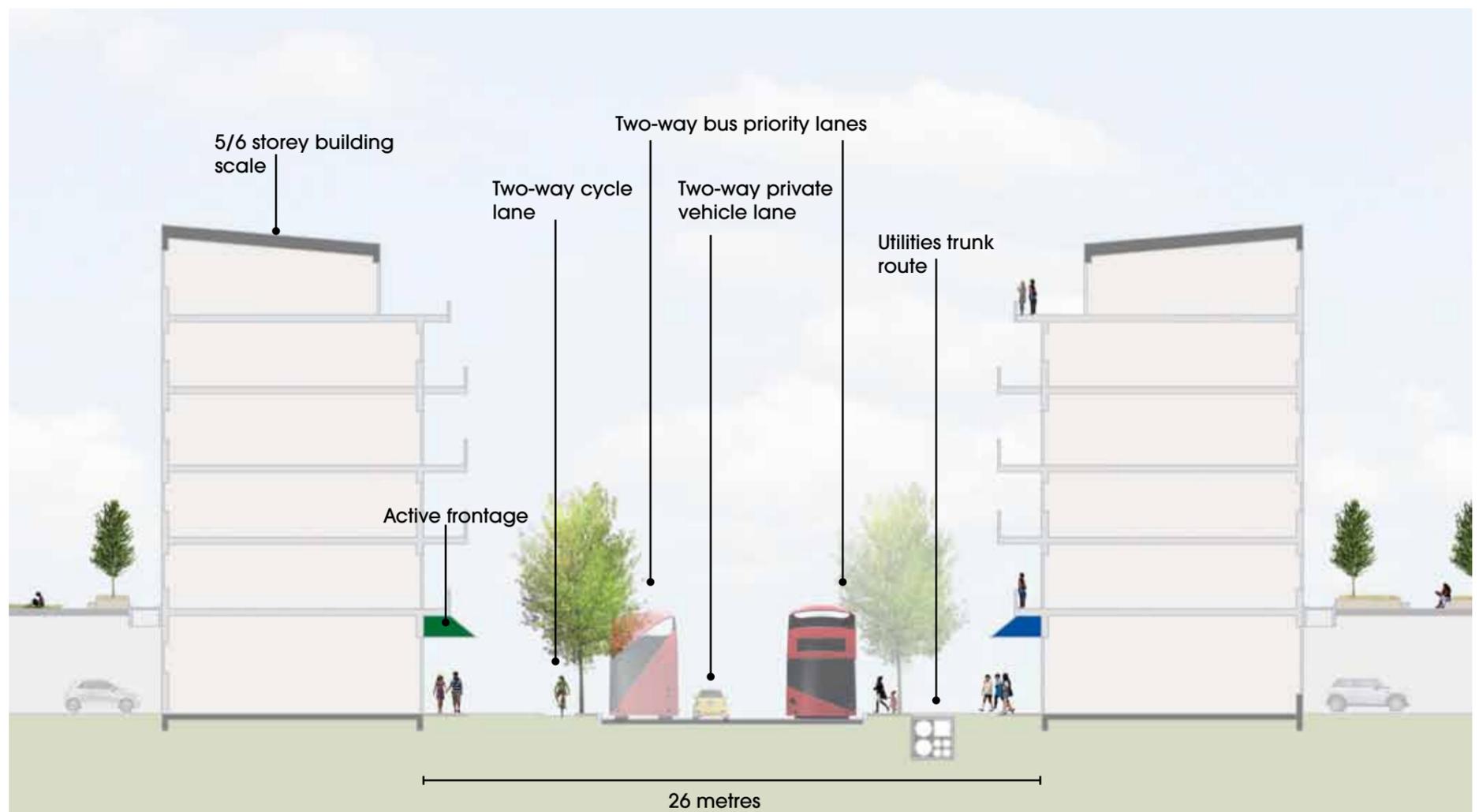


Figure 4-6 Causeway Section



The vibrant Central Square



4.2 The Causeway Alignment

4.2.4 A sustainable transport corridor

The Causeway is absolutely fundamental to the delivery of a sustainable transport strategy. It forms the primary connections with the upgraded train station and integrated transport hub which falls within it. It also carries the realigned bus routes, improving journey times with both bus priority and dedicated tracks and its central alignment means the public transport corridor is easily accessed.

With bus priority and car use limited by a rationalised road layout, encouraged arterial routes, and limited parking (in accordance with TFL standards), a safe and pedestrian friendly corridor is at the heart of Meridian Water. A high quality shared surface enhances the walking and cycling experience along the whole length of the Causeway. A green pedestrian and cycle route at the northern end of the site forms an extension of the Causeway and connects with Edmonton Green.

An iconic bridge adds definition and character to its path and creates views from a key axis point that engage with the surrounding context. The Meridian Underpass extends the influence of the Causeway into a new area, linking pedestrian and cycle connections beneath the railway and connecting two community hubs. Bus routes adjoin and cross the Causeway at key intervals ensuring the complete integration and fluidity of movement through Meridian Water and to the surrounding context.

4.2.5 Climate corridor

This mirrors the Victorian idea of bringing forest trees into the city. The corridor integrates Sustainable Urban Drainage Systems (SuDS), water and large trees. The Causeway creates a cool route through the site during the increasingly hot summers anticipated as the climate changes.

4.2.6 A 21st century energy corridor

The Lee Valley Heat Network delivers a sustainable energy strategy for Meridian Water. Over time, the network will extend beneath the Causeway supplying the new neighbourhoods in the area with affordable low carbon heat from waste to energy facilities for use in space heating and hot water production. It also forms part of a dedicated utility channel that, amongst general services, includes provision for super-high speed internet. The Causeway is delivered in the early stages of the development. This aspect of the Causeway helps to bring forward the transformation of a green business economy.

Although the pipes themselves might not be visible, well designed energy centres of an appropriate scale could be located at certain points on the Causeway.

4.2.7 A delivery corridor

Aligned to existing networks and streets, and shaped by landownership patterns, the Causeway connects the fragmented elements of the area.

In achieving the aforementioned design agenda, the Causeway helps to bring forward regeneration by maximising development value and unlocking the potential of the site.

Individual planning applications will be expected to incorporate the relevant section of the Causeway on their land in full accordance with the overall design intent. This will include masterplan transport and accessibility requirements as well as dedicated accessible corridors for energy and infrastructure.

Equally, every section of the Causeway will be expected to deliver a generous focal space of high quality design, reflected in both its landscape and materials. Buildings fronting onto it will be expected to be of an exceptional design standard, providing for active frontages along its course. The Causeway design should also support a rich diversity of activities and functions that animate its length as the linear focus of the masterplan.

5 The neighbourhoods



5.1 The neighbourhoods

Meridian Water will be made up of seven distinct neighbourhoods defined by their own unique historic characteristics. These neighbourhoods will be interconnected by the Causeway, yet also stand-alone as individual places.

Each neighbourhood will be realised through the delivery of sustainable design layouts, which make the most of the existing natural environment. New development will accommodate the need for residential and employment opportunities in the area.

The design of each neighbourhood will focus on high quality public realm that is framed with energy efficient buildings. New streets and areas of public open space that link surrounding areas, including Edmonton Green and the Lee Valley Regional Park, will be created. In addition, high quality new buildings that animate and frame the street network will be promoted. Meridian Water will evolve into a highly desirable place to live and work and a memorable place to visit.

The following chapter outlines the land use, structure, form, height, landscape and public realm for the seven neighbourhoods, which are:

- ★ Meridian Angel;
- ★ The Gateway;
- ★ Meridian Central;
- ★ The Islands;
- ★ Canal-side West;
- ★ Meridian East; and
- ★ The Parklands.



Figure 5-1 The Neighbourhoods

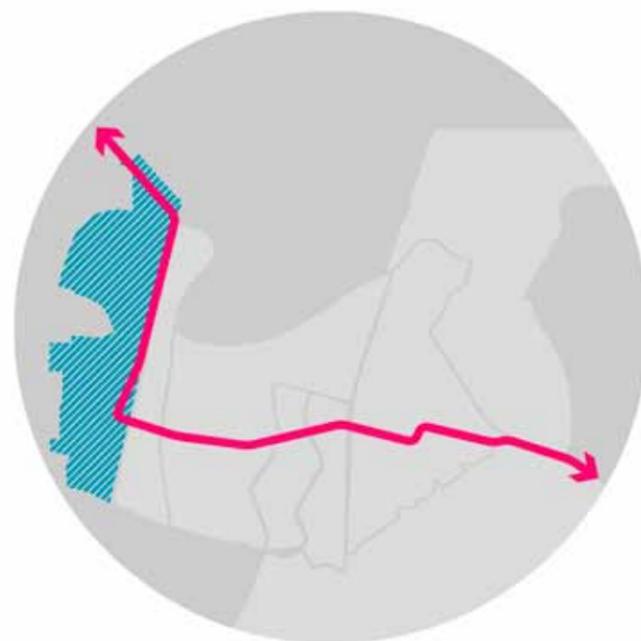


5.2 Meridian Angel

Seamlessly connected to the surrounding neighbourhood, Meridian Angel extends the existing residential area of Edmonton, offering a desirable family living experience.

With a primary school and a neighbourhood park at its heart Meridian Angel forms a vital link between existing communities and the wider Meridian Water area.

The area benefits from new educational facilities, enhanced transport connections, an attractive remodelled underpass and a pedestrian link through to an improved greenway.



5.2.1 Existing Condition

The Meridian Angel neighbourhood is currently characterised by industrial, large block, single storey buildings, with areas of unattractive open land surrounded by two large gasometers. The area's industrial fabric remains and creates several constraints such as the location of an underground gas pipe running diagonally northeast - southwest, as well as a Pressure Reduction Station (PRS) to the south.

Meridian Angel is bordered on its eastern boundary by a railway line running north-south, which forms an unattractive edge that separates the area from the wider Meridian Water area. To the south of the PRS the land rises up to Leaside Road creating an embankment which forms the southern boundary of the site.

Angel Road is elevated at the area's northern edge, which again, creates a visually unattractive and noisy edge, set adjacent to a public park which, for the most part, lacks natural surveillance and feels unsafe.

The western edge mainly comprises the rear gardens of properties along Kimberley Road, beyond which the land use is largely residential.

North of the North Circular Road, the area is bordered by Conduit Lane, an elevated road structure. There is an existing metals and waste recycling facility, which presents a significant noise and visual pollutant to the neighbourhood. Due to the nature of flooding in this area residential uses will not be acceptable. Kenninghall open space is located to the west of the metals and waste recycling facility, but its connections from adjoining residential areas are currently severed.

A sensitive design led approach to the redevelopment of the area, should take into consideration all of the aforementioned constraints and respond accordingly.

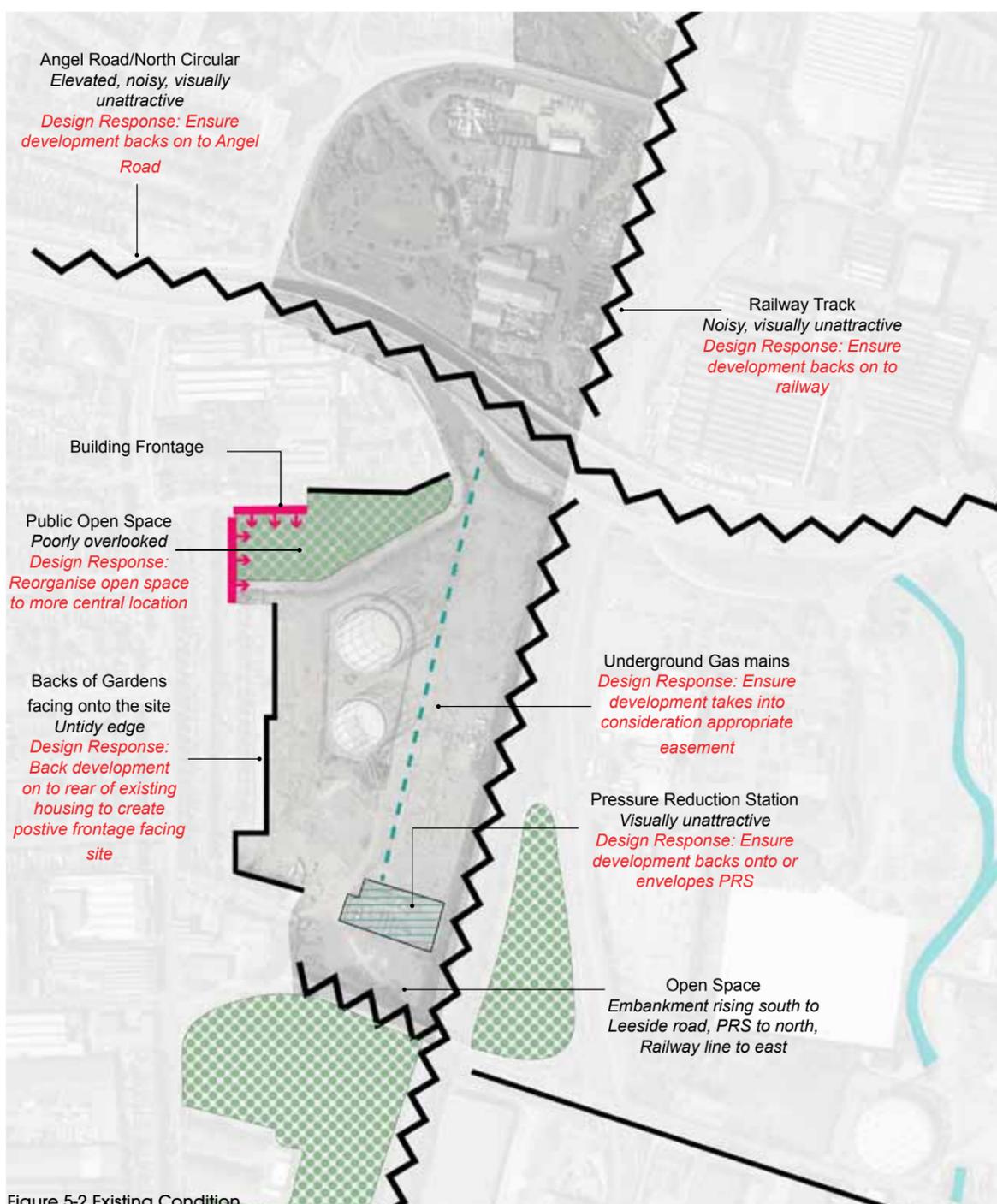


Figure 5-2 Existing Condition

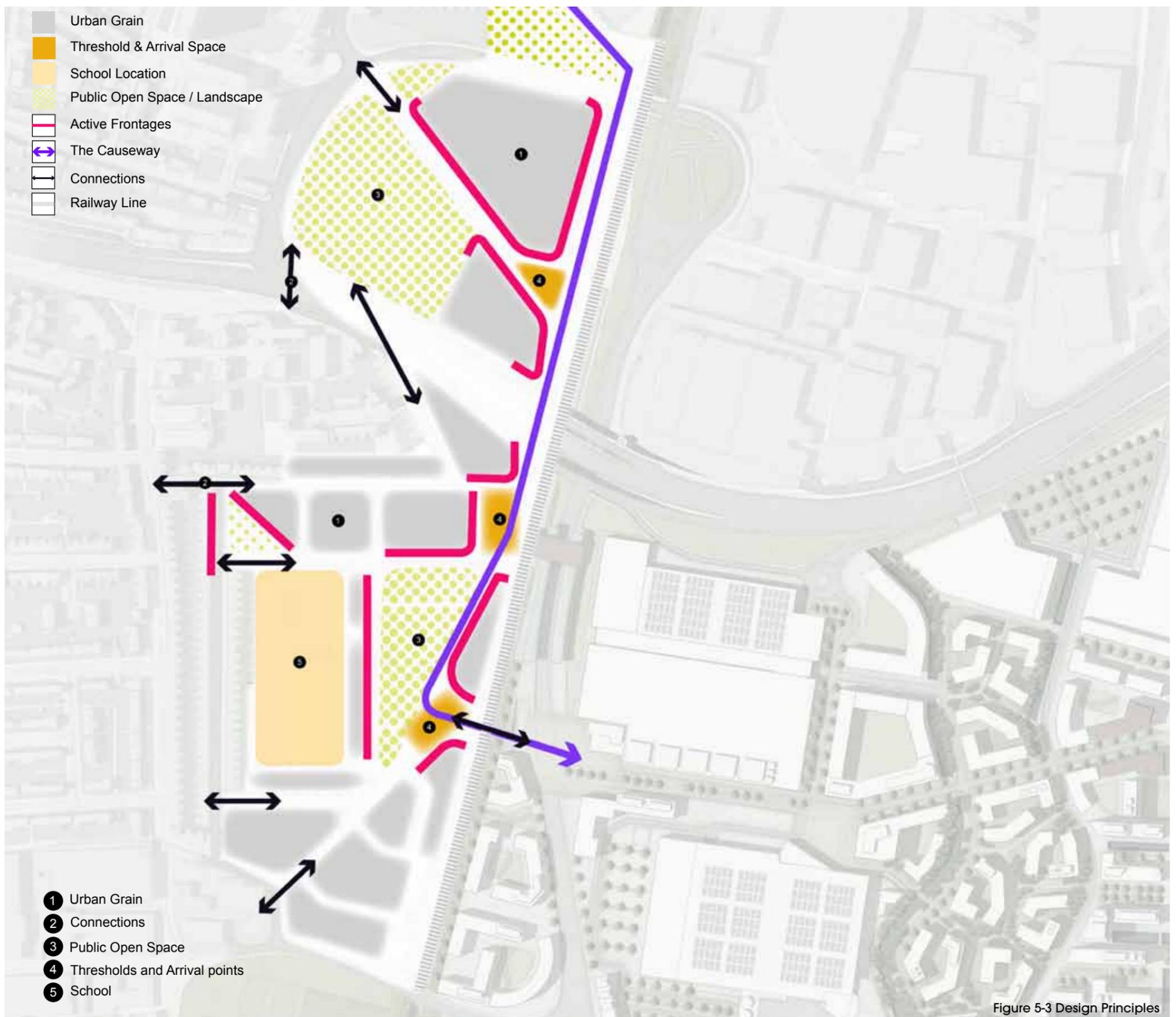


Figure 5-3 Design Principles

5.2.2 Urban Design Principles

In response to the constraints and opportunities presented at Meridian Angel, and taking into account the overarching aspirations for Meridian Water generally, a series of urban design guiding principles have been set out, to ensure proposals that come forward for the neighbourhood, offer robust and well resolved development solutions that mitigate the issues presented.

As indicated on the plan, guiding design and development principles for Meridian Angel include:

- ★ **Legibility** - creation of a legible urban grain;
- ★ **Connectivity** - creation of connections to neighbouring areas;
- ★ **High Quality Public Realm** - Creation of well overlooked open spaces;
- ★ **Gateways and Nodes** - creation of a high quality arrival destination; and
- ★ **Community facilities** - creation of a two form entry school with playing pitches.

5.2 Meridian Angel

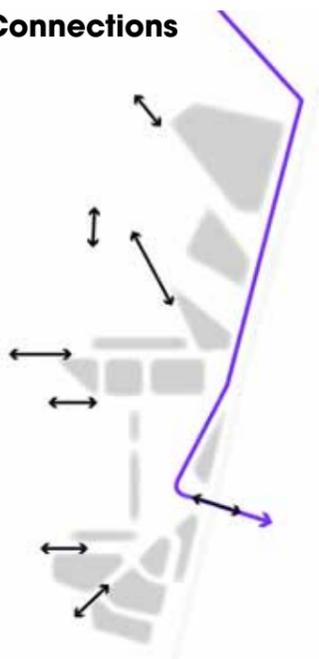
Urban Design Principles

1. Legibility



Proposed development should provide a well structured urban layout through the use of perimeter blocks providing clear fronts and backs. Blocks should be designed to improve the walkability of the area and to provide clear lines of sight to both the underpass, connecting to the wider area, and to the new square at the front of the upgraded railway station.

2. Connections



New links should be provided to connect Meridian Water with existing communities at Edmonton. The re-design of the underpass, running under the railway should ensure safe and open pedestrian movement between the two areas. An appropriate building setback from this route will ensure that the area does not feel enclosed and unsafe, but affords natural surveillance and improved sight-lines along the route.

3. High quality public realm



The area of existing open space to the north of the neighbourhood should be reconfigured and moved to a more centrally located area. In accordance with good practice, all areas of open space should be well overlooked and provide natural surveillance to ensure user safety.

4. Thresholds and Arrivals



Creating attractive thresholds and arrival points within the scheme should be a significant priority in any plans coming forward for this area.

Alongside the upgraded Angel Road Station and integrated transport hub, a well designed, high quality public square should signpost the arrival to Meridian Water.

From here, clear lines of sight should be maintained along the Causeway to adjoining areas of high quality public realm immediately adjacent to the re-modelled underpass.

5. Community facilities: Option A



Locating the school between Edmonton and Meridian Water will see the natural formation of a community hub between the two.

In option A, the school is located in an area that allows for playing fields and a well designed school building helping address the acute education needs in the area. Providing a visual link between the new school and existing St John's Church across a small area of well overlooked open space will help strengthen this new community hub.

Community facilities: Option B



In option B, the school site as a whole is smaller, resulting in a reduction of space provided for playing fields.

This reduction, and in accordance with flood compensation targets, would need to be met by increasing the land occupied by the adjacent neighbourhood park, unless other appropriate flood mitigation measures were to be brought forward in consultation with the Environment Agency.

5.2 Meridian Angel

5.2.3 The vision

The Meridian Angel neighbourhood is an extension to the existing residential area of Upper Edmonton and the Shires Estate. New facilities created within Meridian Angel should complement and enhance existing provision in the area, helping to support community integration. Equally, new homes will increase the local population to support existing facilities such as the local shops on Dysons Road and the community focus at St John's Church.

Good progress is being made, supported by the Greater London Authority (GLA), Transport for London (TfL) and Network Rail, in bringing forward new rail infrastructure. This will enable a four trains per hour (tph) service to be provided at Angel Road Station, transforming the passenger experience and unlocking the development potential of Meridian Angel, as well as the whole of Meridian Water. It is envisaged that this will be completed within five years or possibly sooner. The Council will therefore expect to see a high density housing scheme on land adjacent to the station and east of the railway line, and proposals that do not reflect this requirement will be strongly resisted.

Whilst the Masterplan shows one way that this could be achieved, it is accepted that developers and architects could, having regard to the design principles set out for this area, produce a different layout that would be capable of gaining planning permission. It is expected that this would be of high quality in urban design terms.

A new primary school with shared facilities will form a community focus for the area, bringing local residents together and promoting community cohesion. Located on the north western edge of the area, the school associates closely with both St John's Church, which should be connected legibly through strategically designed public realm interventions, and the high-quality open space and public realm offered by the Neighbourhood Park and Western Square. The new square is located along the animated Causeway and has the potential to support community activity. It will have clear pedestrian connections to the adjoining neighbourhoods, transport hub and to the extended greenway to Edmonton Green. Moreover, its open design supports key sightlines through to Meridian Water's remodelled underpass crossing.

The central focus of this neighbourhood is a reconfigured park to the south of the North Circular. It will provide a good residential frontage and be able to accommodate flood compensation commitments. This enhanced and enlarged green space at the heart of the neighbourhood will enable social interaction as well as active and passive recreation for the whole community. Planting could pay reference to the gas holders which once stood on the site infusing collective memory and identity into the neighbourhood.

An area for business and/or employment generating uses to the north of the neighbourhood will be created. It is set back from the North Circular and screened both visually and acoustically from the existing metals and waste recycling facility, which ideally needs to be relocated in the medium to long – term. This part of the neighbourhood

offers opportunities for high value employment generating uses that are situated closely to the regenerated transport hub. Kenninghall Open Space remains in situ, and will also benefit from various improvements. New pedestrian crossings will be created that will provide safe connections to the surrounding neighbourhoods, fully integrating Meridian Angel with the immediate communities at Upper Edmonton and the Shires Estate.

A new hotel, or centre of social employment use, such as a foyer, is to be situated south of the North Circular, well positioned adjacent to the upgraded rail station. Its location serves to screen the rest of the development whilst taking advantage of its highly visible location and proximity to the transport hub.

Most importantly, the station square forms a key feature of this neighbourhood supporting activity around the upgraded Angel Road Station and transport hub. With the Causeway passing through it, the square is animated by pedestrians picking up Meridian Water's arterial connection and the ebb and flow of commuters and visitors to the hotel/employment/social area. From this anchor point, Meridian Water is fully connected by road, rail, bus and pedestrian links with Edmonton and beyond adding to the vibrant and animated experience within Meridian Angel.

5.2.4 Land Uses

Meridian Angel provides a continuation of surrounding residential uses, whilst the northern employment section forms a buffer to the North Circular and benefits from good exposure. The school is well located between Edmonton and Meridian Water forming a community hub between the two.

The neighbourhood will comprise the following:

- ★ Residential dwellings of mixed-tenure and type;
- ★ Energy efficient homes, which have the potential to benefit from affordable low cost energy from the Lee Valley Heat Network;
- ★ Development at relatively high density, given improved public transport accessibility, providing approximately 1,000 new homes;
- ★ A primary school, which has the potential to act as a heat load for the Lee Valley Heat Network;
- ★ A public park with children's play space;
- ★ A community square and a station square;
- ★ An upgraded station connecting into an integrated transport hub;
- ★ The Causeway – taking the form of a high quality cycle and pedestrian link along this section of its length;
- ★ Kenninghall open space
- ★ A new hotel (or other equivalent employment/social use); and
- ★ High value business and employment opportunities in close proximity to upgraded transport connections.

Land Use	Total Site Area (ha)	Site Coverage	Footprint (sqm)	Total floor area (sqm)
Business	0.76	0.22	1700	10200
Business - Kenninghall/Conduit Lane	3.14	0.29	9420	14,130
Primary school Option A	1.5	0.02	300	600
Primary school Option B	0.67	0.37	2500	2500

Meridian Angel - Residential Density 220			
479 habitable rooms/Ha			
2.1 habitable rooms/dwelling			
Area (ha)	Density (dph)	No. Dwellings (approx.)	Population
4.5	220	990	2277

Total Developable Area (ha)	9.9
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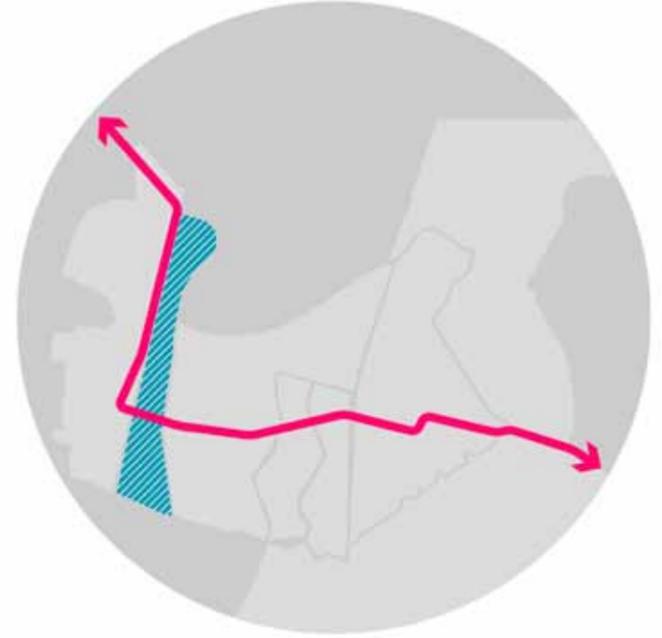
- Conduit Lane
- Montagu Road
- Kenninghall Open Space
- A406 North Circular
- Kimberley Road
- Willoughby Lane
- Leaside Road
- Extended green link to Edmonton Green
- Employment
- Employment
- Employment/Social
- Station pick up/drop off area
- Angel Road Station and transport hub
- Reconfigured Neighbourhood park
- The Causeway
- Western Square

Figure 5-4 Illustrative Plan

5.3 The Gateway

Arriving into Angel Road Station, the Gateway connects into a vibrant transport hub, which will announce and celebrate the transformation of Meridian Water.

The Gateway is an education and working area, with activity throughout the day and night. It connects communities to the west into Edmonton, and east into the rest of Meridian Water. It is defined by its distinct, landmark infrastructure and buildings.



5.3.1 Existing Conditions

The Gateway neighbourhood is bordered by the railway line to the west and Angel Road station to the north. The neighbourhood is well served by the highway network. Meridian Way provides the radial route and the North Circular provides the east-west orbital route in the area.

Angel Road station is located to the north of the neighbourhood. It provides a link to the centre of London and northwards to Stansted and Cambridge. The service from Angel Road to Stratford has a journey time of 17 minutes. The station is surrounded by dual carriageway roads to the north, east and south, and by a scrap metal yard to the west.

The only entrance/exit point to Angel Road station is located to the north. The entrance is accessed via steps on the north side of Conduit Lane (the flyover to the north of the station), which then leads pedestrians back under the flyover and along a long narrow pathway which follows the train line southbound to the platforms.

All of these surrounding constraints and the pedestrian environment currently have a negative impact on the station's accessibility.

To the south is Leaside Road. This rises to form an embankment edge to the south, creating physical and visual barriers at every edge of the neighbourhood thereby fragmenting the area.

There is a disused underpass to the south of the neighbourhood.

These barriers will necessitate an inward focus for emerging development.

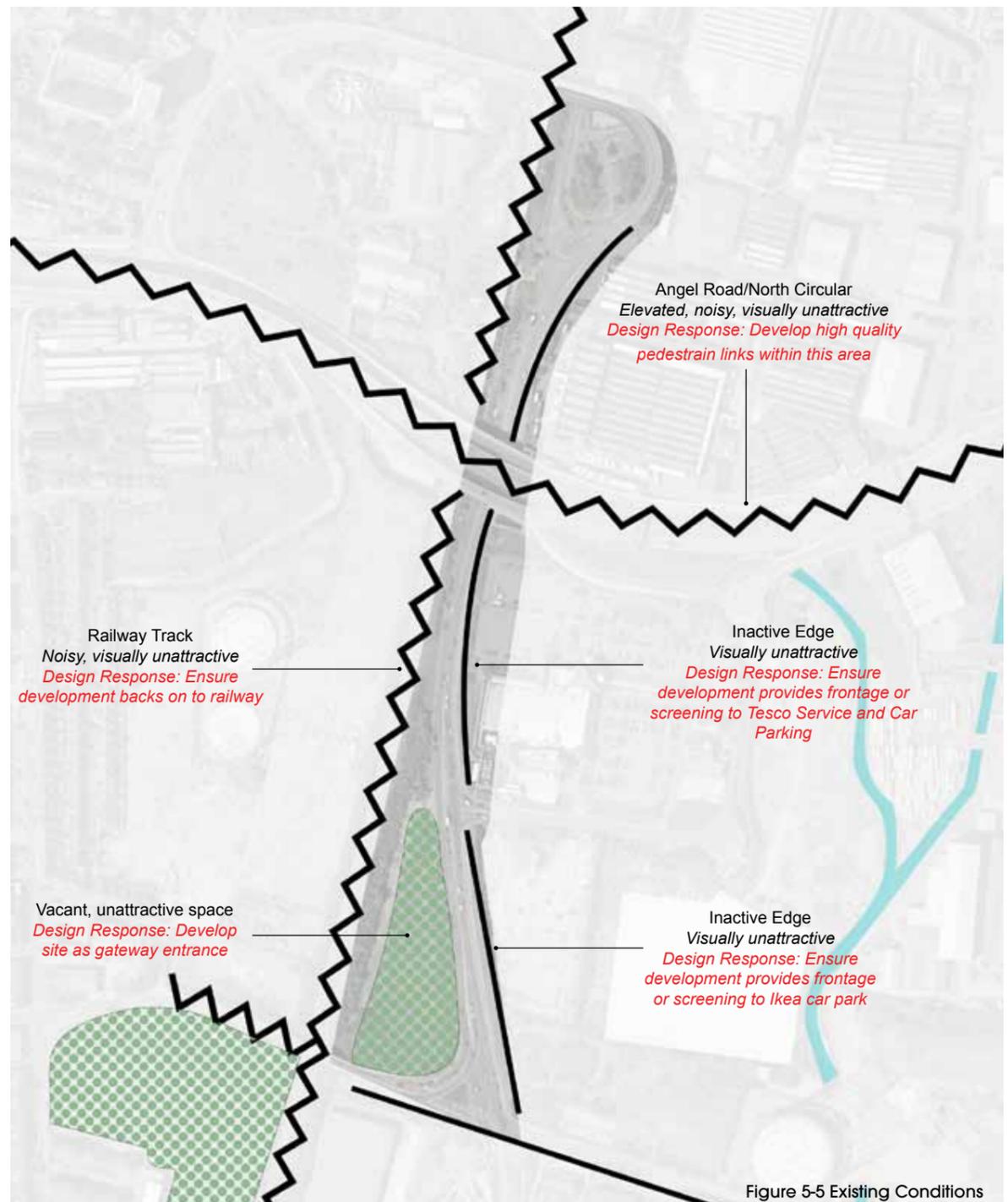


Figure 5-5 Existing Conditions

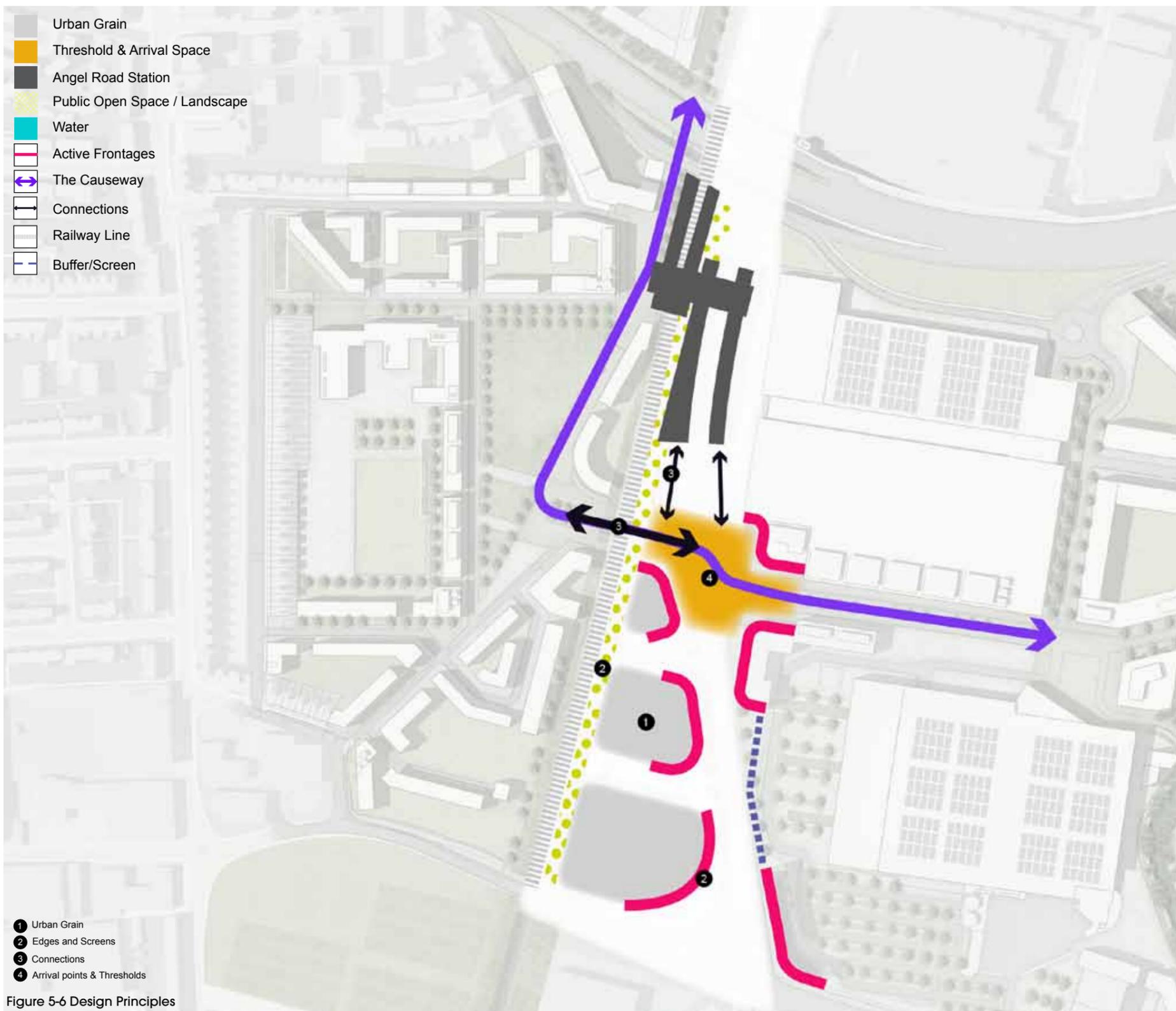


Figure 5-6 Design Principles

5.3.2 Urban Design Principles

Taking into account the constraints and opportunities presented by the Gateway neighbourhood, and the over arching aspirations for Meridian Water generally, the urban design guiding principles below have been set to guide proposals coming forward so that they are robust and sensitive to the area's issues.

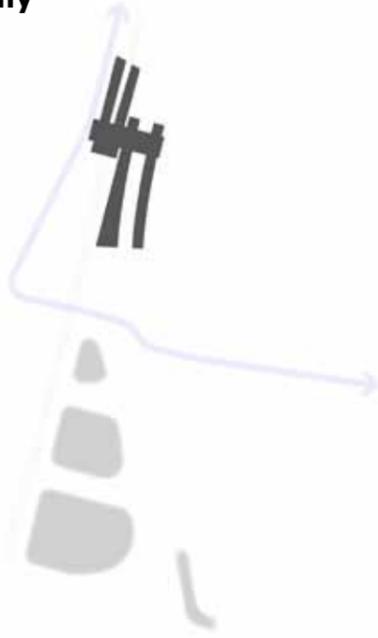
The urban design principles overleaf are key to the delivery of the Gateway neighbourhood.

- ★ **Legibility** - creation of a legible urban grain;
- ★ **Active Edges** - creation of active frontages along all pedestrian and vehicular routes;
- ★ **Connectivity** - creation of strong pedestrian connections integrated with open space, buildings and transport nodes;
- ★ **Gateways and Nodes** - creation of high quality gateway destinations; and
- ★ **Community facilities** - creation of a University Technical College (UTC).

5.3 The Gateway

Urban Design Principles

1. Legibility

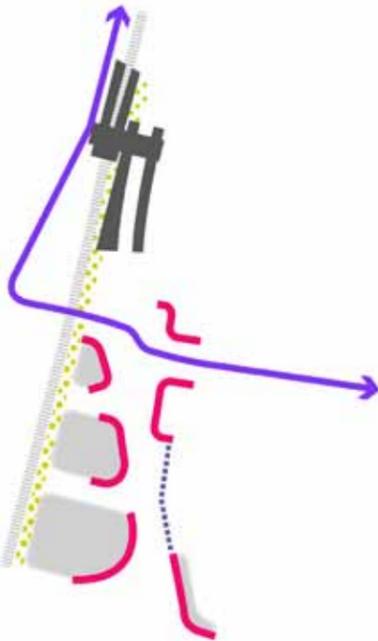


Introducing an improved network of routes and spaces leading toward the Gateway will make the zone easy to understand and navigate through. The introduction of the Gateway Square and the station building will ensure this.

Gateway Square should be framed by a series of buildings, which will create a dramatic sense of arrival and a key point of orientation. Introducing these attributes will create landmarks within the neighbourhood.

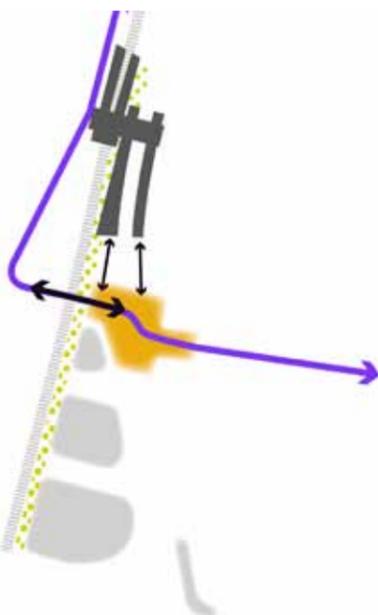
Development blocks within the Gateway neighbourhood will be densely organised and rise to between 5 and 15 storeys, with the taller buildings fronting Gateway Square

2. Active Edges



All development should frame and overlook streets and other pedestrian routes, where possible. This will create activity and interest to the street. This can be achieved in the Gateway neighbourhood through the provision of a mix of uses along street frontages.

3. Connectivity

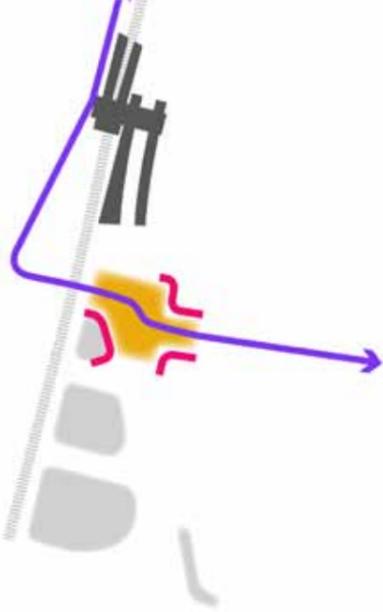


New routes should be properly integrated with existing routes and connect back into the wider Meridian Water area. Creating direct routes to encourage people to walk and enjoy the Gateway neighbourhood.

Key areas within the neighbourhood should give pedestrians priority so that safe pedestrian and shared links connect across Meridian Way.

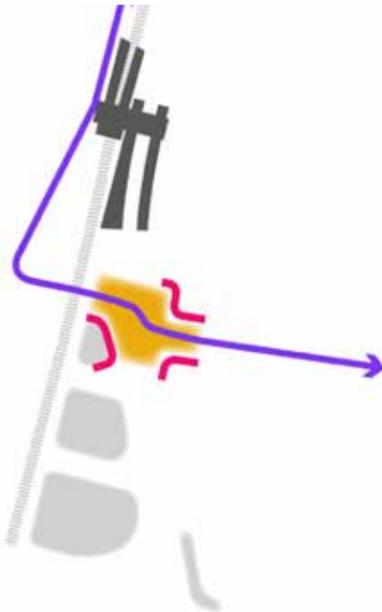
4. Gateways and nodes

New public open spaces should be provided within the area and the layout and structure of new development should add variety to ensure the area is inviting and vibrant. This can be achieved by making the public realm accessible for all and ensuring that the zone is easy to get to and use.



5. Community Facilities

New and existing residents adjoining the area will be able to access the University Technical College (UTC) proposed on Meridian Way. The UTC should be designed to create a focus for community activity with the purpose of centring the activity of educating children and young people in communal life.



5.3 The Gateway

5.3.3 The Vision

Responding to existing rail and road infrastructure and Tesco's current configuration, the Gateway neighbourhood will be a vibrant high quality mixed-use area that will be the entry point to Meridian Water, to support business, retail and residential facilities. A new public transport interchange with proposals including a new building for Angel Road Station will be created.

A large public space, known as Gateway Square, will be situated at the centre of the neighbourhood with access from improved and extended station platforms and a new pedestrian access creating more direct access from the station to the wider Meridian Water area. This space will provide opportunities for people to interact, and it will serve as a threshold to Meridian Water whilst also providing a high quality open space supporting the retail facilities of Meridian Central and the University Technical College.

In addition, there will be new bus and taxi facilities so that the Gateway neighbourhood becomes a transport hub that can accommodate all forms of public transport. Consequently the area will be a focus point for much of Meridian Water serving direct and onward connections to London and beyond.

The Gateway neighbourhood will help to connect the community life, which is currently divided by the railway line, and will create a distinctive landmark feature for Meridian Water. Whilst careful thought will be needed in order to balance differing user needs at the intersection between the A1055 and the proposed pedestrian priority at the Causeway, this opportunity must be maximised within design layouts as they are taken forward. A sensitive design-led approach to the redevelopment of the area should take into consideration all of the aforementioned constraints and opportunities and respond accordingly.

The underpass is retained and significantly improved to continue the east-west connection into the Meridian Angel neighbourhood to the west. High quality, yet durable materials and high quality lighting are encouraged. Special attention should be given to opportunities for the public realm to support active frontages. Opportunities for children and young people to enjoy informal play situations should be integrated as part of the public realm.

5.3.4 Land Uses

The provision of a University Technical College and proposals to improve Angel Road station define the Gateway neighbourhood.

Proposals for the UTC are set out in Chapter 6, in the section on community facilities.

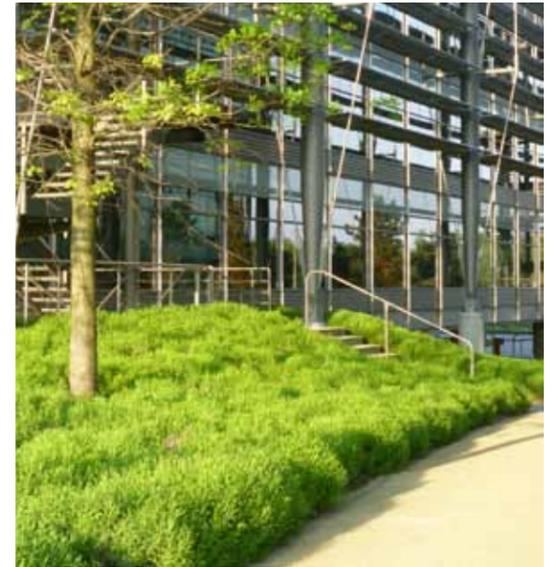
To enhance access, the station is moved southwards. This is combined with the creation of a new pedestrian access and new bus interchange hub. The enhanced access to the station and new links to the existing bus network would immediately connect Meridian Water with the wider area.

Whilst the station is relocated to the south, and access to the station is enhanced will make it more attractive to passengers, it is unlikely that passenger numbers would increase dramatically without significant improvements to the frequency of the rail service at the station. Here, with the work on three tracking, which will enable the provision of a four trains per hour service at Angel Road station, is progressing well, advanced not only by Enfield and the wider North London Strategic Alliance (NLSA), but also by the Greater London Authority (GLA), Transport for London (TfL) and Network Rail.

The UTC and improved access and connections throughout the area will help develop the vitality required so that the Gateway neighbourhood is recognised as the transport hub of Meridian Water.

Proposed land uses at the Gateway neighbourhood are:

- ★ A new University Technical College;
- ★ An integrated transport hub with extended platforms and access;
- ★ The Causeway – public realm with green space;
- ★ High quality public space forming a threshold to the development; and
- ★ A remodelled underpass that will provide an attractive route for pedestrians and cyclists.



Land use	Total Site Area (ha)	Site Coverage	Footprint (sqm)	Total floor area (sqm)
SIL - UTC	1.74	0.1	1740	5220

Total Developable Area (ha)	1.74
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Angel Road Station and transport hub

Underpass

Gateway Square

Potential University Technical College site

Meridian Way

Leeside Road

Figure 5-7 Design Principles

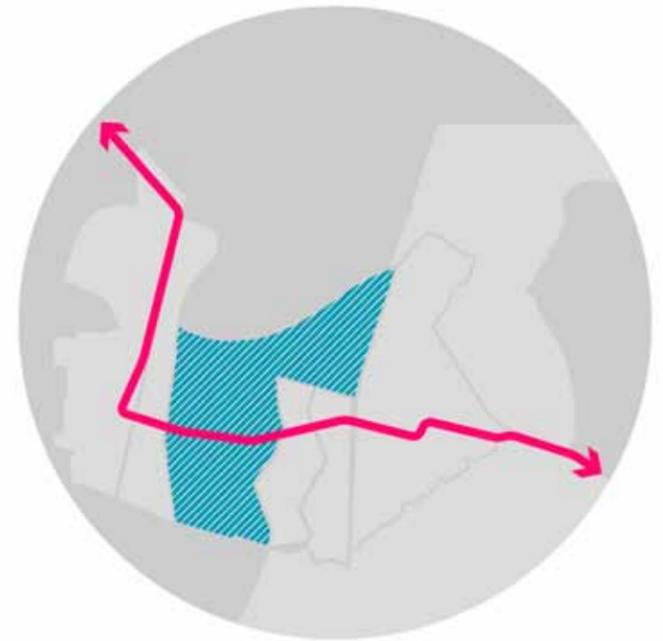
5.4 Meridian Central

Meridian Central is defined by a dynamic high street at the heart of the neighbourhood. As the land usage around Tesco and Ikea is maximised, new development opportunities are created for a mixed-use neighbourhood to flourish.

The area will be enhanced to become a place where activity is focused along the Causeway, with high quality public spaces as positive spaces to stop and rest.

It will be a busy and lively area that benefits from a wide variety of positive uses at ground and upper floors in surrounding buildings to ensure that it is used throughout the day.

Specialist markets, outdoor dining and temporary space support the local economy, whilst a strong mix of community facilities help shape Meridian Central into a lively focus for the area.



5.4.1 Existing Condition

Meridian Central is currently characterised by a mix of large and small industrial and retail units. Ravenside Retail Park is situated on the southern side of the North Circular Road, to the west of Cooks Ferry roundabout, and the retail frontage is highly visible from the North Circular. The IKEA and Tesco stores are located on Glover Drive with large areas of associated car parking. A large gasometer is currently situated to the south of IKEA, off Leaside Road.

Meridian Central is bordered by the North Circular, at its northern edge, to the east by the River Lee, to the south by the North East Tottenham Industrial Estates and Leaside Road. Meridian Way forms its western edge. Pymmes Brook forms part of the area's eastern edge, which provides a potential asset to incorporate into the design of the area. These conditions begin to dictate potential building orientations towards the east and centre of the area.

A sensitive design-led approach to the redevelopment of the area, should take into consideration all of the aforementioned constraints and respond accordingly.

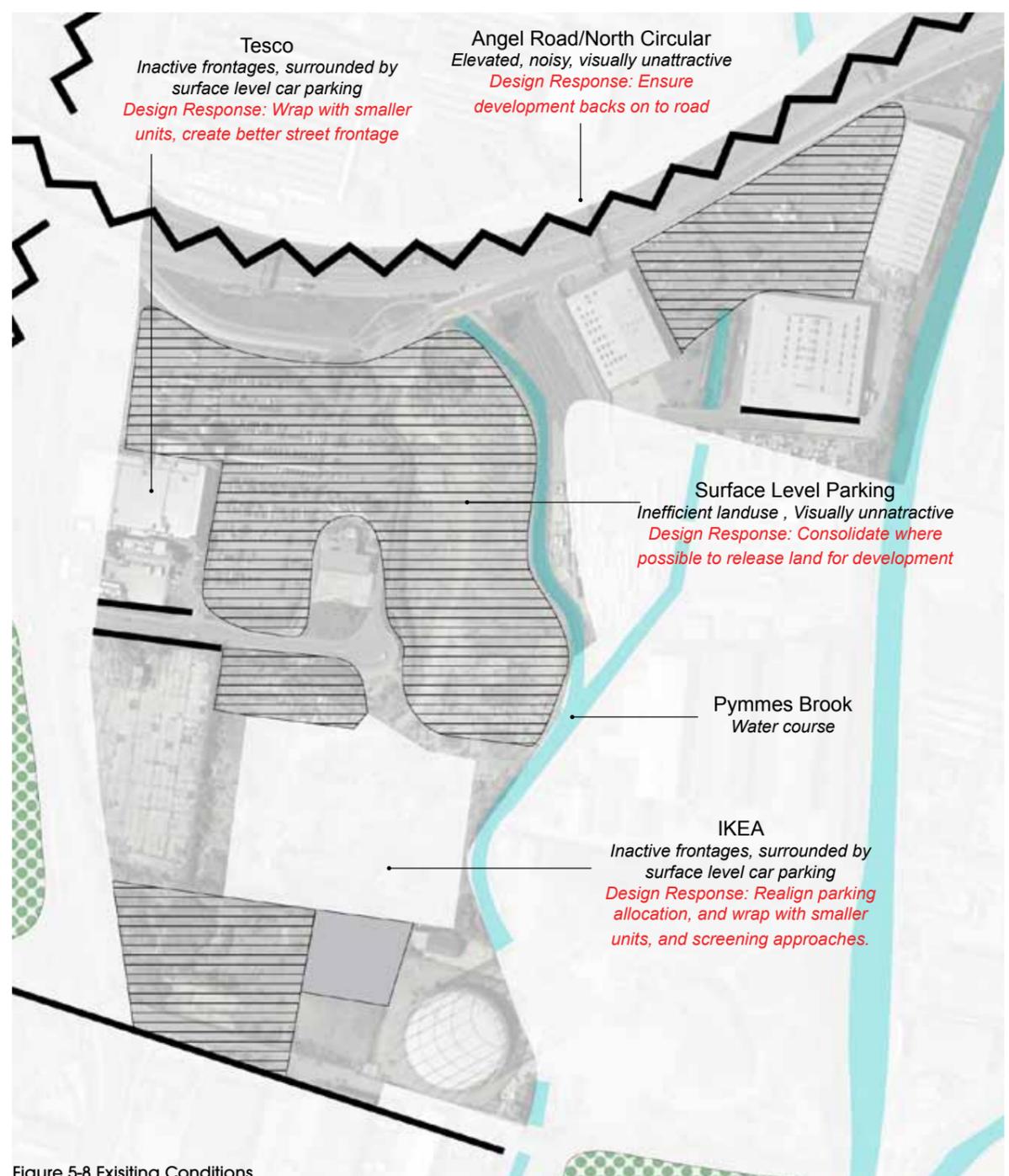


Figure 5-8 Existing Conditions

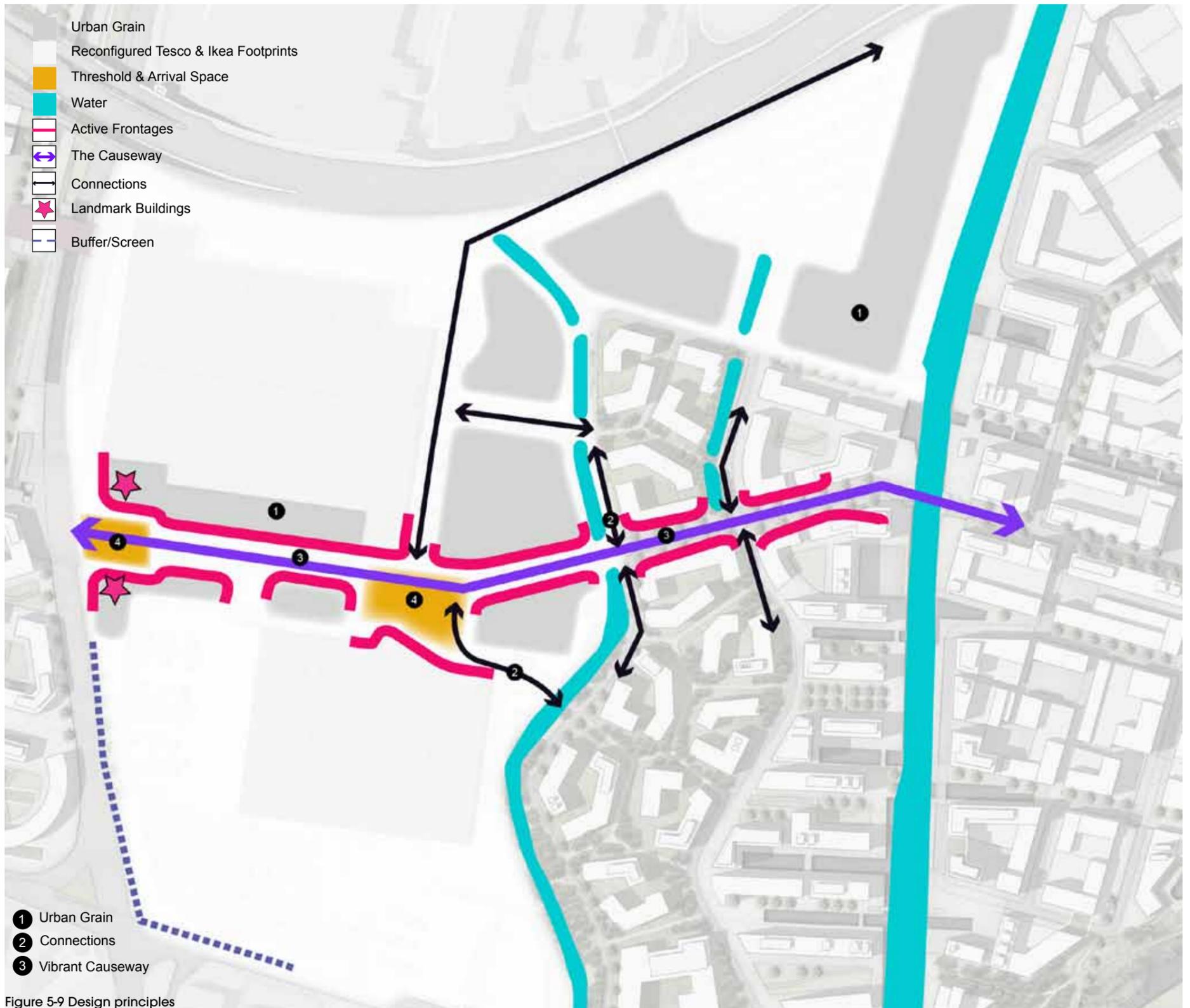


Figure 5-9 Design principles

5.4.2 Urban Design Principles

In response to the opportunities and constraints of the area that are highlighted overleaf, combined with the over arching aspirations for the Meridian Water area generally, a series of urban design guiding principles are presented to help direct development towards a robust and well resolved outcome.

As indicated in the plan, key principles include:

- ★ **Legibility** - creation of a legible urban grain;
- ★ **Connectivity** - connecting the area into wider Meridian Water;
- ★ **Active frontage** - creation of active frontages along all pedestrian and vehicular routes; and
- ★ **Public realm** - creation of high quality open space.

5.4 Meridian Central

Urban Design Principles

1. Legibility



Given the presence of IKEA and Tesco stores, Meridian Central is characterised by large urban blocks. Effort should be made to introduce a greater variety of plot and block sizes into this area, helping to create a wider range of potential uses.

Options should be explored to screen IKEA's reconfigured parking lot, and break up the urban mass presented by the large store units. Wrapping with appropriately scaled active employment uses may be appropriate here. Blocks should be oriented towards features such as the Causeway and Water courses such as Pymmes Brook.

The central square plays an important role in creating legibility within Meridian Water and Meridian Central.

2. Connections



New pedestrian connections should be introduced, to improve accessibility throughout the area. Given the nature of the large urban blocks, it is imperative that the streets and spaces in this area are designed to a high standard. This will help create activity around the centre.

The Causeway runs through the heart of Meridian Central, providing an axial route and key connections to neighbouring areas, such as Meridian Angel, the Gateway and the Islands.

A narrow grain to frontages, specifically along the Causeway, should be encouraged to create a more human-scale dimension of variation and interest along key connections.

3. Active Frontage



As the North Circular Road has a significant presence to the north of the area, new development should attempt to reduce its visual presence and the impact of the noise from highways. This can be achieved by ensuring the most direct routes and connections within the area are centred to the Causeway.

It is important that the spaces around the Causeway are enclosed throughout. This is supported in order to maintain the human-scale dimension desired within the Masterplan vision.

It should be ensured that active street frontages are created along the Causeway and key pedestrian routes continue into the adjoining communities of Edmonton. This will maximise natural surveillance at the edges of the neighbourhood.

4. Public Realm



The central square plays an important role in the legibility of Meridian Central. This provides the main public space within the area. The space should be activated on all sides by both new and existing buildings.

The Causeway, and open spaces punctuated along its length, form the main areas of public open space within Meridian Central. These spaces should be well overlooked to facilitate a comfortable user experience.

The maintenance of strong sight-lines and the use of consistent high quality materials should be encouraged in order to draw users into this important community space.

5.4 Meridian Central

5.4.3 The Vision

Meridian Central supports the largest area of public realm in Meridian Water. The central square provides a key community focus for the whole scheme. It is well connected by transport networks, pedestrian and cycle routes. The square has the potential to provide activity throughout most of the day and night.

The square will be framed by the reconfigured IKEA store, community facilities, businesses, retail units, cafés, restaurants and bars, with spill out space for a range of unplanned uses. Entertainment and leisure facilities, create a focus of activity throughout the evenings and keep the square consistently animated. The day and night time economy is further supported by the presence of high speed wireless internet supporting informal work spaces.

A programme of large-scale events should be scheduled throughout the year within the square. Smaller events and weekly markets could attract the surrounding communities whilst also supporting the local economy.

Shaping the structure of the area, the built form and landscape respond to the brooks that pass through. New access and planting would allow the waterways to be reintegrated into the landscape bringing both ecological benefits and a pleasing amenity for the surrounding buildings.

5.4.4 Land Uses

The Meridian Central neighbourhood will include a mix of shopping, leisure, workspace and apartments to complement the existing retail offer. The focus will be on providing a range of smaller retail, restaurant and café units and workspaces with direct street access including affordable space for alternative and independent business. This will be in both new developments as well as refurbished buildings where possible.

As IKEA's parking provision is reconfigured, improvements are made to pedestrian connections.

No changes are made to Ravenside Retail Park, but improvements are made to the public realm and pedestrian connections.

Employment generating uses are created to the north. This serves as a buffer from the North Circular Road, and also benefits from excellent exposure and north-south and east-west access. To the south is Pymmes Business Park where opportunities are created, to benefit from linkages to the adjoining industrial estates in Haringey.

The retail provision will meet the day-to-day needs of the new community. Meridian Central will become a local centre that brings together a new health facility, library, community rooms, police presence and local shops. In order to be accessible to the whole area, these uses will be located in a highly accessible and visible location.

As the area transforms and its population grows, Meridian Central has the opportunity to attract higher quality office and some further town-centre uses. Where there are specific opportunities, the Central Leaside Area Action Plan and/or through the review of the Local Plan, will provide the planning framework that will guide the quantum of retail that could be considered in Meridian Water. These new uses would provide a range of opportunities. New buildings should be designed to have semi-public areas where people can meet and where appropriate, to become a vital part of the evening economy.

Redevelopment on the upper floor of retail is supported for residential uses. This could help to foster urban-living and animate the neighbourhood outside of business hours. New apartments will provide a mix of high quality affordable and private provision, with homes designed that meet or exceed the Mayor's Housing Design Guide's standards.

Given the availability of parking spaces and its proximity to the railway station, car parking for new development should be kept to a minimum. Further information on car parking can be found in Enfield's adopted Local Plan.



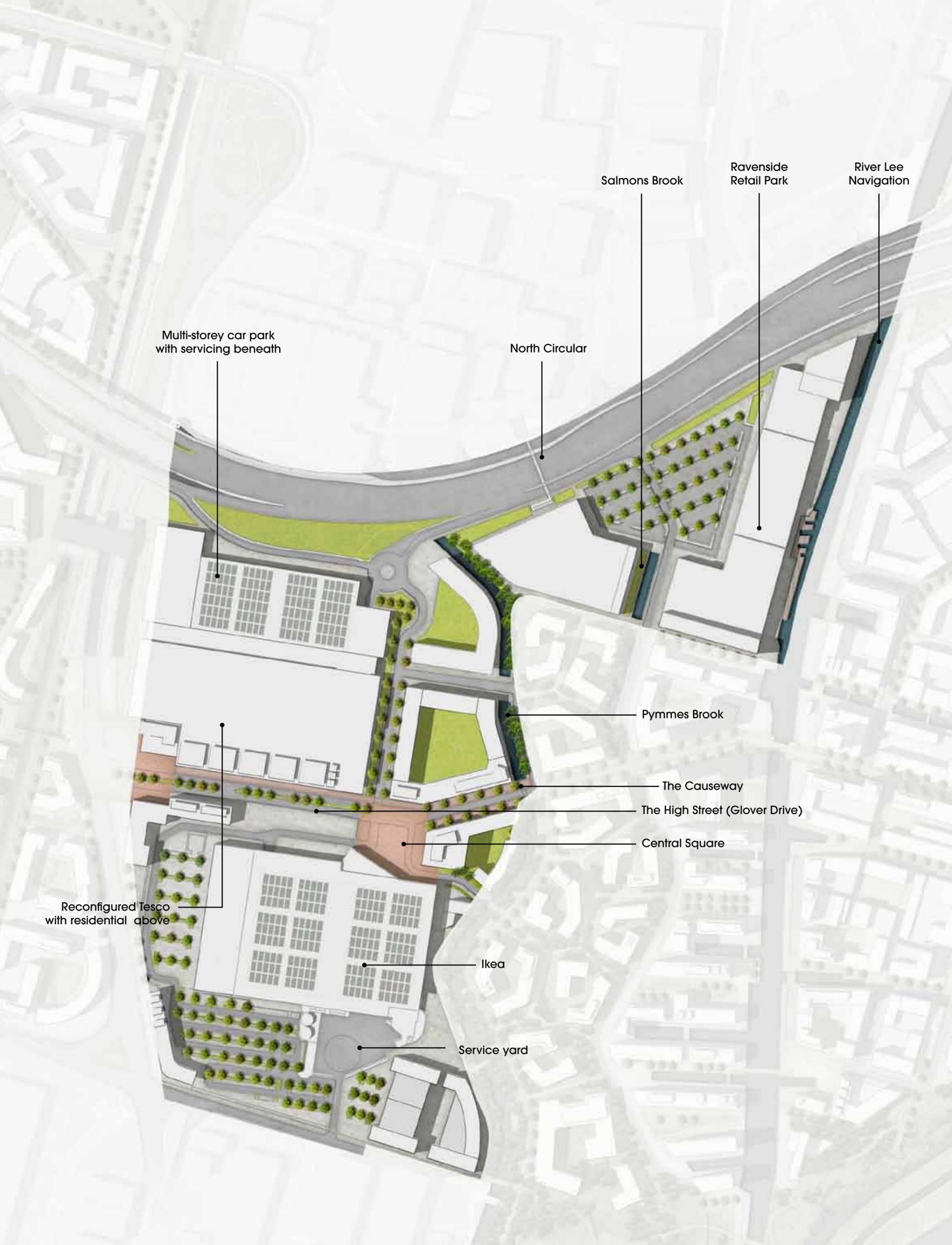
Components of Meridian Central include:

- ★ Improved public realm and pedestrian connections to and from Ravenside Retail Park;
- ★ A new shared surface high street;
- ★ Business units with some residential above;
- ★ Reconfigured land around the Tesco and Ikea stores;
- ★ A local centre offering a new health facility, library, community rooms, police presence and local shops;
- ★ Pymmes Business Park;
- ★ Wildlife corridor along Pymmes Brook; and
- ★ The Causeway

Land Use	Total Site Area (ha)	Site Coverage	Footprint (sqm)	Total floor area (sqm)
SIL B- small & medium warehouse	1.44	0.5	7200	7200
SIL D- offices	1.23	0.3	3690	11070
Tesco	4.96	0.3	15400	15400
New High Street	0.20	1.0	2000	2000
Ikea (inc. extension)	6.27	-	-	-
Ravenside Retail Park	3.50	0.47	16750	25125

Meridian Central - Residential			
Density 220 dwellings/Ha			
PTAL rating 4-6			
479 habitable rooms/Ha			
2.1 habitable rooms/dwelling			
Area (ha)	Density (dph)	No. Dwellings	Population
1.84	220	405	931
4.40 (Above Tesco)	35	154	354
0.72 (Above new retail)	35	25	58

Total Developable Area (ha)	17.6
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Multi-storey car park with servicing beneath

North Circular

Salmons Brook

Ravenside Retail Park

River Lee Navigation

Pymmes Brook

The Causeway

The High Street (Glover Drive)

Central Square

Reconfigured Tesco with residential above

Ikea

Service yard

Figure 5-10 Illustrative Plan

5.5 The Islands

The Islands will create a unique and sustainable residential area, formed through an extension of the Lee Valley Regional Park, which defines the characteristic of the neighbourhood.

An all-through school will be located towards the southern boundary between Meridian Water and Lee Valley Regional Park, taking advantage of the opportunity to locate playing fields within the park's existing boundaries and enhancing access for the community.

The Causeway connects the neighbourhood, creating the opportunity to provide active frontages along this main route through Meridian Water.

To support accessibility, provision of a secure, overlooked pedestrian priority route will be created along the canal-side. This route is crucial to connecting the school site with the central Causeway, and nearby bus-stops.



5.5.1 Existing Condition

The Islands neighbourhood is currently characterised by warehousing and retail units, large swathes of car parking land and vacant land.

The northern boundary consists of the Ravenside Retail Park, with the North Circular beyond. Ravenside has the potential to act as a buffer between residential areas and the noisy North Circular Road. For this to be successful, careful design consideration must be given to how the two land uses meet.

There are several water courses running in close proximity. Efforts should be made to create positive frontage onto those which run directly adjacent to the neighbourhood, such as Pymmes Brook. Both visual and physical connections to the nearby Lee Navigation should be encouraged.

The Lee Valley Regional Park is located to the south of the neighbourhood. This 26 mile long, 10,000 acre park acts as a 'green lung' for London and there is opportunity to create a strong connection with the park by extending its character through the islands site and into the heart of Meridian Water.

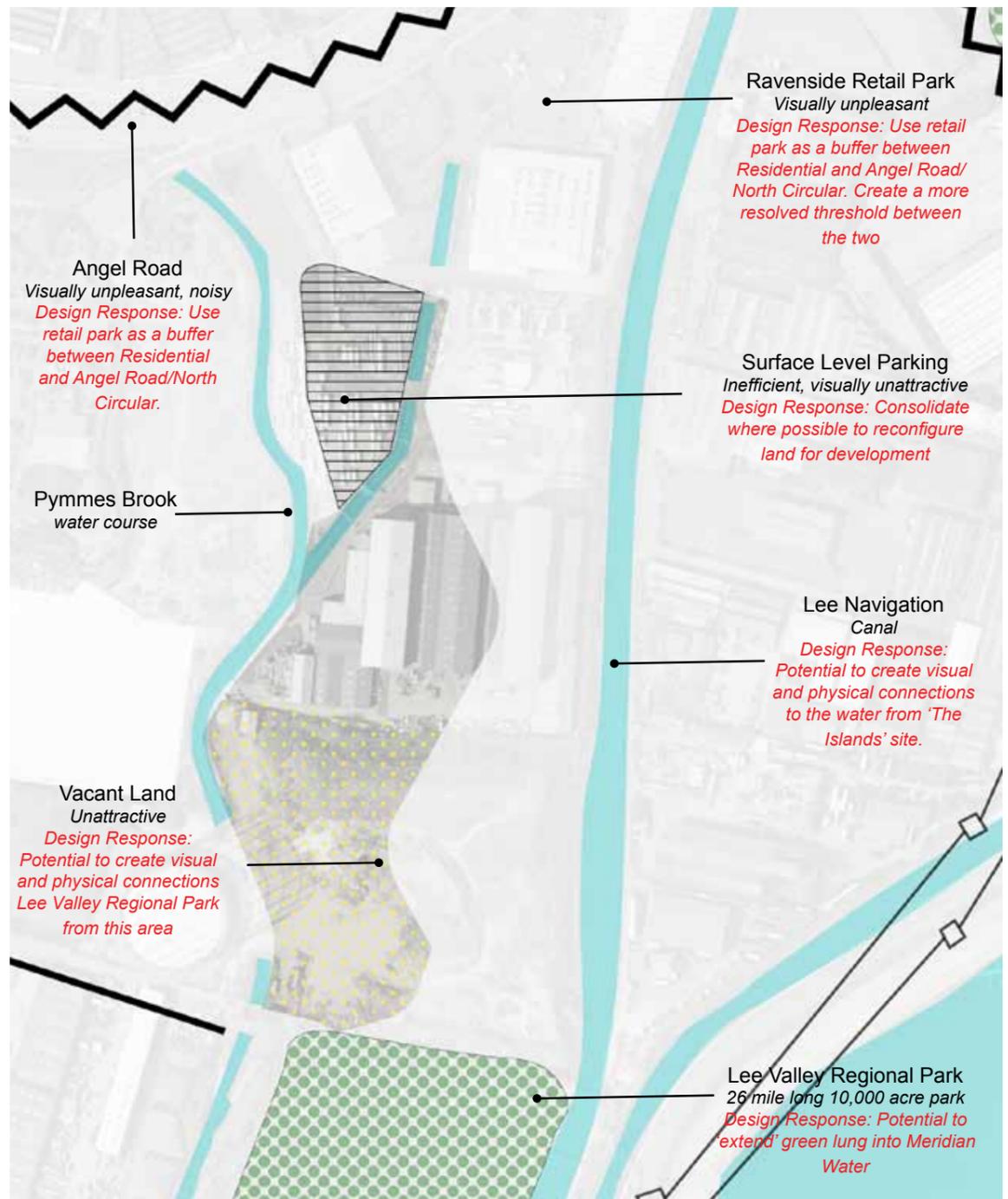


Figure 5-11 Existing Conditions



Figure 5-12 Design Principles

5.5.2 Urban Design Principles

In response to the opportunities and constraints of this area, a series of guiding urban design principles are set out to help direct development to shape and guide development.

- * **Legibility** - creation of a legible urban grain;
- * **Public Realm** - creation of well overlooked open spaces;
- * **Community infrastructure** – creation of facilities to serve the community;
- * **Connectivity**– creation of facilities to serve the community; and
- * **Active frontage** - creation of active frontages along all pedestrian and vehicular routes.

5.5 The Islands

Urban Design Principles

1. Legibility



The Islands area should see the creation of a legible perimeter block structure, responding to the flooding constraints of the area, and incorporating high quality landscaping which will be integral to residential development.

Building heights will predominantly range from 2 to 6 storeys and include a mix of apartments, terraced housing and other typologies.

Principal living spaces will be orientated with external aspects onto the parkland, promoting natural surveillance as well as maximising views and connections to nature.

Clusters of residential development will be provided with undercroft parking beneath a communal deck.

Towards the south of the neighbourhood, building heights should respond to the height of the proposed all-through school.

Pathways will connect the residential blocks to each other as well as to the neighbouring Canal Side West neighbourhood and to the Causeway, which runs through the neighbourhood.

2. Public Realm



The use of wide shared-surfaces and soft landscaping along streets will help create an aspirational setting for residential blocks providing permeable high quality, well overlooked natural amenity space for residents.

Internal courtyards will provide high quality, shared residential spaces which can accommodate some parking.

Naturalised flood mitigation will make use of an integrated network of swales, tree planting and landscaping to store surplus run off and create the ecological environment of the Lee Valley Regional Park.

Recreation and informal play will be provided for alongside new habitats and planting.

The public realm will make use of low energy lighting and where possible, reuse materials that reflect the area's history. Habitat creation along the bank of Pymmes brook will respect the existing biodiversity of the wildlife corridor and create a visual buffer between Ikea, the school and the residential development.

Naturalising parts of the river bank, increasing access and planting creates a strong feature of this waterway, reconnecting it will the surrounding built form and landscape.

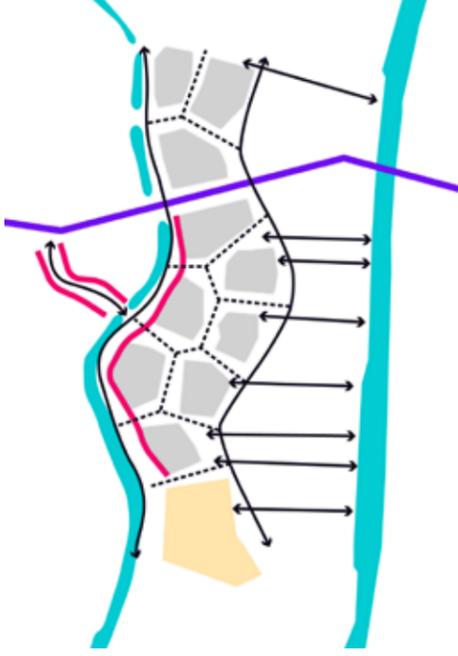
3. Community Infrastructure



An all through school should be located to the southern edge of the neighbourhood. School buildings will occupy approximately 1ha. Its playing pitches will, however, be located within the Lee Valley Regional Park. These should be designed in such a way as to facilitate an appropriate level of community use. They must also contribute to flood mitigation.

Mixed use buildings will flank the Causeway, and will be designed to be adaptable for different uses in the future. Indicative uses include retail, commercial and community uses on the ground floor.

4. Connections



The Islands neighbourhood must maintain visual and physical connections to area's natural assets, such as the Lee Navigation and Lee Valley Regional Park.

Local residential streets, with some on-street parking will be provided to connect residential clusters, providing security through continuity of use. Surface treatment should be selected in order to reflect an intended parkland setting, and traffic calming implemented to discourage through-traffic.

A safe, overlooked route to school should be provided from the Causeway, connecting this key public transport link intuitively with the new educational facility.

5.5 The Islands

5.5.3 Vision

The Islands neighbourhood will be fully integrated with the Lee Valley Regional Park. The open space will offer a community resource at the residents' doorstep. With access to nature, active and passive recreation opportunities will encompass family homes and encourage inter-neighbourly exchange that will create a cohesive sense of community in the neighbourhood. Connections between the Islands neighbourhood and the Central Square should also be given a priority.

To the south of the area, an all-through school will straddle the boundary between Meridian Water and the Lee Valley Regional Park, taking advantage of the opportunity to locate its playing fields within the park's existing boundaries. This would require the negotiation of appropriate and out-of-hours use arrangements at the planning application stage. The opportunity created here provides the school with ample playing field provision and also contributes to Meridian Water's flood mitigation obligations.

In order to promote this location for the development as a school, consideration will be given to the provision of a secure, overlooked pedestrian priority route alongside the canal-side. This route is crucial to connecting the school site with the Causeway, offering a legible link between the school and nearby bus stopping points. This opportunity allows the school to be an accessible and shared asset for surrounding communities.

5.5.4 Land Uses

Residential development maximises the tranquillity, rural views and access to nature offered in this unique parkland setting. This neighbourhood will comprise the following:

- ★ Residential development set within high quality parkland landscape;
- ★ The potential for mixed use development edging the Causeway, to create active frontage onto this central route;
- ★ All-through school site with ample playing fields provision into the Lee Valley Regional Park; and
- ★ Green wildlife corridor running along Pymmes Brook.

The masterplan overleaf shows a conceptual arrangement of building form and open space. To achieve the design intent set out in this section, it is expected that there is likely to be some alterations to this layout to accommodate known constraints or future variations in flood risk assessment. Any changes must continue to have due regard to design intent for this neighbourhood and for the principles and objectives for the over all masterplan.

Land Use	Total Site Area (ha)	Site Coverage	Footprint (sqm)	Total floor area (sqm)
All through school	1	0.5	5000	15,000

Meridian Central - Residential Density 220 dwellings/ha PTAL rating 4-6 479 habitable rooms/ha 2.1 habitable rooms/dwelling			
Area (ha)	Density (dph)	No. Dwellings	Population
3.76	220	827	1903

Total Developable Area (ha)	4.76
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Access to school from Central Square

Pymmes Brook

All-through school

The Causeway

Public parkland

Residential block with private internal courtyard

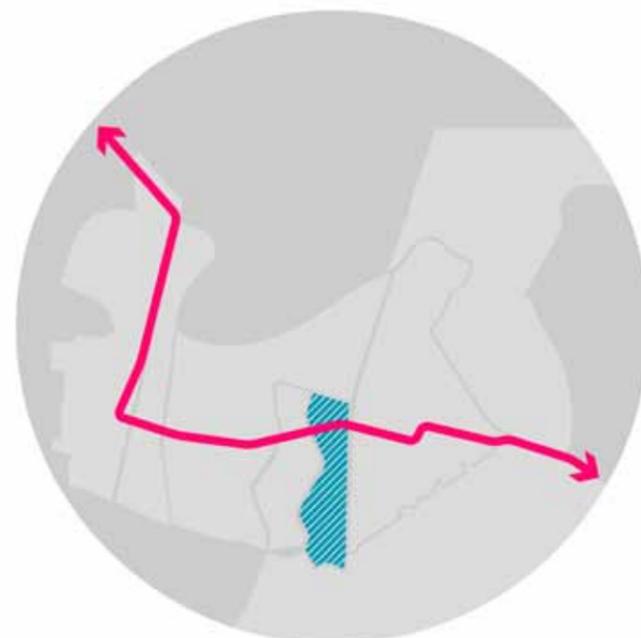
Guided busway

Figure 5-13 Illustrative Plan

5.6 Canal-side West

Canal-Side West celebrates its relationship to the Lee Valley Navigation. It provides a unique waterside living experience within the heart of Meridian Water, connecting communities with the waterside, Lee Valley Regional Park and to employment opportunities to the east through the creation of a new landmark bridge crossing the Lee Navigation.

As prime development land, it will deliver new high density waterfront apartments and open space of exceptional design and quality, enhancing the existing river's edge and creating new and engaging waterside experiences.



5.6.1 Existing Condition

Canal-Side West is located to the west of the Lee Navigation. Currently, the area accommodates a mix of retail warehouses and associated car parking with some smaller industrial units. Canal-Side West is characterised as a low density industrial area at the water's edge. The existing network of streets and buildings are disjointed from the wider area. In addition, due to the large scale blocks of development, the area has poor accessibility.

The northern boundary edge is defined by the Ravenside Retail Park and the North Circular Road. Ravenside Retail Park creates a buffer between the developable area and screens the rest of the area from the noisy North Circular Road. This buffer should be extended to screen future residential development in this neighbourhood. The Lee Navigation Canal provides opportunities for development to be orientated in such a way as to celebrate this asset, and to create positive, extended frontages along the waterway.

Across the water to the east, is Harbet Road Industrial Estate. This estate is protected as Strategic Industrial Location (SIL) for continued employment uses in Enfield's Local Plan and the Mayor's London Plan. As this designation is set to continue in the short/medium-term, opportunities for screening should be explored to mitigate impact. In time, it is hoped that the West and East banks will mirror each other in terms of vitality and attractiveness.

Finally, the Lee Valley Regional Park is located to the south of the neighbourhood. This 26 mile long, 10,000 acre park acts as a 'green lung' for London and, as with 'The Islands', an opportunity exists to promote connections between the residents of 'Canal-side West' and this significant local asset.

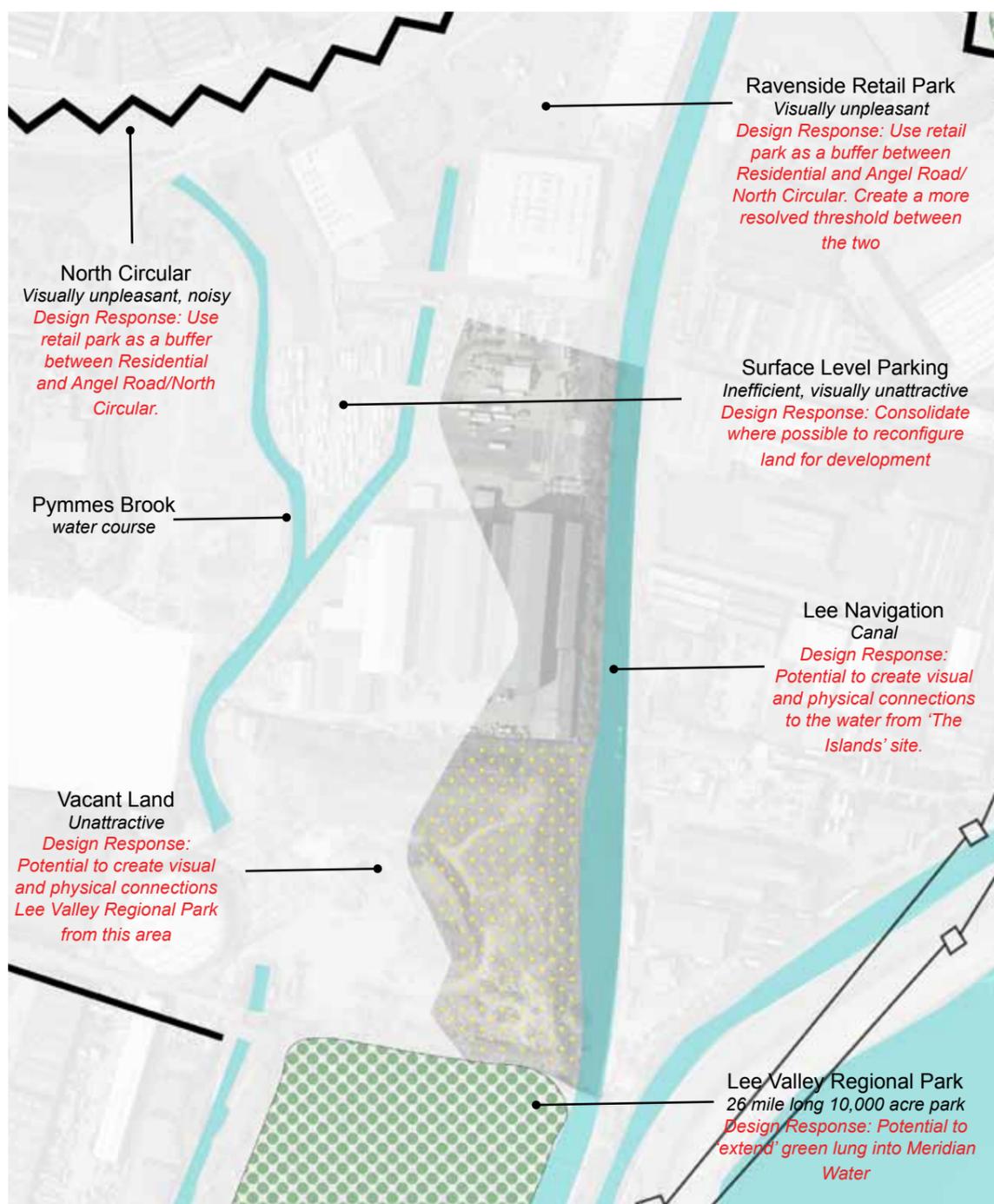


Figure 5-14 Existing Conditions

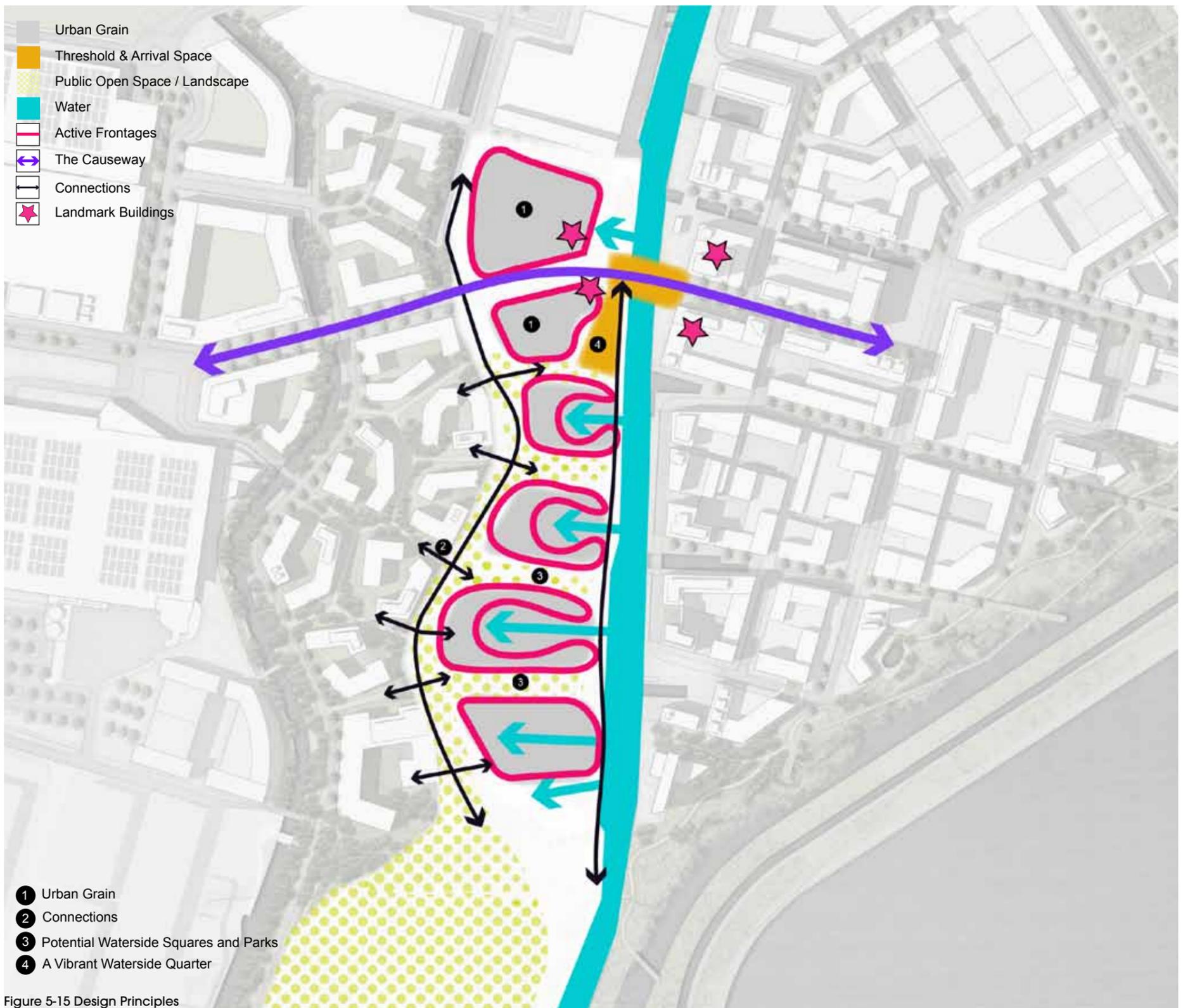


Figure 5-15 Design Principles

5.6.2 Urban Design Principles

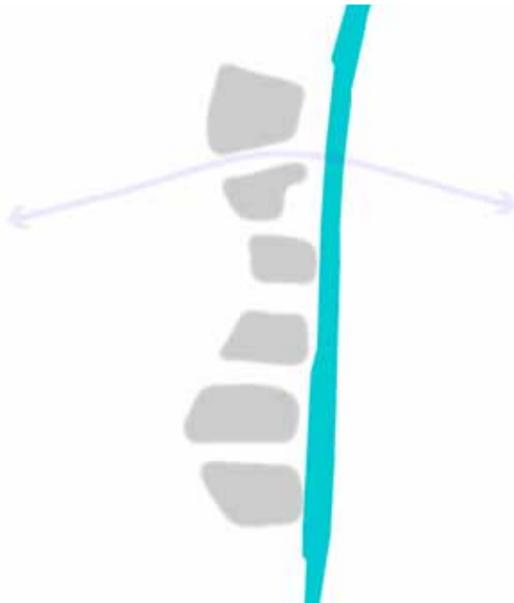
In response to the opportunities and constraints presented in the area, combined with the over arching aspirations for Canal-Side West, the Masterplan defines a series of guiding design principles to inform and shape future developments proposed in the area. These urban design principles should be considered in proposals for the area to ensure that development is of high quality, robust and will transform canal side west into an exemplar residential living area. As indicated in the plan below the urban design principles for Canal-side West are as follows:

- ★ **Legibility** - creation of a legible urban grain;
- ★ **Connections** – connecting into the wider area;
- ★ **Public Realm** – integrating waterside with new development; and
- ★ **Mix of uses** - integrating uses to create vitality.

5.6 Canal-side West

Urban Design Principles

1. Legibility



Canal-side West currently accommodates large development blocks, which should be broken down to make the area more permeable and human in scale. The emergence of a smaller block structure should be used to open up vistas and physical links to the waterfront. This will increase the potential to capture the economic value presented by the Waterfront.

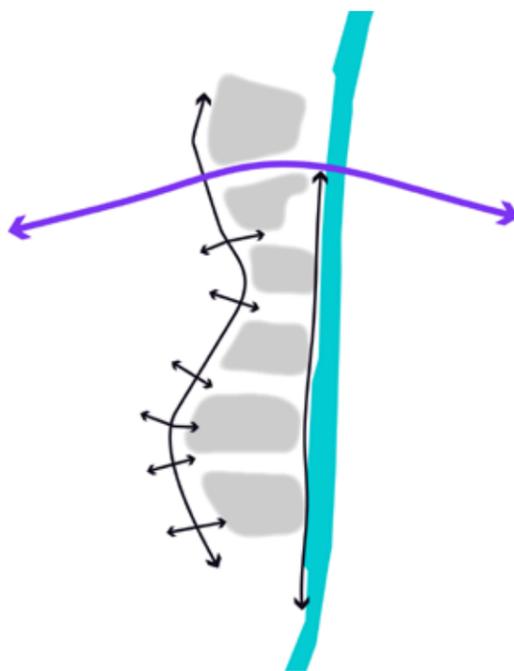
Development will be arranged off a principal spine street connecting to the Causeway to facilitate vehicular access whilst reserving the waterfront for pedestrians and cyclists.

Where possible, development frontages should be orientated towards the canal side, maximising waterfront views and benefiting from solar gain. Overall the urban grain of this area should provide clear distinctions between private and public space, creating permeability and security throughout the site.

Development will be predominantly 6-7 storeys in height, with the opportunity, where appropriate for occasional taller buildings along the water's edge. Two taller landmark buildings up to 15 storeys will flank the Causeway and frame views to the bridge crossing the River Lee. Towards the south of the site, building heights should respect the height of the all-through school.

Clusters of residential development will be provided with undercroft parking beneath a communal deck.

2. Connections



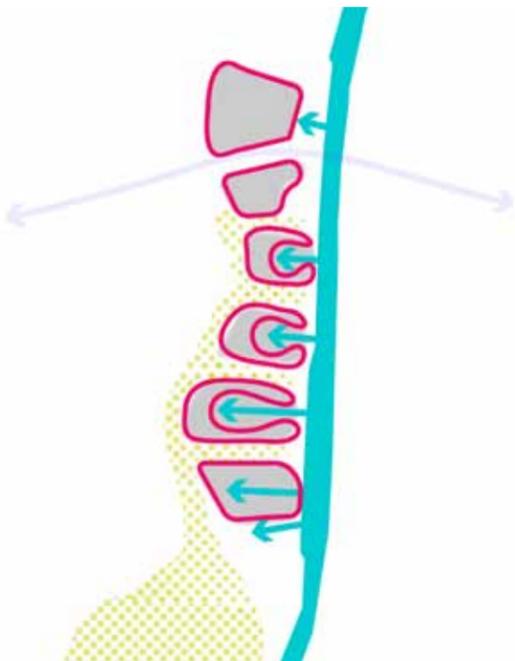
Building on the Masterplan's overall vision of permeable development, it is proposed that Canal-Side West will benefit from strong visual and/or physical connections on all edges. To the north, it is important that the intersection with the Causeway is celebrated as a key community hub.

A landmark bridge will cross the Lee Navigation to create a new east-west connection across the area that is suitable for bus, bicycle, pedestrian and controlled vehicular usage. To the south, a second bridge suitable for pedestrian and bicycle access connects Canal-Side West with Meridian East. Pedestrian and cycle links that skirt the canal edge should merge seamlessly into the adjacent Lee Valley Regional Park.

Connections with the 'The Islands' to the west should be promoted in order to support integrated development. Visual connections to the east should be promoted to open up the benefit of waterside views for the community.

Local residential streets, with some on-street parking will be provided to connect residential clusters, providing security through continuity of use. Surface treatment should be selected in order to complement its waterfront setting, and traffic calming implemented to discourage through-traffic.

3. Public Realm



The Lee Navigation is a significant natural asset within Canal-Side West. Any new development in this area should maximise the potential for the waterside to be used for appropriate leisure and recreation uses.

Drawing water into the masterplan will positively increase land values in this neighbourhood. There is potential to extend some water bodies into residential areas, creating new spaces which could be aligned in a linear form to reflect the pattern of the water and promote passive cooling.

High quality open spaces will vary throughout the neighbourhood, alternating between courtyard spaces and basins. The landscape character of courtyards will vary from more formalised to naturalistic arrangements, as they move south in order to create a smooth transition into the Lee Valley Regional Park.

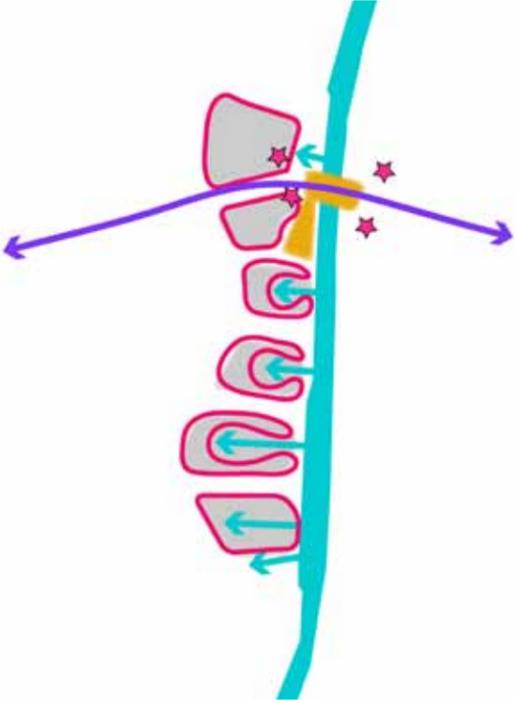
The courtyards will be publically accessible and will include landscaped garden areas and access to the water, whilst allowing both formal and informal play.

Public amenity space will include provision of pocket parks, to supplement individual private balcony space and enable the Masterplan to deliver a diverse housing offer which incorporates a range of densities.

Development units should adhere to a layout that enables spaces to benefit from natural surveillance through the use of active frontages. The area has the opportunity to produce high quality, well overlooked amenity space for both private and public usage.

Public realm throughout will make use of low energy lighting and, where possible, reuse of materials that reflect the area's history.

4. A Mixed Use Quarter



Although predominantly residential in nature, there are opportunities to create a mix of uses along the canal-side and the Causeway, to create vibrant community infrastructure such as restaurants, cafes and bars.

Signified by the inclusion of two landmark building flanking the Causeway and framing the bridge, Canal-Side West will support a vibrant, mixed use quarter, benefiting from a close association with the waterside. A waterfront promenade will create north-south connections, and increased waterfront edge will allow opportunities for leisure and social facilities to activate the development.

5.6 Canal-side West

5.6.3 Vision

The vision for Canal-side West is to deliver a residential-led development, which maximises its waterfront location and connection to the Causeway community spine, to offer high quality residential living alongside a hub of activity which includes cafes, bars and restaurants.

A riverside promenade connects a series of waterside spaces that run south from the Causeway to the Lee Valley Regional Park. High quality public realm including a waterfront pocket park creates a community focus within the residential development, offering opportunity for information recreation close to residents' homes.

5.6.4 Land Uses

With water being at the heart of the Masterplan, Canal-side West's residential development will provide a unique living experience where the benefits of the re-invigorated River Lee can be drawn into the daily lives of the local community.

Some retail and leisure facilities will be needed to support this waterside living and provide destination points along the north - south towpath. This neighbourhood is made up of the following components:

- * Predominantly residential, but mixed tenure;
- * Mixed-use quarter with cafes, bars, restaurants;
- * A pocket park;
- * Canal side spaces and high quality promenade; and
- * Possibilities for floating homes and residential moorings.

The masterplan overleaf shows a conceptual arrangement of building form and open space. To achieve the design intent set out in this section, it is expected that there is likely to be some alterations to this layout to accommodate known constraints or future variations in flood risk assessment. Any changes must continue to have due regard to design intent for this neighbourhood and for the principles and objectives for the over all masterplan.

Canal-side West - Residential			
Density 220 dwellings/ha			
479 habitable rooms/Ha			
2.1 habitable rooms/dwelling			
Area (ha)	Density (dph)	No. Dwellings	Population
4.8	220	1056	2429

Total Developable Area (ha)	4.8
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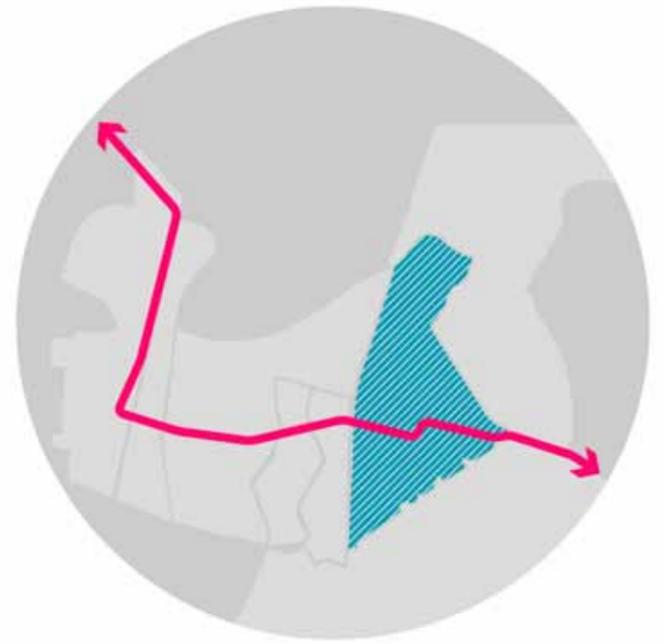


Figure 5-16 Illustrative Plan

5.7 Meridian East

The Meridian East area will be a dynamic and vibrant mixed use neighbourhood with a distinct character. Intensification of development will provide opportunities to improve the quality of the existing industrial offer and attract new businesses, alongside delivering new homes and a better quality urban environment.

Public spaces and the central Angel Works Square will support a mix of commercial and leisure activities and will connect the area and its communities to the waterside and parklands beyond.



5.7.1 Existing Condition

Today Meridian East is predominantly in industrial use and is protected as a Strategic Industrial Location (SIL) in Enfield's Local Plan and the Mayor's London Plan. It is largely made up of the Harbet Road Industrial Estate, which is also known as the Lee Valley Trading Estate. This is a large estate with good accessibility to the North Circular and other major roads. It is generally well occupied with a mix of industrial and employment generating uses in a number of different land ownerships. The area provides a range of jobs for local residents.

It is bordered to the north by the North Circular Road. The Islands Neighbourhood is to the west, where new residential uses and potentially an all-through school are proposed. To the east lie the natural assets and waterways of the Lee Valley Regional Park, designated as green belt in Enfield's Local Plan.

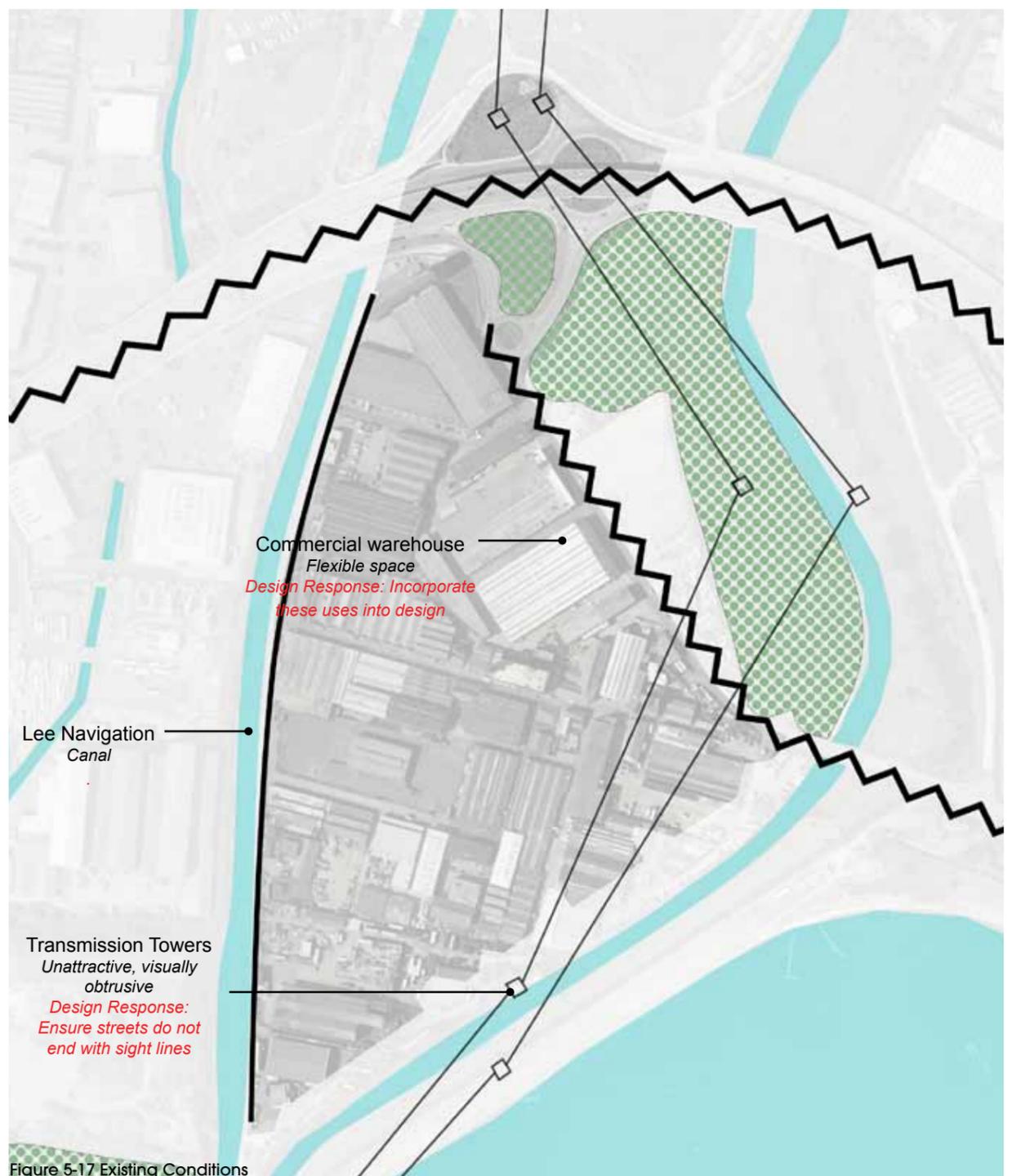


Figure 5-17 Existing Conditions



Figure 5-18 Design Principles

5.7.2 Urban Design Principles

Development at Meridian East should adhere to the principles of good urban design set out below. The existing industrial character and organisational structure of the employment area should be maintained. Development should be brought forward on a managed and phased basis, gradually allowing for the intensification of uses across the area. Meridian East will gradually evolve into an area where new businesses work alongside residential development set within a water-side and parkland environment

- ★ **Legibility** - creation of a legible urban grain;
- ★ **Connections** - connecting into the wider area;
- ★ **Public Realm** - creation of well overlooked spaces; and
- ★ **Mix of uses** - integrating uses to create vitality.

5.7 Meridian East

1. Urban Grain



In the short term, the existing buildings, service yards and routes in the northern part of the neighbourhood will be retained. Re-use and intensification will be encouraged and could create affordable space for a range of different businesses to flourish. In the longer term the area's industrial and business focus will be consolidated and intensified, benefitting from its good road access and other locational strengths.

Lying at the heart of the Meridian East is Angel Works Square. This public space acts as a transitional zone between the dense industrial area to the north and a new mixed-use area to the south. Buildings frame the Square to create a dramatic sense of arrival and a key point of orientation.

Within the Square, new contemporary buildings alongside reused and retrofitted stock will be encouraged to create visual interest as well as provide a range of start up and small business space. This is where businesses and residents can co-exist. Clear space within the Square should be maintained to allow for a programme of events to support both the business and residential communities.

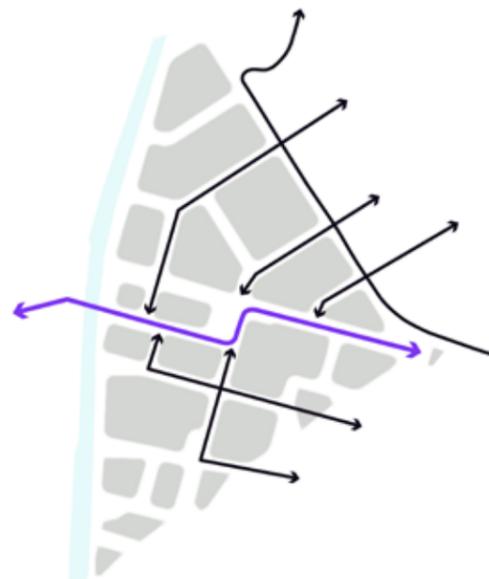
South of the Square there is scope for a well designed and managed mixed-use area where lighter industrial uses sit comfortably alongside residential development. This zone will have a tighter urban grain and streetscape comprising of densely organised development blocks rising between 5 to 15 storeys.

The quality of the residential units, especially family units, should not be compromised by their spatial relation to buildings that differ in scale and function. This could be achieved by introducing a mix of uses through vertical stacking, with business and/or employment generating uses maintained on the ground floor with development continuing above.

Redevelopment provides the potential to create shared spaces that could evolve into high quality courtyards and squares. An improved network of routes and spaces will lead towards the Angel Works Square and Bridge to make the neighbourhood easier to understand and navigate through.

A landmark feature to the east accentuates the central spine and Angel Works Square to create a focal point and marks the gateway to and from Waltham Forest.

2. Connections



Proposals should contribute towards improving visual and physical connections and accessibility. Enhance the experience of walking and cycling through the area through the creation of safe welcoming new links to adjoining neighbourhoods is a priority.

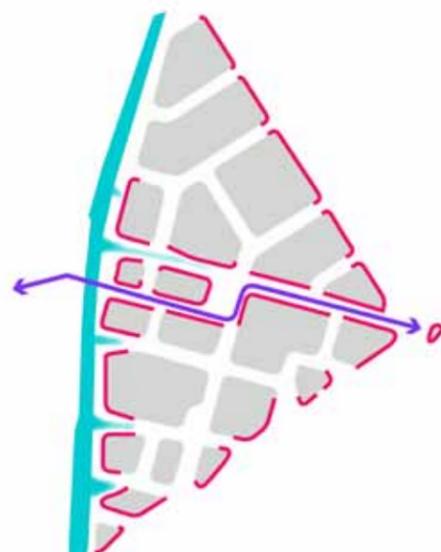
The Angel Works Bridge will create a connection over the Lee Navigation to improve east-west connection.

There is an opportunity to improve the signage in this area, linking into the Legible London scheme and into Lee Valley Regional Park and southwards to Stratford.

Streets through the neighbourhood should be influenced by the area's natural assets and be accentuated with green routes and tree planting. Attractive and shared surfaces will be encouraged.

Improvements to the Harbet Road towpath to form part of a strategic connection through the Lee Valley will be required. This route should be strengthened as part of Enfield's Greenway Network, and be properly integrated with new routes created.

3. Public Realm



Principal living spaces and external aspects should be orientated to maximise the views onto the Lee Valley Regional Park and Banbury Reservoir to the south, and the Lee Navigation to the west. Development could take the form of densely organised development blocks starting at 5 storeys rising to 15 storeys particularly along the waterway. Roof top terraces would maximise views and connections to nature.

All development should frame and overlook streets and other pedestrian routes, where possible. New buildings should be carefully designed to ensure that they have an active frontage and can support natural surveillance.

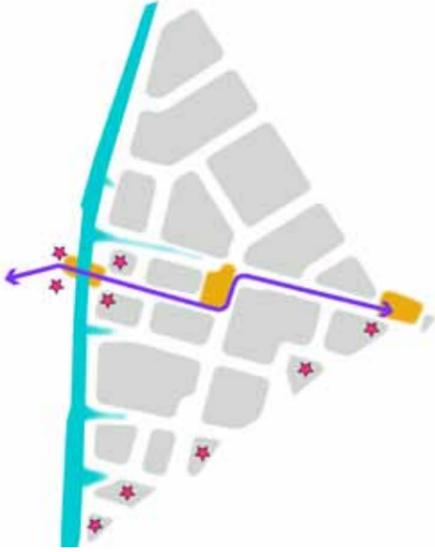
Private amenity space should be provided to all homes in the form of communal gardens, courtyards, balconies or roof top terraces.

A series of open spaces stepping back from the river's edge to open up views and allow for spill out activity from cafés, bars and restaurants, creating a dynamic waterfront should be explored.

4. Community Uses

A mixture of uses on the ground floors, particularly within the Angel Works Square and along the water's edge will be encouraged. These uses should be designed to be adaptable for different uses in the future; and

A complementary and careful relocation strategy for existing industrial uses to avoid the loss of employment will be required, and will need to be implemented over time.



5.7 Meridian East

5.7.3 Meridian East Vision

Meridian East will continue to provide a focus for employment and industrial activity. Primarily protected as Strategic Industrial Location (SIL) for continued employment uses, the Harbet Road Industrial Estate will be regenerated, combining elements of its working past with new business and employment opportunities and live-work spaces along the water's edge.

The northern part of the estate benefits from good and exclusive 24 hour vehicular access to major roads. Physically separated from more sensitive land uses, this area will retain and intensify its industrial density in order to achieve no overall net loss of industrial capacity over Meridian East as a whole. Concentration of industrial uses could create a critical mass for new services and amenities, both within buildings (i.e. security arrangement, shared waste facilities, and logistics) and in the neighbourhood (i.e. café, public space and meeting places), improving the attractiveness for a wider range of potential users.

South of the Causeway and Angel Works Square, the character of the area will change. Careful design will offer scope for more intensive forms of development with a mix of industrial and non industrial uses. Certain types of industrial activity, including those with a creative and/or cultural character could successfully operate in close proximity to residential quarters and be compatible with new homes nearby.

Residential development will mirror that of the western bank along the canal and will be complemented by waterside leisure activities including cafes and bars. Careful planning of this mixed use neighbourhood will ensure that residential and employment uses can successfully operate together and that issues such as design, noise, light, air quality, materials, movement and access arrangements are appropriately addressed.

Meridian East will be fully integrated with the Lee Valley Regional Park. A new network of urban open spaces through the area will provide physical and visual connections within the neighbourhood and beyond and help to soften the boundaries and relationships between the different uses.

The open space will be intertwined with high quality aspirational housing offering a community resource at the resident's doorstep. New waterside housing and the potential for self build plots will provide a rare opportunity in London, helping to create diversity and an engaged, creative group of residents.

Development will maximise its water-side location. Redevelopment will facilitate the creation of a high quality public realm, particularly along the water's edge. Employment generating uses associated with water are also encouraged. Being adjacent to the water-side also offers the opportunity to promote healthier lifestyles by offering high quality walking and cycling routes using the Harbet Road towpath.

The Masterplan seeks to realise transformational change whilst sustaining economic growth. In order to ensure that there is no net loss to industrial capacity, it is recognised that some redistribution of employment uses from the southern portion of the Harbet Road Industrial Estate to elsewhere may be necessary. This is discussed in further detail in Chapter 6, section 6.4 on Business and Employment, and will be formally determined through the Central Leaside Area Action Plan.

5.7.4 Land Use

The main components of this neighbourhood are:

- ★ Retention and intensification of the area as a focus for business and employment generating uses;
- ★ An integrated industry, commercial and residential neighbourhood south of Angel Works Square and along the watercourses;
- ★ New business opportunities for creative industries and business start-ups and a hub for innovation and new ideas;
- ★ A mixture of homes, comprising of live/work, mixed-tenure and type to help create a mixed community and meet the range of housing needs in Enfield;
- ★ High quality homes created along areas with positive water-side aspect; together with leisure facilities such as cafes, bars, restaurants to maximise the area's unique riverside and park-side setting;
- ★ A new public square and link over the Lee Navigation connecting this neighbourhood and the rest of the Meridian Water area; and
- ★ Possibilities for floating homes and residential moorings.

Land Use	Total Site Area (ha)	Site Coverage	Footprint (sqm)	Total floor area (sqm)
New SIL at Harbet Road Industrial Estate	2.22	0.5	11,100	11,100
Regen SIL at Harbet Road Industrial Estate	12.16	0.3	36,480	54,720
Meridian East - Residential				
Density 220 dwellings/ha				
PTAL rating 4-6				
479 habitable rooms/ha				
2.1 habitable rooms/dwelling				
Area (ha)	Density (dph)	No. Dwellings	Population	
4.45	220	979	2252	

Total Developable Area (ha)	18.83
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North Circular

Argon Road

Harbet Road Towpath

River Lee Navigation

Harbet Road

The Causeway

Bus, pedestrian and cycle bridge

Angel Square

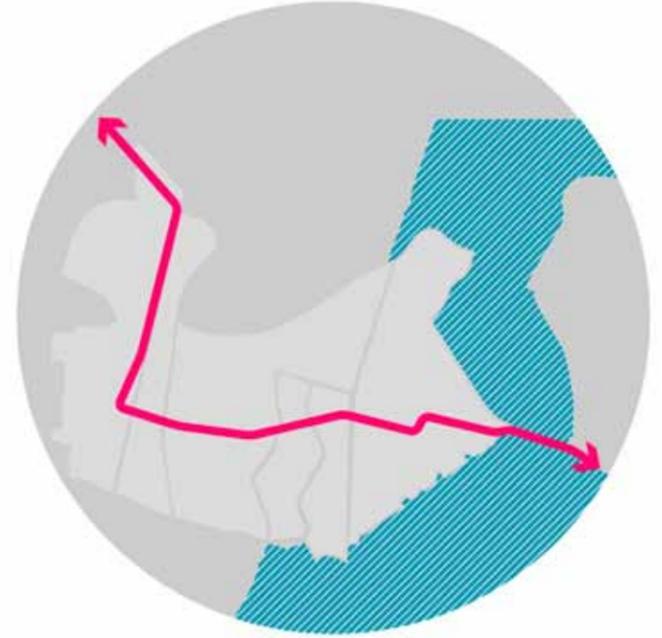
High value residential

Figure 5-19 Illustrative Plan

5.8 The Parklands

Drawing its influence into the heart of the Masterplan, the parkland transforms the image of the area's industrial heritage and integrates experiences of this extraordinary asset with everyday life. Forming a rejuvenated part of the Lee Valley Regional Park, its character and form are adapted and enhanced to create four unique park zones. Each has a distinctive character and function that bring a combination of ecological, recreational and economic benefit at a local and regional scale.

New bio-diverse habitats and river re-profiling exploit the potential of the waterways. Growing spaces, leisure and recreation facilities promote active, healthy, social lifestyles whilst integrated flood storage capacity reflects the adaption to climate change and connects with the over arching SUDS strategy of the Masterplan. The regeneration of the Park will be accommodated through the process of creating flood compensation within it.



5.8.1 Existing Conditions

The Parklands is an area of open space along the eastern most edge of Meridian Water. As part of London's green belt and the Lee Valley Regional Park (the Park) it forms an important section of the Park's network of open spaces at one of its narrowest points. Elsewhere throughout its 26 mile length the Park is home to numerous leisure and recreational opportunities. However at Meridian Water there is currently little or no public access to the footpaths, open spaces and waterways beyond. Development at Meridian Water provides an opportunity to maximise access to this underused resource. The western boundary of the Parklands is characterised by a range of industrial buildings and operations within the Harbet Road Industrial Estate. The North Circular Road defines the northern boundary and the River Lee Diversion and River Lee Flood Relief Channel form the eastern edge and southern edge. Whilst outside of the defined area, the open land to the north of the Parklands, beyond the North Circular Road has the potential to play a significant role in the flood relief for the entire area. It currently includes a commercial soil screening operation, which is expected to leave the site by 2015-16.

The Parklands is dominated by the River Lea, the Lee Navigation and Banbury Reservoir. Its character is defined by its industrial, ecological and agricultural heritage which combined with its location, create a green corridor of countryside that penetrates into the urban area. Much of the area is currently used for car parking, informal animal grazing and is visually dominated by electricity pylons running north to south. It also has extensive underused riverside areas, and protected wildlife habitats which are home to rare flora and fauna of London wide significance. Much of the area falls within the Lea Valley Site of Metropolitan Importance for Nature Conservation designated in the Mayor's London Plan.

The physical barriers of the existing watercourses and major roads means that the area lacks permeability. This has had the effect of restricting accessibility and limiting views into and out of the area, reducing the area's visibility, and also making the area feel unsafe and isolated. The positive attributes that the area has are not promoted and the area has become an underused, undervalued asset.

5.8.2 Urban Design Principles

In order to improve the function and appearance of the area, a series of guiding principles are set out below to inform and direct future development of the Parklands. Overall the intention is to establish the Parklands as a destination in its own right, creating an accessible, visually attractive and distinct place with a clear sense of identity.

1. Legibility – Making the area legible

Improving access, navigation and ease of movement is a priority for this area. Walking and cycling routes will be encouraged to provide new routes as well as connections to existing ones and the Causeway.

Good signage and way finding systems will be required along these new routes to aid legible circulation. Public art features could create points of interest and activity at particular points within the Parklands.

Informal and formal amenity space will need to be established with provision of both soft and hard landscaped areas. This will improve the functionality of the area and create variation.

2. Edges – Creating overlooked edges

Boundary treatments will be required to screen the noisy and abrupt North Circular Road and to define the Parklands as a distinct neighbourhood. Establishing clear boundaries along the edges of the area will strengthen identity and support the area's importance for nature conservation. Defining the area will help to create clear, inviting entrances into the site which will improve direction, access and legibility.

3. Connections and public realm – Connecting into the wider area

Access to the Parklands should be opened up with direct access to the natural and planned environment that will characterise the area in the future. New physical connections should create direct, convenient access to all amenities in the Parkland and the wider Meridian Water area. Improving east - west connections is a priority.

Visual connections from Meridian Water through to the Parklands are needed, with the provision of vistas directed at key features within both areas. The waterways should be used to visually connect the area. Enhancing the public realm along the waterways will encourage greater use by walkers and cyclists.

Public open spaces should be designed in such a way that they will benefit from natural surveillance from the neighbouring properties in Canal Side West and the Islands.

A clear hierarchy of spaces should be provided within the redesign of the Parklands neighbourhood, all centred around arrival nodes where junctions meet and people interact.

5.8.3 The Parklands Vision

The Parklands will be a destination park serving the Meridian Water community and adjoining neighbourhoods, helping to establish the "North London Riverside" as a vibrant community on the banks of the River Lea. With a variety of informal and more formal open spaces uses, it will be a safe and desirable place to go. A consistent and effective management plan will ensure the long term sustainability of these well used and well maintained open spaces, and the extensive connections into the Lee Valley Regional Park, Meridian Water and beyond.

The Parklands area has been divided into 4 distinct areas; The Eastern Common; Water's Edge Walk; Meridian Gardens; and Banbury Reservoir.

Water's Edge Walk



Figure 5-20 Water's Edge Park

Parkland Zones



Figure 5-21 Parkland Zones

5.8 The Parklands

5.8.4 The Eastern Common

Extending from Meridian East outwards into the greenbelt, the Eastern Common should provide growing, recreation and leisure space for Meridian Water. The Eastern Common will provide 6.5 ha flood storage capacity whilst providing ecological benefits through habitat creation and river re-profiling which complements the area's existing nature conservation characteristics. It will serve as a valued local resource and contribute to the identity of the wider Lee Valley Regional Park.

Objectives/Principles:

- ★ Planting and sight lines will extend into Meridian East, which integrate the area physically and visually with the urban form;
- ★ An urban farm or similar activity has the potential to serve as a community meeting space, providing spaces for events and support for the sporting facilities within the park;
- ★ Community facilities, children's play and a variety of formal playing fields including junior and senior football pitches will be supported. These will promote active lifestyles and team sports and be managed as part of the parkland;
- ★ Community agriculture and food growing will provide residents with the opportunity to engage with the landscape;
- ★ Close proximity to green routes will allow connections into Angel Works Square and the opportunity for activity within the park to extend into the community;
- ★ Re-profiling along the River Lee Diversion will be supported, softening the existing hard river edge with reed and marginal planting to create new habitats. Basins and ponds will be cut back from the channel's edge, creating new wetlands that are able to contain flood waters. Re-profiling will support new diverse habitats and create connections to the water. New landscape features will divert attention away from the electricity pylons and the North Circular Road; and
- ★ Boardwalks and pontoons will be used to provide access through the new wetland habitat, extending some of the street form into the landscape. Other areas will be left inaccessible, allowing nature to take charge and maximising the biodiversity potential.

5.8.5 Water's Edge Walk

Creating a positive edge to the southern boundary of Meridian East, Water's Edge Walk should ensure a continuous experience of the Lee Valley Regional Park. The re-profiled naturalised edge of the Lee Diversion channel creates a unique ecological and recreational resource that should bring an experience of nature to the residents' doorstep.

Objectives/Principles:

- ★ A tall landmark structure will form a point of orientation and marks an entry point into Meridian Water along Harbet Road.
- ★ The landscape will respond to the built form drawing the parkland edge to the residents doorstep and strong views from the homes along the southern boundary will extend over the reservoir
- ★ Where appropriate, the streetscape will extend into the landscape with pontoons and planting creating physical and visual links entwining the landscape with the urban grain. Soft landscaped forms and planting will bring definition and character from the rest of the park into this safe and accessible learning space; and
- ★ Boardwalks will meander through the new habitats close to the river, with a higher level walkway creating a linear route along the park, safe from flooding.

River re-profiling will extend along the channel's edge, softening the landscape, stepping away from the development towards the park. The re-profiling will also increase flood storage capacity.

Objective/Principle:

- ★ Habitat creation along the softened edge increases biodiversity and the ecological value of the waterway.

5.8.6 Meridian Gardens

Meridian Gardens will form a continuation of the landscape character sweeping around the eastern boundary of Meridian Water and connecting with the adjacent metropolitan greenbelt. It will provide local and catchment-scale flood alleviation, whilst promoting biodiversity and enabling the community access to nature. It will drive the Lee Valley Regional Park through to the heart of Meridian Water.

Objectives/Principles:

- ★ The Lee Valley Regional Park will extend north through the Islands neighbourhood and provide a seamless link between the residential area and the park;
- ★ Residential development will be integrated into the landscape with access, views, routes and connections into the parkland;
- ★ Meadow planting, soft landforms and groupings of trees will be used to create a parkland landscape that moves through the development and extends south;
- ★ Pathways will weave through the residencies creating pedestrian and cycle links connecting to the roads running parallel either side of the islands;
- ★ Within Meridian Gardens, strategically located "look out" structures create elevated vantage points across the park and flood alleviation space;
- ★ Walkways meander across flood storage ponds and fluctuating landforms allowing for climate change adaptation. Sculpted landforms create a dynamic landscape; and
- ★ Trees, marginal and wetland planting will be used to promote diverse new habitats and create a transformed, naturalistic landscape with biodiversity and ecological benefit.

5.8.7 Banbury Reservoir

Enhanced access to Banbury Reservoir will be created, creating a recreation and leisure destination for the surrounding communities and for the Lee Valley Regional Park.

Objectives/Principles:

- ★ Improved pedestrian access around the reservoir, including a fitness trail will be provided around the reservoir boundary, with green links and connections to South Chingford and Higham Hill;
- ★ Boating and water sports activities will create a leisure destination, and provide a community focus; and
- ★ The increased access and facilities at Banbury Reservoir will be delivered on a phased basis. The Council will work with Thames Water and LB Waltham Forest at each stage to ensure the viability, practicality and safety of these uses.

Organising structure - connections and frontages

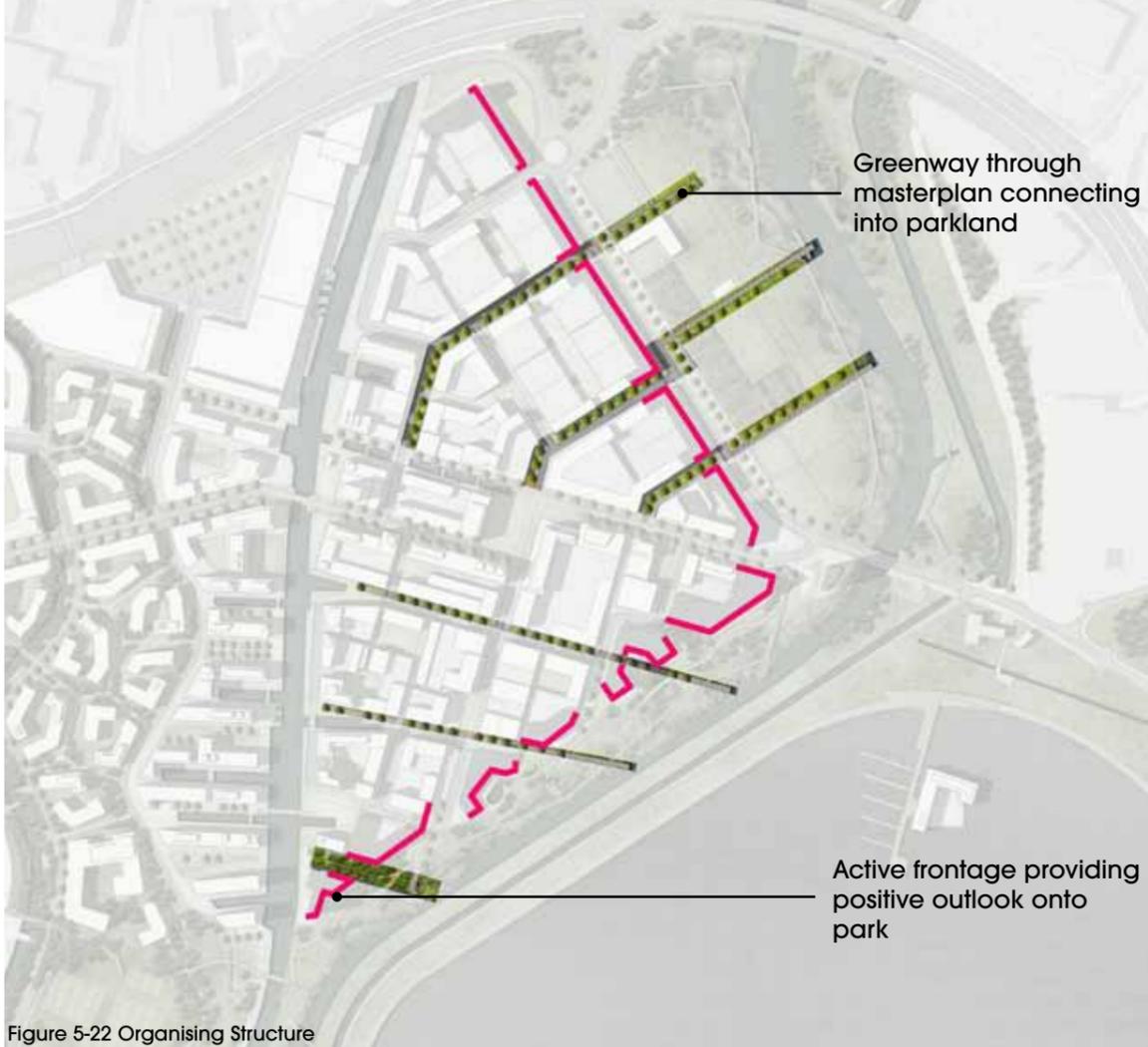


Figure 5-22 Organising Structure

Urban design principles



Figure 5-23 Urban Design Principles



River Lee Navigation

North Circular

Meadow planting

Multi-use games area (MUGA)

Urban Farm

Urban agriculture and allotments

Naturalised river bank

Children's play area

Landmark structure

Naturalised river bank

Riverside boardwalk

Potential watersports Centre

River Lee Diversion Channel

Lee Valley Regional Park

River Lee Flood Relief Channel

Banbury Reservoir

Figure 5-24 Illustrative Plan

6 The frameworks



6 The frameworks

6.1 The frameworks

Meridian Water is designed within a robust yet flexible structure that allows for flux and change in the future.

Acknowledging the past, responsive to existing communities, infrastructure, facilities and the environment, the masterplan is a culmination of frameworks, working as layers to create a coherent, strong and forward thinking masterplan. They give stability and strength to the Meridian water, fully encompassing all elements for the success of this aspirational eco – community.

The 8 frameworks are:

- * Movement;
- * Homes;
- * Business and Employment;
- * Shopping and leisure;
- * Community;
- * Water;
- * Public realm; and
- * Energy.

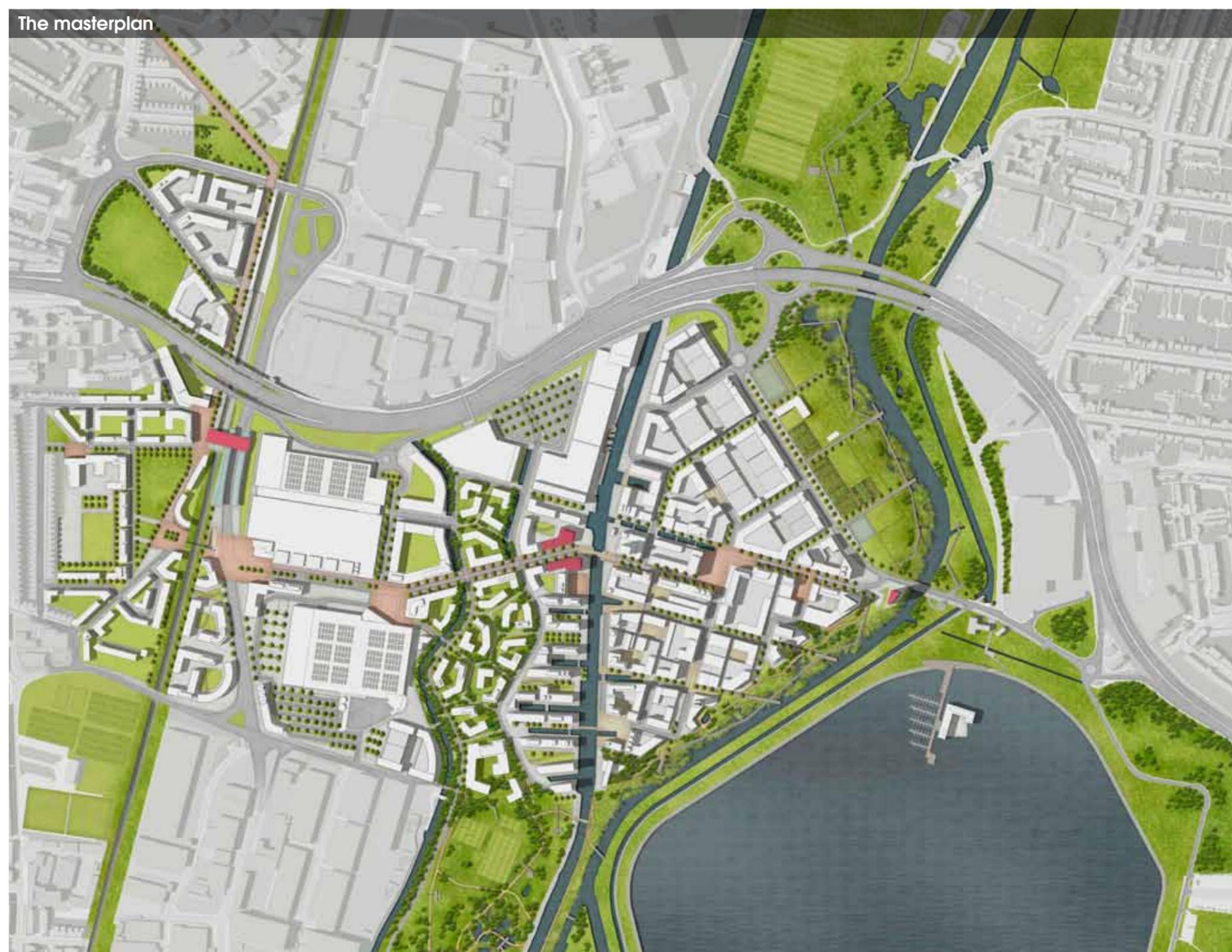


Figure 6-1 Illustrative Plan



Water's Edge Walk

6.2 Movement

The delivery of the movement framework is integral to achieving positive change at Meridian Water. It supports and sustains the success of business and retail, delivers the capacity for residential development and creates a well-connected destination that adds to the quality of life for new residents and surrounding communities.

The creation of a highly sustainable transport network is vital. The Masterplan includes an improved train service and upgraded rail station integrated with a new transport hub and a re-routed bus service.

High quality routes connect residents and users on foot and bicycle, while initiatives such as car sharing, car clubs and electric car-points further advance the sustainability agenda.

The movement framework also places emphasis on Meridian Water’s excellent connection to London’s strategic road network, with a particular focus on their benefits to the retail and business components of the Masterplan.

6.2.0 Overview

There are three distinct components to the movement framework:

★ **Public Transport**

Public Transport Accessibility Level (PTAL) ratings will be raised through improvements to rail and bus infrastructure, including upgrading Angel Road Station and improving train frequency. Allied to this, a new transport hub will connect bus services with the station enabling effective travel to and from Meridian Water without relying on the private car.

★ **Local movement**

Secondly, a framework for local movement within the site will prioritise pedestrians and cyclists within safe high quality routes and public realm. Integration with public transport is essential and will be supported by a provision of secure bike parking at key nodes of interchange. Effective car free areas will support family friendly development and the enhance Meridian Water’s sustainability credentials.

★ **Road network**

The third component accommodates vehicle movement and ensures important access is maintained to the employment and retail components. Car clubs and other forms of car sharing are beginning to change patterns of car ownership and use. Electrification of vehicles will form part of the UK’s response to its legally binding carbon reductions, first with plug in hybrids and later through the 2020s with fully electric vehicles. Provisions to support these initiatives will be promoted, carrying Meridian Water forward into a sustainable future.

6.2.1 Rail

The creation of a more reliable, resilient and flexible rail service will form the backbone of development and regeneration within the entire Lee Valley. The Council and other partners have recognised that by significant improvement to the West Anglia Main Line service and stations, significant economic benefit, new homes and jobs will be driven forward along this industrial corridor.

Improved frequency

In order to support additional stopping services on the line, the North London Strategic Alliance (NLSA), Greater London Authority (GLA), Transport for London (TfL) and Network Rail are working together to implement a three-tracking scheme between Stratford and Brimsdown, which will benefit Angel Road Station. This will provide an extra line on spare land to the east of the existing line, allowing a greater frequency of trains to operate.

Objectives:

- ★ The provision of a three-tracking alignment will provide a more frequent, resilient and reliable service by accommodating the Stansted Express so that a greater number of stopping services can be included along the route; and
- ★ Angel Road Station will be provided with four trains per hour, which will support significant passenger flows and investment. This will transform the potential of the Meridian Water development and significantly improve PTAL ratings.

Increased capacity

Phased improvement of train capacity is also currently underway, largely through the lengthening of trains, providing 40% more capacity along the route. The combination of three-tracking the rail-line and increasing capacity will significantly improve transport links and help to drive investment. Meridian Water may also derive benefits from Crossrail 2 in the future.

Upgraded station

As part of the Lee Valley strategy to provide an improved passenger experience, Angel Road station will be upgraded to create a high quality, safe, approachable and usable station.

Objectives:

- ★ In order to improve access to Angel Road Station and bring it closer to the centre of the scheme, the platforms will be lengthened so that they extend to the south of the North Circular. This will allow new entrances on both sides of the railway; and
- ★ Real time information will also be provided.



6.2 Movement

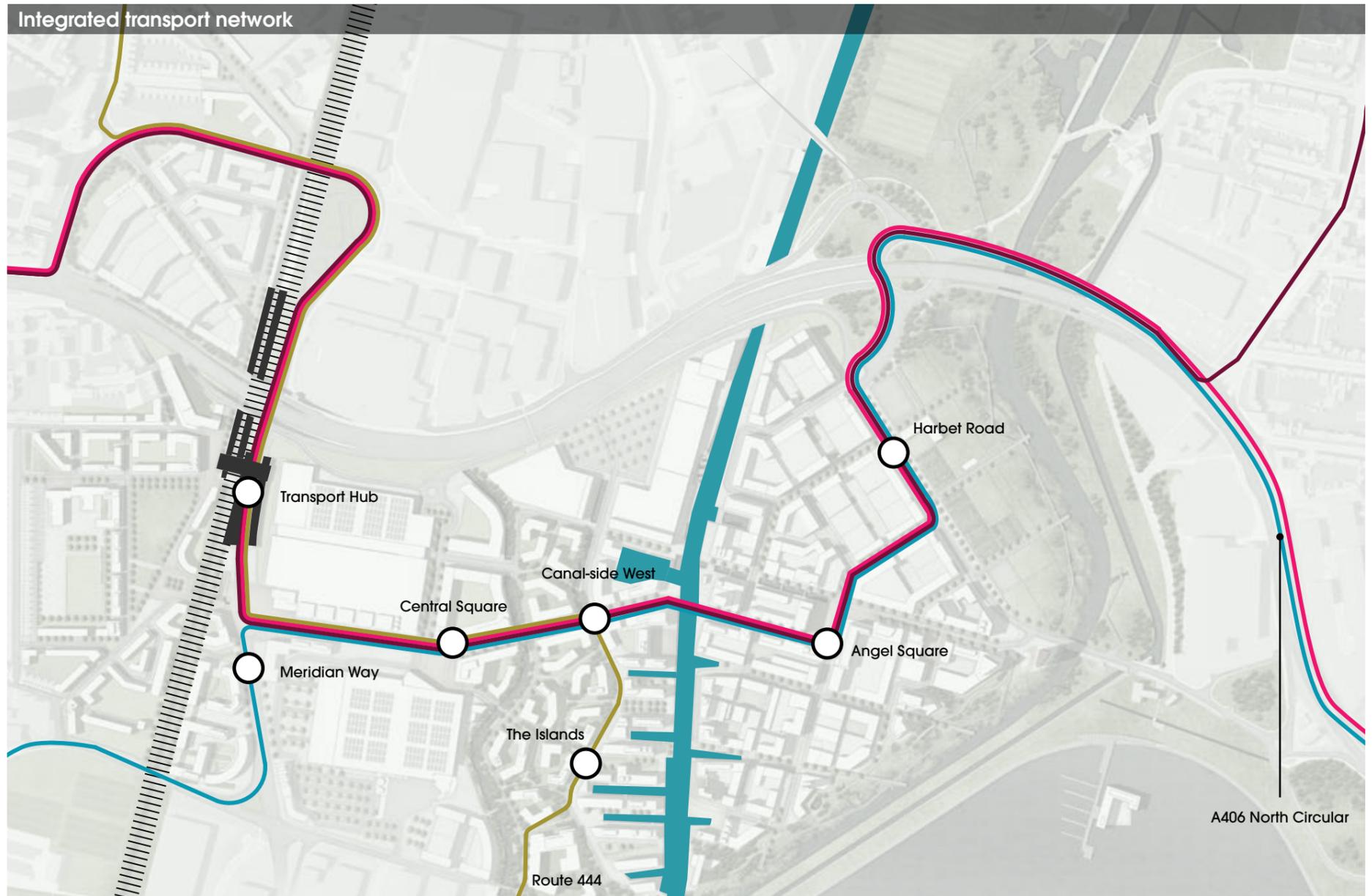


Figure 6-2 Transport Plan

- Route 34
- Route 341
- Bus stop
- Route 444
- Route 192
- Railway line
- River Lee Navigation

Improved accessibility

Improvements to pedestrian access, security and facilities will be provided as part of an integrated transport hub at Angel Road Station in order to encourage rail patronage.

Objectives:

- ★ Disability Discrimination Act (DDA) compliant accesses will be properly integrated with the station. A car and taxi drop off point and cycle/car-club parking will promote accessibility;
- ★ Vehicular access to Angel Road Station will be provided from Albany Road; and
- ★ The Council are already implementing plans to improve accessibility to Angel Road Station through the extension of the existing greenway which runs south-east from Edmonton Green towards Montagu Road, along the route of a former railway line. The extension of the greenway to Angel Road Station will provide direct access to the station as well as the much needed disabled access, whilst also improving the safety and security of passengers. It is anticipated that it will also lead to increased patronage to support the more frequent train service.

6.2.2 Walking and cycling

Network

The Council are working with TfL and the Mayor of London to bring the Legible London scheme to Meridian Water on a phased basis. This will bring a single, unified walking and cycling branding to the area that will help visitors and residents to easily find their way across Meridian Water. The integration of cycling and walking routes with a clear pedestrian information system will promote healthy lifestyles and create an accessible and legible landscape.

Objective:

- ★ A network of pedestrian and cycle links, supported by appropriate facilities, will be provided across the area to facilitate easier connections with existing and new public transport services.

River Lee Navigation

More use will be made of the River Lee for local journeys and to realise potential pedestrian, cycle and water bus connections between Meridian Water and North East Enfield.

Objectives:

- ★ Improvements will be made to the River Lee towpath, including Towpath Road, providing a continuous green route between Tottenham Hale in the south and Enfield Lock in the north. Particular attention should be paid to where the towpath passes under the A406 North Circular; and
- ★ Opportunities will be explored to use the River Lee Navigation as a freight and leisure corridor between the River Thames and Hertfordshire.

Public realm

A dramatic improvement in the quality of the urban environment will be triggered, making better use of the area and promoting good design to create high quality buildings and an attractive public realm.

Objectives:

- ★ A high quality urban environment with pedestrian and cycle priority will be provided. New bridges will cross the waterways to facilitate east-west movement;
- ★ With a focus on the quality of the public realm and access for pedestrians and cyclists, Leaside Road will be improved to provide a pleasant route linking into the Lee Valley Regional Park; and
- ★ Secure cycle parking will be integrated into the public realm, particularly around transport hubs, public spaces, shops and cafes.

Pedestrian connections

High quality, safe and attractive pedestrian bridges and underpasses will be provided in places where movement at ground-level is not possible.

Objectives:

- ★ A new pedestrian underpass will be provided between Glover Drive and the land to the west of the railway, providing a continuous pedestrian link beneath Meridian Way and the railway. This must be well-designed with high quality, but easily maintained materials, and well lit; and
- ★ Improvements to the existing pedestrian bridge over the North Circular will be made, making it a more attractive and obvious route for pedestrians.

Cycle expressway

Meridian Water will connect to high quality strategic cycle routes, affording wider cycle access across North London. Expressways will be developed which will be of an exceptionally high quality, well lit, safe, direct, and continuous. They will give cyclists priority over vehicles, where appropriate.

Objectives:

- ★ Cycle Superhighway Route 1 will be extended up to Meridian Water and will connect with a new cycle expressway from Meridian Water to Stratford;
- ★ Improvements will be made to signage for strategic walking and cycling routes; and
- ★ Secure cycle parking will be provided at all transport interchanges as well as at the main trip generators within the site.

Cycling and walking network

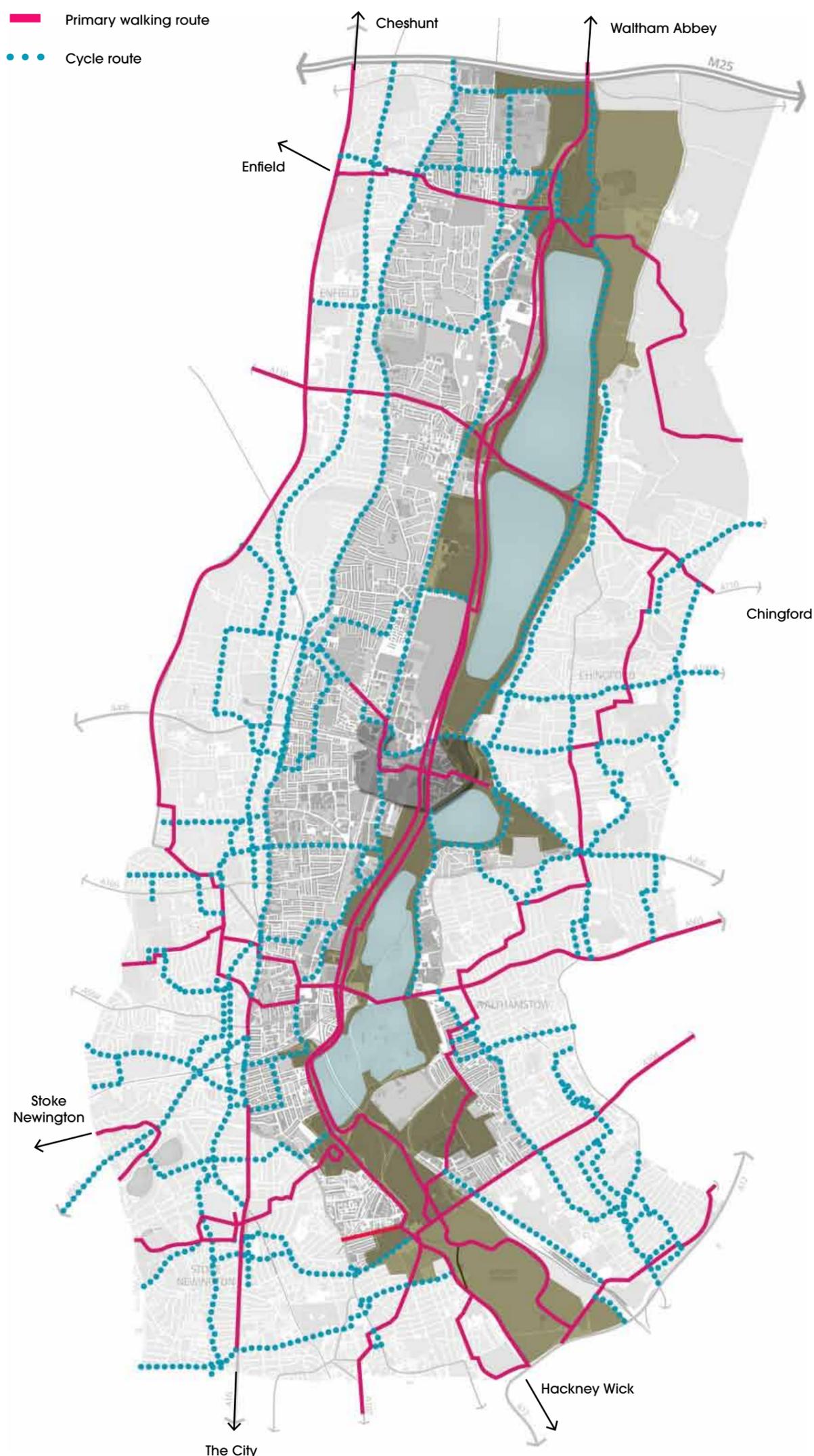


Figure 6-3 Cycling and Walking Network

6.2 Movement

Primary walking and cycling routes within Meridian Water



- Primary walking route and cycle routes
- Secondary walking routes

Causeway public realm link

Greenway to Edmonton Green

London Lee Valley Strategic Walk, National Cycle Network, Capital Ring and London Outer Orbital Path

Figure 6-4 Cycling and Walking Network

6.2.3 Angel Bridge

Integral to the movement corridor along the Causeway and successful integration of the area, Angel Bridge is a vital piece of infrastructure creating a link across the River Lee Navigation.

Objectives:

- ★ The bridge will serve as a landmark, and its design should celebrate this function;
- ★ The bridge should accommodate safe surfaces and paths for bus, cycle and pedestrian connections which should be prioritised;
- ★ Vehicular access will also be permitted, although to prevent 'rat-running' this will be confined to residents only through an appropriate vehicle recognition and control system;

- ★ To accommodate the regularity of bus routes, the bridge will be fixed, unless an alternative technologically robust and cost-effective solution is brought forward that will achieve the same ends;
- ★ The bridge will be required to provide for a head height that permits the continued functioning of the canal and towpath; and
- ★ The design of ramped access to either end of the bridge will need to accord with relevant pedestrian accessibility requirements.

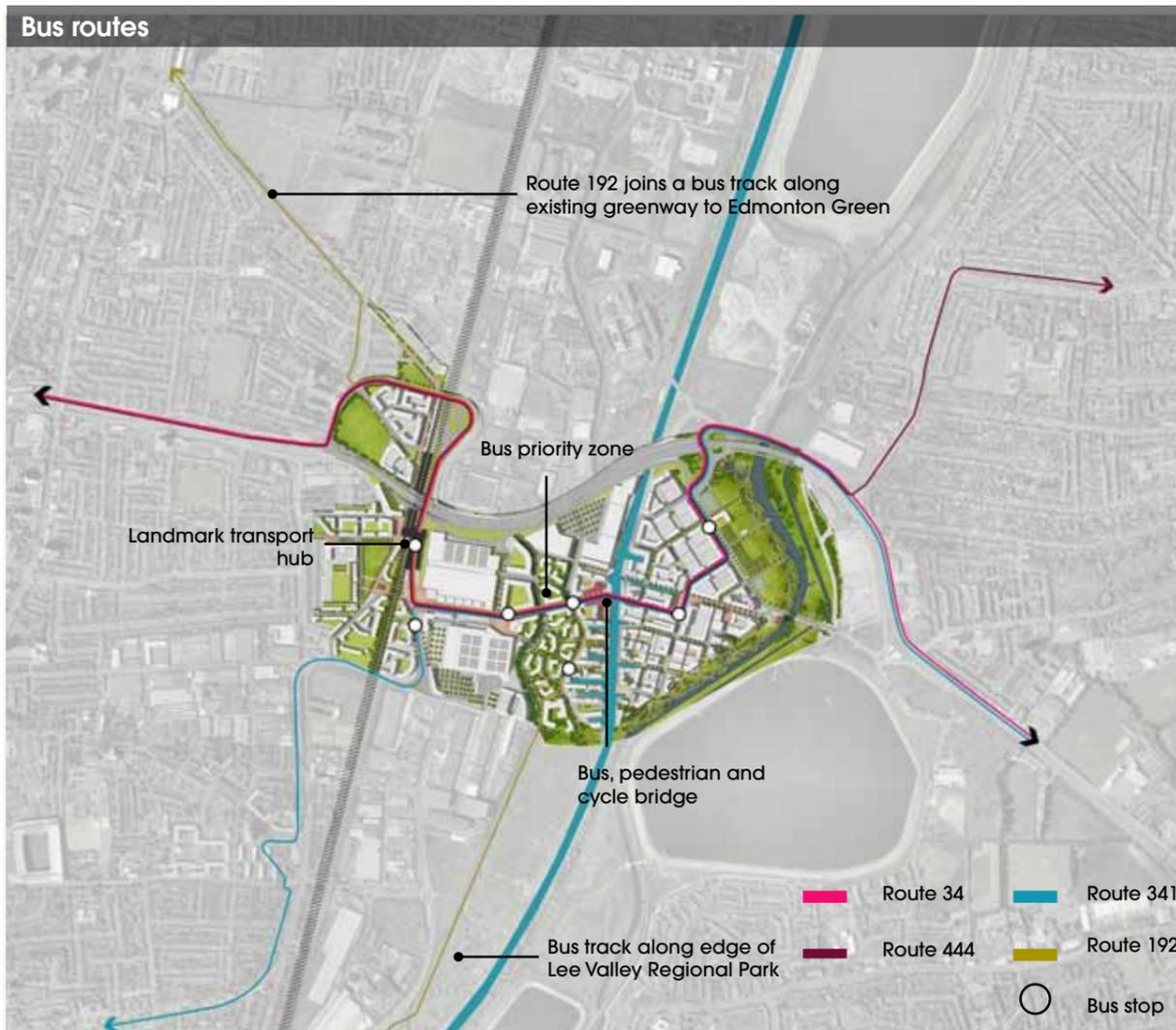


Figure 6-5 Bus Routes

6.2.4 Bus

Transport hub

A new bus interchange will be co-located with Angel Road Station, creating a high quality transport hub which connects Meridian Water to wider North London, the City, Stansted Airport, City Airport, Cambridge, Heathrow and beyond.

Bus routes

Existing bus routes will be reorganised so that they run through the centre of the area along the Causeway. This will facilitate better integration between bus routes and other modes of travel.

Objectives:

- ★ In addition to the re-routing of existing bus routes, a new route will connect Edmonton Green to Tottenham Hale via Meridian Water along a dedicated busway. Taking advantage of the existing greenway, the route will run between Edmonton Green and Montagu Road along the path of the disused railway line. This will join the Causeway before heading south through the area and running on a guided busway through the Lee Valley Regional Park; and
- ★ Bus service provision will be improved by providing bespoke services to surrounding communities, particularly Edmonton Green town centre, the transport hub, and Tottenham Hale for access to the London Underground network.

Bus priority

Bus journey times will be improved through a series of bus priority measures. These will enhance the travelling experience, make it a more attractive option and increasing its financial viability.

Objectives:

- ★ A new bus, pedestrian and cycle only bridge will be provided over the River Lee Navigation as part of the Causeway. This will facilitate east-west movement, reduce internal car trips and prevent “rat-running” through the scheme; and
- ★ Improved priority will help to support an increased frequency of service.

Bus stops

Bus stops will be conveniently located so as to encourage patronage.

Objectives:

- ★ Frequent bus stops will be located so that every part of Meridian Water is within a 5 minute (400m) walk of a bus route. Their precise siting will be informed by detailed discussions with TfL and the bus operators; and
- ★ Waiting facilities and real time information will be provided at all bus stops. Bus shelters should be conveniently located and attractive, enhancing a sense of safety. In order to promote a mix of uses and a wide range of employment types, heavy vehicle movement will be discouraged along the waterfront edge and near key mixed use spaces, wherever possible.

6.2.5 Vehicular routes

As development comes forward, each land owner will be responsible for working with the Local Authority, TfL and other partners to undertake full traffic impact assessments. The design and layout envisaged by the Masterplan should serve as the starting point for design in order to develop more

detailed and modelled traffic management plans for the highway network.

Private car

Meridian Water will aim to reduce private car dependence through a combination of parking restrictions and provision of alternative modes of travel.

Objectives:

- ★ Traffic will be discouraged from residential parts of Meridian Water through the use of shared surfaces which allow streets to be safely used by residents, pedestrians and cyclists;
- ★ In some parts of the area, parking provision will be provided away from the private home, (see parking - residential); and
- ★ The use of the private car will be discouraged where possible by providing facilities and infrastructure that reduces the need for residents to travel further afield to access schools, jobs, healthcare and shopping.

Car clubs & Charging Points

All new development will provide electric car charging points and car clubs, car sharing or similar for residents, visitors and workers.

Travel plans

Work place and residential travel Plans will be implemented and parking provision restricted at destination locations, such as businesses and schools where reasonable alternatives exist.

The Causeway

East-west movement by private car will not be permitted along the Causeway.

Objectives:

- ★ The Causeway serves predominantly as a pedestrian, cycle and public transport route. Through movement by private cars will be actively discouraged; and
- ★ The River Lee Navigation Bridge will exclude private vehicles, facilitating a bus, pedestrian and cycle only link.

Secondary and tertiary streets

From the Causeway a series of more quiet residential streets will be laid out, serving only the dwellings and uses along them.

Objectives:

- ★ Secondary streets should reflect this quiet character, calming traffic and providing a pedestrian and cycle friendly environment;
- ★ Tertiary streets have pedestrian priority and shared surface Home Zones; and
- ★ Permeability between spaces should be maximised for pedestrians and cyclists but restricted for vehicles.

Strategic Industrial Location (SIL)

SIL forms the primary employment type, therefore streets will be designed to accommodate these uses.

Objective:

- ★ Road widths will be designed to allow heavy vehicular movement, where appropriate. Yards will be able to accommodate necessary turning circles.

6.2 Movement

Retail and employment access

Meridian Water is well placed on the road network with excellent access to the M25, A10 and the North Circular.

Objectives:

- ★ Existing road connectivity will be safeguarded and strengthened. Direct connections from the employment and retail areas to these routes will be protected in order to discourage movement through the wider Masterplan area;
- ★ A secondary access route from the North Circular via Ravenside Retail Park will be explored. This will be carefully designed so as to prevent “rat-running” along the Causeway; and
- ★ Good vehicular access to Tesco, Ikea and the High Street will be maintained, but again, it will be carefully designed to discourage “rat-running” (see diagrams).

Parking - retail

Higher density retail uses will be achieved using multi-storey parking. This will enable a dramatic reduction in parking areas around Tesco and Ikea and make way for new development.

Objectives:

- ★ Car parks should be located along the outer edges of the masterplan;
- ★ Parking for Tesco and Ravenside should be provided adjacent to the North Circular;
- ★ Parking for Ikea should be reconfigured and screened by new uses. This will allow for easy access, whilst also active as a buffer for more sensitive uses;
- ★ Car parks will have the best spaces reserved for car clubs, car sharing and for people with disabilities; and
- ★ All car parks will include vehicle charging points.

Parking - residential

Residential parking will be kept to a minimum, supported by raised PTAL levels.

- ★ In family orientated areas and areas with the highest PTAL rating cars will only be allowed access to homes to pick-up or set-down. Parking will be grouped into car parks set close to but away from homes, creating effective car free environments that are friendly to families but do not prevent residents from owning cars. This approach is common in higher density developments in this country and on the continent;
- ★ The level of off-street parking should be appropriate to the type and style of residential accommodation. It should support sustainable transport choices with secure cycle parking, car clubs, car sharing, greater use of public transport and walking;
- ★ Fields of parking are unattractive and should be avoided. Undercroft parking should be explored in areas of flood risk, and as discussed above, in some instances communal parking will be appropriate; and
- ★ On street parking should be used in places to help slow vehicle movement and create a more attractive pedestrian environment.

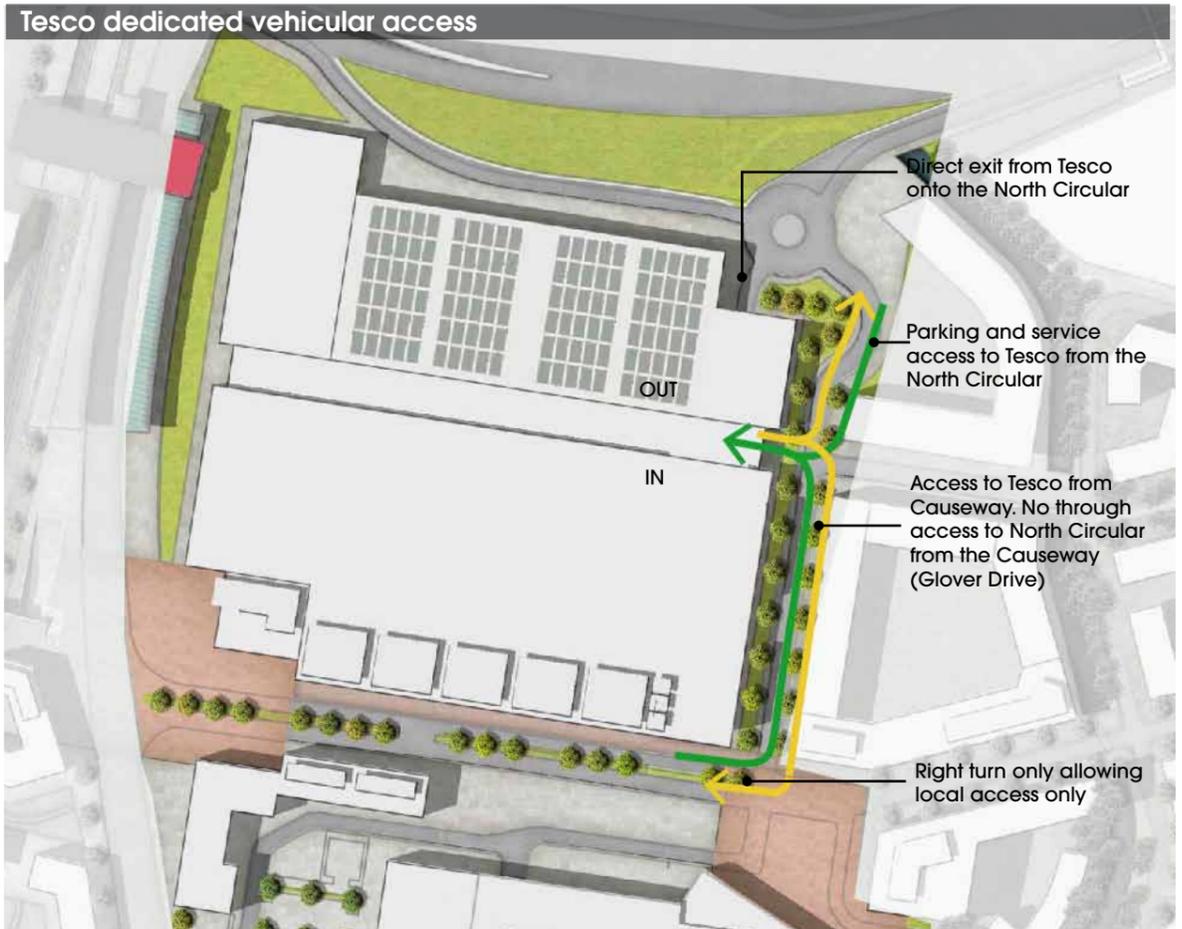


Figure 6-6 Tesco Access

- ★ Direct, easy access to Tesco from the North Circular and from Meridian Way is retained and enhanced throughout the Masterplan. The existing street arrangement is however, re-configured to prevent any ‘rat-running’ connecting Glover Drive directly to the North Circular. This supports the pedestrian focus promoted by the Masterplan. Site usage can be intensified through the provision of an attractively screened multi-storey car park facing the North Circular.



Figure 6-7 Ikea access

- ★ Direct, easy access to Ikea from the North Circular and from Meridian Way is retained and enhanced. However, the exit has been re-routed to the south of Ikea onto Leaside Road, which in turn allows direct access onto Meridian Way. This supports the pedestrian emphasis within the Masterplan, particularly on the Central Square and Glover Drive.

6.3 Homes

Meridian Water is a place for people, and with up to 5,000 new homes envisaged, it will be the first choice development in North London for thousands of residents. So, every single one of these homes will be expected to be well-designed, to use high quality materials and finishes, and to incorporate best practice in terms of sustainability.

Choice will be absolutely crucial because the clear aim is to encourage the creation of inclusive communities that cater for a wide range of needs, demands, ages and lifestyles. Equally, by walking through each neighbourhood, it should be impossible to distinguish market from affordable

housing, because new housing will have been built in a tenure blind way. But, the scale of the new housing will be such that new and supporting physical and community infrastructure is evolved. Add in the integration of waterways, open spaces and parklands and you can imagine just how good Meridian Water is going to be.

These qualities will help to not only create, but also to sustain, the seven neighbourhoods that the Masterplan promotes.

6.3.0 Overview

Homes will have a major impact on the sustainability of Meridian Water. Adapting to the effects of climate change, and the changing needs and evolution of communities; and interwoven within the overall energy strategy, homes and their environment will be a driving force behind Meridian Water's balanced communities and overall quality of life.

- ★ The way homes are used is constantly changing so design should be flexible to accommodate shifts in tenure, use and changes in climate;
- ★ The sustainable home environment should extend to the open spaces between houses to support healthy living, including the choice of materials, use of light and space and proximity to green space and water;
- ★ As major contributors to climate change, homes will be heavily impacted by energy security thus building to high energy standards is an important factor in the viability of communities;
- ★ Housing will be an important component of the district heating network. The layout, density and mix of uses will need to support connection; and
- ★ All homes will have access to high speed fibre-optic internet supporting the working and living environment for all residential communities.

6.3.1 Location and land use

The location and configuration of the residential areas will be designed to create a continuous network of residential communities from east to west. Within that, each neighbourhood is uniquely defined by its character, context and its surrounding communities.

Development should incorporate the following objectives set out below:

Objectives:

- ★ New residential streets should be linked to existing ones to provide direct and convenient connections and a natural extension between existing and new communities at each of the neighbourhoods;
- ★ Support a mixed use neighbourhood at Meridian Central, by accommodating residential above Tesco and on the upper floors of the buildings along the Causeway where possible. This will help to create a continuity of activity and vibrancy through the heart of Meridian Central;
- ★ Maximise the potential of the waterfront and parklands;
- ★ No residential uses should be located within 30 metres of the power lines or within 50 metres of the North Circular; and
- ★ Where development is adjacent to areas protected as Strategic Industrial Location (SIL), careful consideration must be given at the design stage to promote compatibility with the adjoining employment uses.

6.3.2 Type

A range of high quality housing types and sizes, including family homes, terraces and apartments will be delivered to ensure a balanced, diverse and sustainable community evolves.

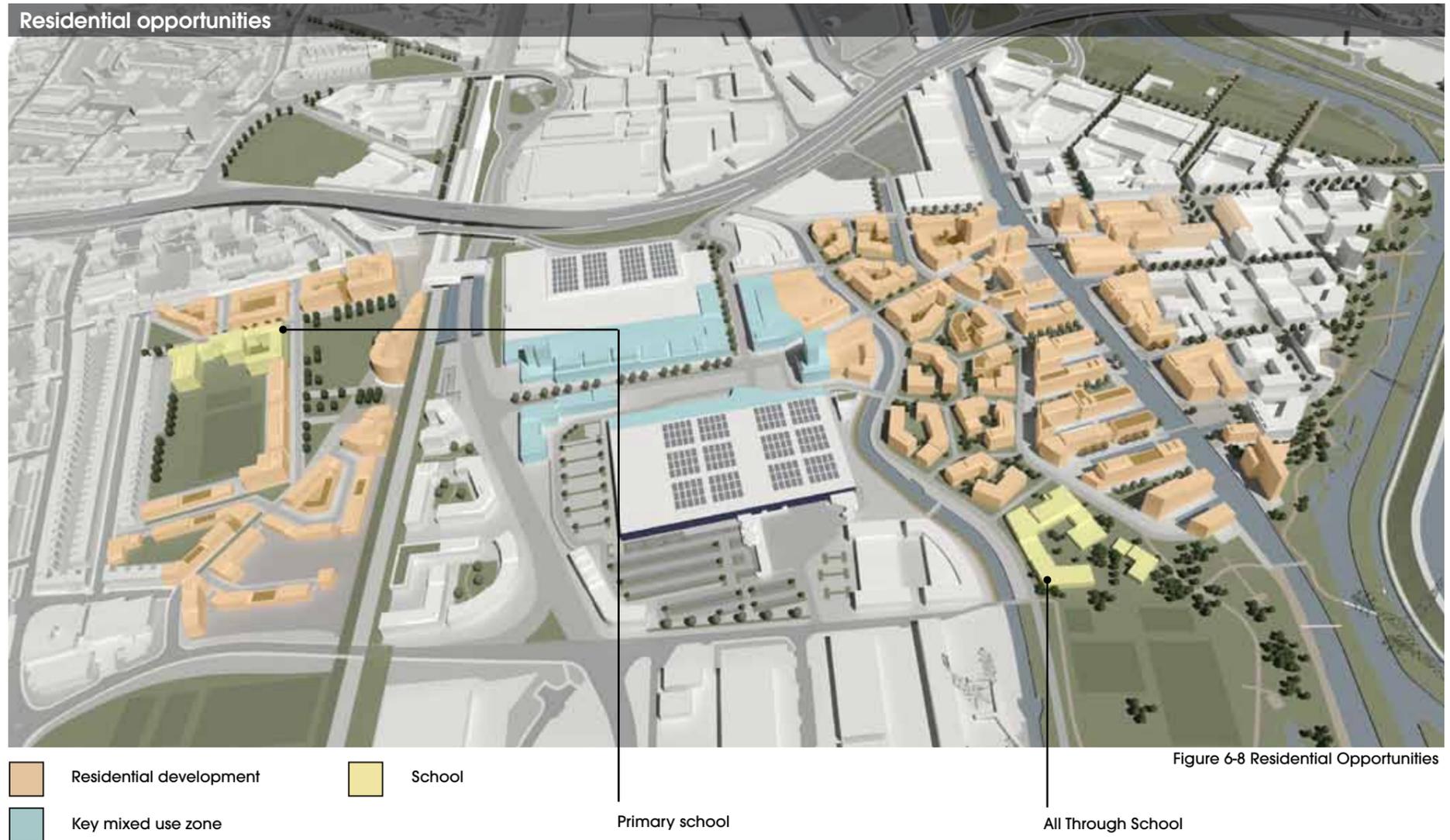
Development should incorporate the following objectives set out below:

Objectives:

- ★ Provision will be made for single people, couples, families, social groupings and extended families;
- ★ Self build initiatives will be supported where affordable community-driven design can create cost effective and innovative housing typologies that meet the demands of the residents. Live/work self-build initiatives will be supported to promote vibrant, mixed used areas;
- ★ Five to ten per cent of new dwellings should be reserved for community self-build projects across the area, unless a lack of demand dictates otherwise;
- ★ Flexible housing typologies will be expected to respond to the need for play space, private and communal gardens, balconies, roof terraces, and Home Zones, to adapt to changing models of living in London;
- ★ Affordable housing must be provided in all neighbourhoods, although the percentage of affordable housing may vary according to design and viability;



6.3 Homes



- ★ An ageing population will be provided for, with recognition of the sensitivity of scale, accessibility and location for this social group. For example, it is intended that sheltered accommodation and care homes will be provided close to facilities and bus stops;
- ★ Housing will range between areas that are exclusively residential to fully mixed-use neighbourhoods;
- ★ Opportunities along the Causeway must support a mixture of uses and spaces that are flexible as possible to allow for changes in use over time; and
- ★ Housing must be situated in areas that are predominantly residential as well as in fully mixed-use neighbourhoods.

6.3.3 Tenure

Mixed tenure will be promoted with all homes being designed in a “tenure blind” way. It should not be possible to distinguish between affordable and private homes from their external appearance.

Mixed tenure will help create a more inclusive community. More details on tenure mix are set out in Enfield’s adopted Local Plan.

Neighbourhoods will include a mix of home sizes to create a mixed community. This should include a significant proportion of family sized units. Development should aim to exceed the standards set out in the Mayor’s Housing Design Guide (2010).

6.3.4 Quality and design

Residential proposals must have regard to the minimum standards and principles set out in the Mayor’s Housing Design Guide (2010). Development should incorporate the following objectives set out below:

Objectives:

- ★ Proposals should respond to the character of neighbourhoods whilst also catering for a variety of lifestyle options
- ★ Proposals should ensure that development is integrated with the wider public-realm network, providing opportunities for access to open and green space, and ensuring that development enhances the existing character of the area, wherever possible;
- ★ Proposals must incorporate a mix of housing sizes, types and tenures, at appropriate densities;
- ★ Development must respond positively to the implementation of the Code for Sustainable Homes;
- ★ All proposals should aim to exceed the relevant Level for the Code for Sustainable Homes; and
- ★ Schemes should be designed to be flexible wherever possible, to allow for possible changes of use over time

6.3.5 Density

The area will support suitably high density development throughout with improved public transport, high quality public-realm and access to healthy living corridors.

With increased accessibility to an improved public transport system, housing density will gradually increase. Improvements to PTAL ratings support the achievement of higher densities generally, whilst the highest density may be along the Causeway, close to the transport hub and along the waterways.

The Masterplan has been developed within a flexible framework that contains a range of densities. Three growth scenarios have been tested to assess the robustness and flexibility of achieving: 90, 150, and 220 dwellings per hectare.

Development should incorporate the following objective:

Objective:

- ★ Higher densities should generally be closest to public transport and along the waterways. This will reflect market demand and ensure that the full benefit is derived from that location.

6.3.6 Responding to climate change

Development will be expected to demonstrate high standards of sustainability in line with the adopted policies in Enfield's Local Plan and the Mayor's London Plan. Development should incorporate the following objectives:

Objectives:

- ★ Sustainable design and construction methods must be used to ensure that there is no net increase in carbon emissions. This will be achieved through the use of highly efficient buildings and other technologies, such as the use of solar photovoltaic panels;
- ★ Appropriate climate change mitigation and adaptation strategies must be utilised;
- ★ Development must have regard to Sustainable Drainage Systems, follow the SuDS hierarchy, seek to minimise the rate and volumes of surface water runoff, and improve water quality, amenity benefits and improved biodiversity. Consideration should be given to green roofs as part of SuDS strategy; and
- ★ Proposals must address Enfield's biodiversity objectives and create access to nature opportunities within green spaces, including the towpath. Habitat creation and management of spaces for the enjoyment of nature also creates opportunities for informal recreation, sustainable drainage and/or flood storage.

As part of the Council's work, feasibility studies have shown that the potential for a decentralised energy network, known as the Lee Valley Heat Network is financially viable. Development should therefore be designed so that it is "connection ready", where viable, to use this low carbon energy source. Further guidance can be found in Enfield's Development Management Document.

6.3.7 Density & Parking Study

The masterplan provides a flexible framework that can accommodate a range of residential densities which would rise as the PTAL rating increases. The Council supports a mix of densities so that high quality living is combined with a good sense of place and community.

This flexibility is demonstrated on a 1.2Ha section of the masterplan (right). The study also gives an indication of the residential typologies that are likely to be delivered in respective densities. A ratio of 0.7 on street/courtyard parking bay was allowed for per dwelling for the purposes of the study.

Average Density Target - 220 dwellings per hectare

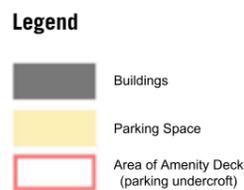


Figure 6-9 Density Example

Statistics	
No. houses	26
No. apartments	213
No. parking spaces	167
Building height	3-7 storeys



View looking north across Station Square



6.4 Business and employment

Designed as a place of enterprise and innovation, Meridian Water provides favourable conditions for business ventures of various scales to deliver its significant economic potential. Communities will be able to respond positively to new economic opportunities.

Located within one of London’s most significant industrial clusters, the Masterplan maximises the area’s strategic and accessible location. Growth of up to 3,000 new jobs is focused around diversification and intensification combined with the opportunity to build new green industries, based around specific local opportunities.

6.4.1 Existing condition

At the moment the eastern part of the area, south of the A406, is almost entirely industrial. The area to the east, is covered by the Harbet Road Industrial Estate. It forms part of a wider employment area known as the “Central Leaside Business Area” which straddles the neighbouring London Boroughs of Haringey and Waltham Forest, but with the majority of land located within Enfield’s boundary.

The Masterplan area also includes the unconnected southern part of the Montagu Industrial area known locally as the Kenninghall Estate. It is safeguarded as a Locally Strategic Industrial Site (LSIS) in Enfield’s Local Plan. At the moment, this area accommodates a waste and recycling business, abutting the North Circular Road, and is directly adjacent to the Angel Road Station.

To the north of the Masterplan area is a large swathe of industrial land which is protected as Strategic Industrial Location (SIL) in Enfield’s Local Plan and the London Plan for ongoing employment use. This includes: Montagu Industrial Area, Eleys Estate, Aztec 406 Industrial Park and also the waste management facility at Edmonton Eco Park, which is the largest waste management site in north London.

North East Tottenham industrial estates are located to the south of the area, which can be accessed from Leaside Road. These industrial estates are within the London Borough of Haringey and are protected as SIL in Haringey’s Local Plan.

6.4.2 The Vision

Business and employment will help shape the identity, drive the local economy and sustain the community at Meridian Water. A rich variety of industry will attract a range of investors and employers, sustaining diversity and balance, whilst building on the history of the Lee Valley. The development of green industries will be promoted whilst others will support low carbon energy, infrastructure and communications.

This Masterplan framework is organised to deliver on the following six objectives:

1. Improving business performance;
2. Attracting investment;
3. Intensification of use;
4. Regeneration of existing facilities;
5. Diversification of business and employment; and
6. Realising sustainability ambitions.

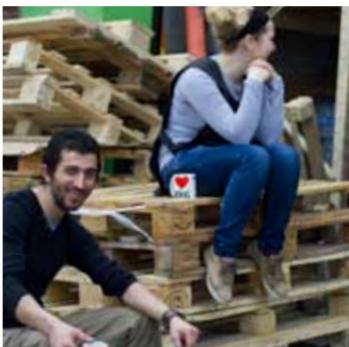
6.4.3 Opportunities

Meridian Water will continue to benefit from its varied and diverse business and employment uses. The Masterplan strengthens and enhances existing provision within the area. The Masterplan also consolidates guidance set out in the Local Plan and suggests some spatial re-distribution of land uses.

In addition, opportunities for mixed-use developments within the area helps to support the overall vision and helps to create a unique destination, which could be attractive to a range of investors and occupiers.

Principles:

- ★ Business and employment will be focused around, and form extensions to, the existing areas protected as SIL;
- ★ Access and visibility to the North Circular and the strategic road network will encourage investment into the area, where industry can benefit from excellent transport routes;
- ★ Access to public transport is important to the success of business. An improved and integrated bus network and improved frequency of train service will make doing business much easier, whether it is connecting with the City or accessing the Cambridge-Stansted growth corridor. At the same time, access to employment will be improved for local people, but businesses will also have the opportunity to recruit from a wider area if necessary;
- ★ Connections to the dynamic new high street and the other resources of Meridian Water will afford much benefit to business and employees at Meridian Water;
- ★ Some new employment will be centrally located close to new leisure facilities finding mutual benefit in one another, attracting and sustaining investment;



Employment opportunities

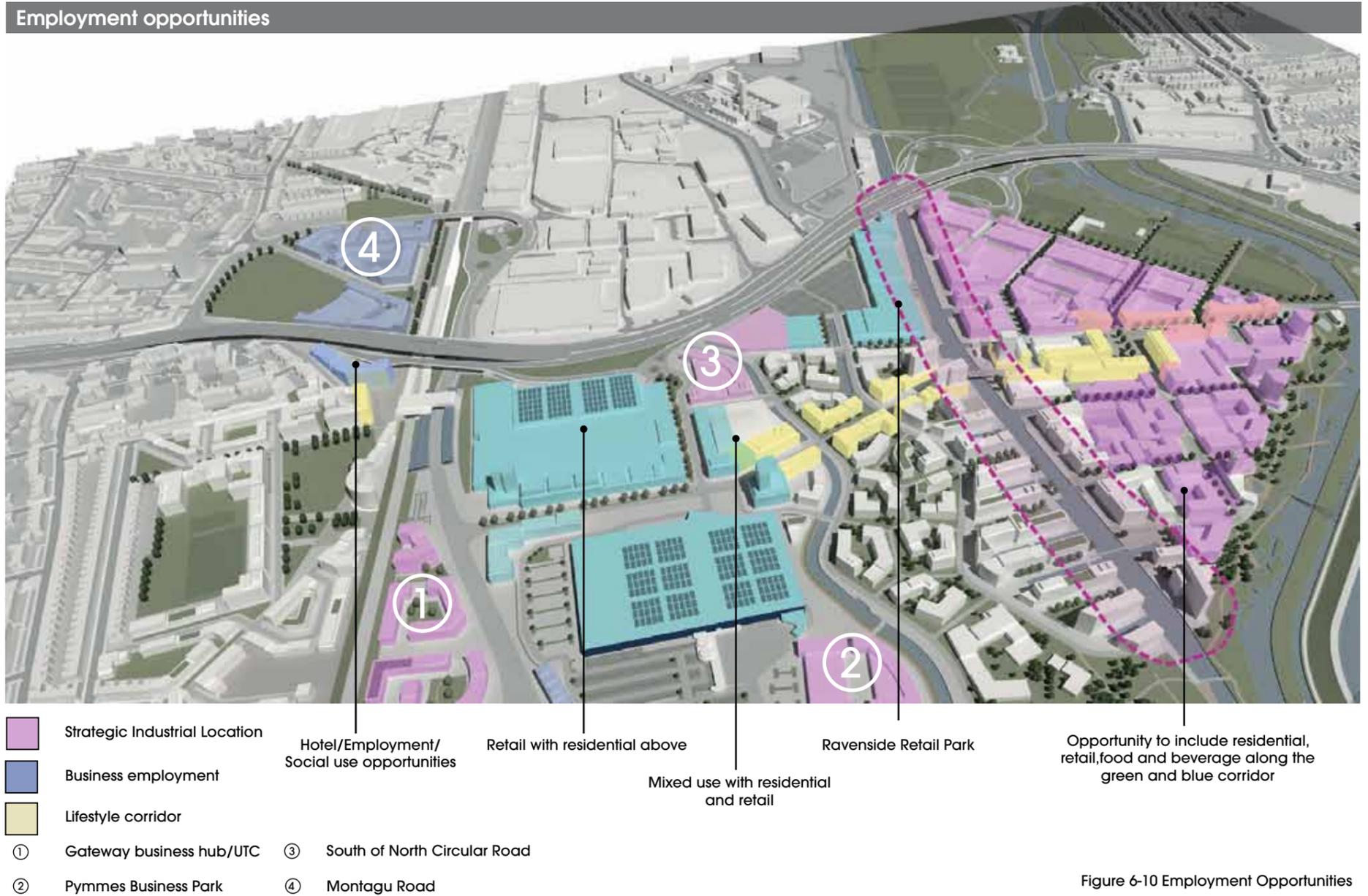


Figure 6-10 Employment Opportunities

- ★ Business which is currently located on the waterways and parkland edge will be reconfigured overtime to allow residential development to benefit from this strategic location; and
- ★ Employment and business use will be used to create buffers between existing large-scale infrastructure, the North Circular and pylons along the eastern boundary of Meridian Water.

6.4.4 Land Use and the future of Strategic Industrial Location (SIL)

The Harbet Road Industrial Estate is protected as SIL in Enfield's Local Plan and the London Plan for continued employment uses. It retains an industrial character with immediate access to the Lee Navigation. The Masterplan seeks transformational change through the creation of a new neighbourhood at the southern part of the estate, known as Meridian East. This neighbourhood has the opportunity to juxtapose high quality new homes, with low carbon conversion of existing structures within a unique high value waterfront site. New development will transform the environment of this stretch of the canal to the collective benefit of Meridian Water. The design and delivery of Meridian East will ensure that a diverse residential population will be complemented by thriving local businesses.

In order to facilitate a residential neighbourhood, the Masterplan recognises that a redistribution of land safeguarded as SIL from the southern portion of Harbet Road Industrial Estate will be necessary. One option is to safeguard parts of the central area for future employment uses as these benefit from improved accessibility and exposure. This reorganisation would create the opportunity for higher density uses and provide for the creation of new facilities on these sites.

The opportunity to introduce a mix of uses creates the stimulus to realise increased value through the redevelopment of existing uses that include for an additional residential component. Redevelopment will result in the regeneration of facilities whilst also creating a vibrant mixed-use neighbourhood with a distinct identity that serves as a further stimulus for new business to emerge.

Although the Masterplan suggests a re-distribution of SIL, the overall quantum of SIL within the area remains the same. Formal changes to the SIL boundaries will be explored and determined through the Central Leaside Area Action Plan. In order to achieve a balance of transformational change and no net loss to industrial capacity in this area, the following locations have been identified as potential areas for SIL and warrant further assessment:

1. Gateway Business Hub

This site is located within the Gateway neighbourhood and can be accessed from Meridian Way. Chapter 5 of the Masterplan provides more information relating to this neighbourhood.

The site is conveniently close to Angel Road station and the transport hub. It has good visibility from Meridian Way and direct access to the major road network that makes it ideally suited for SIL use.

A University Technical College (UTC) has been identified as suitable for SIL. It has the potential to maximise industrial connections with the wider industrial corridor and also helps to promote skills and employment training.

Consequently, this site is considered unsuitable for residential development due to its relative isolation between the railway line and busy road.

2. Pymmes Business Park

This site is located within the Meridian Central neighbourhood. Chapter 5 of the Masterplan provides more information relating to this neighbourhood. It is complemented by its proximity to Ikea's existing service yard and the North East Tottenham Industrial Estates in the London Borough of Haringey. In turn this makes it form part of a natural extension to the wider industrial corridor.

Due to its proximity to adjoining industrial estates, this site already benefits from good access via Leaside Road.

Consequently, this site is considered unsuitable for residential development due to its relative isolation.

6.4 Business and employment

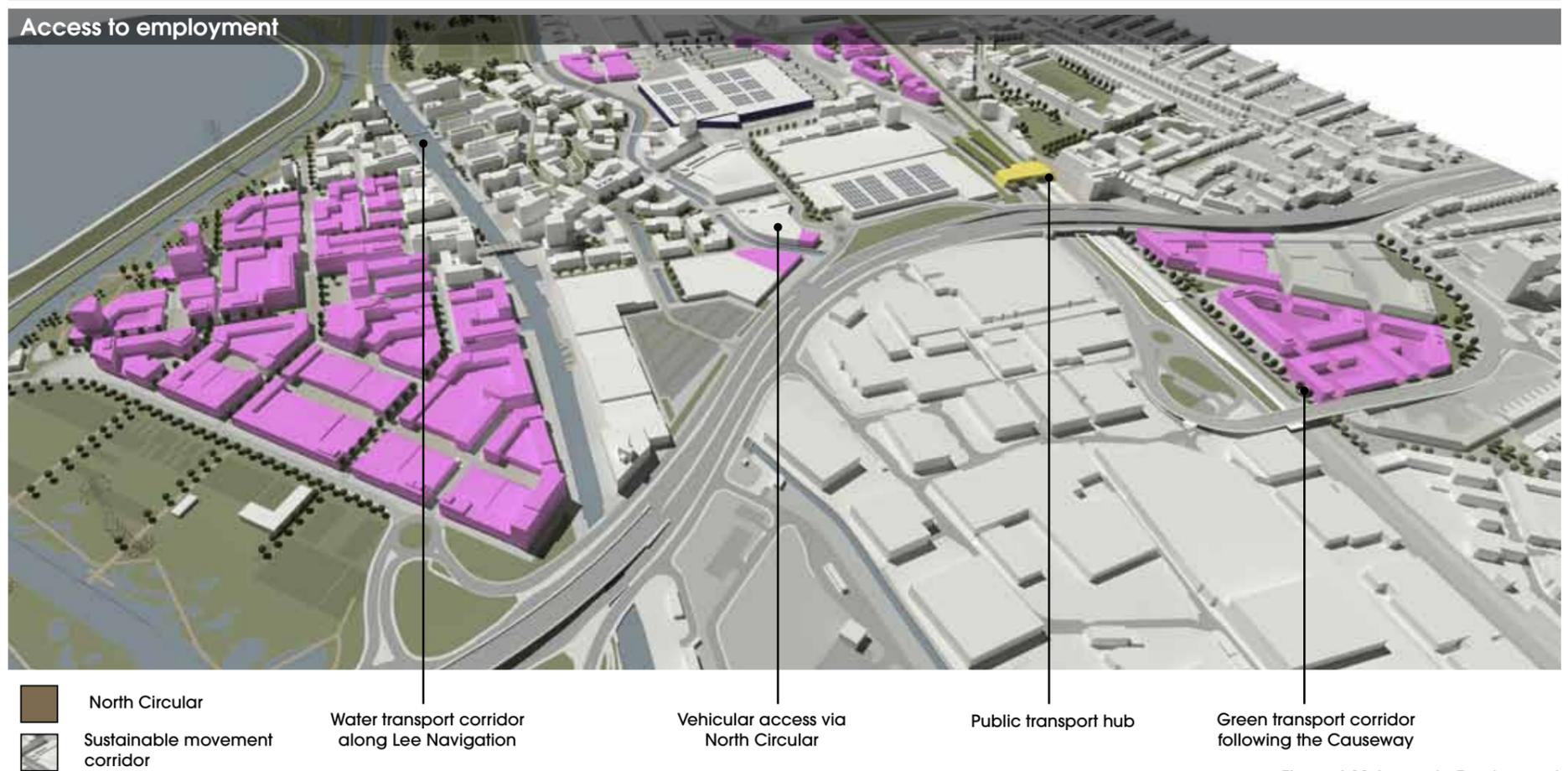


Figure 6-11 Access to Employment

3. South of North Circular Road

This area is located to the west of Ravenside Retail Park. It is complemented by its proximity to the existing Eleys Estate and Aztec Industrial Park to the north. In turn this makes it form part of a natural extension to the wider industrial corridor.

The site benefits from good access and visibility from the North Circular.

4. Montagu Road

No changes have been proposed in relation to the existing metals and waste recycling facility. The site is safeguarded as a Locally Significant Industrial Site (LSIS) in Enfield's Local Plan for continued employment uses. However, it is recognised that the re-imagining of this facility is required to ensure site-wide viability for the scheme. In the medium to long term, it needs to be re-located.

Given the potential cost associated with relocating the waste and recycling facility, the Masterplan provides recommendations for short-term mitigation, in advance of long-term redevelopment ambitions. As development moves forward, it is envisaged that the site might become an enlarged bus depot, possibly creating a central hub to benefit both Enfield and Haringey Boroughs.

In order to achieve transformational change, the Council will take a proactive role in working in close partnership with the landowner to bring forward development.

A relocation strategy for existing industrial users will be prepared to minimise any potential loss of industrial capacity and employment from Enfield.

6.4.6 Diversity and identity

A combination of improved accessibility and initiatives to support job opportunities for local residents will help to create strong cohesive neighbourhoods and drive regeneration and sustainability into the heart of the new eco-community.

The areas identified as potential SIL will offer a variety of opportunities for both small and larger employers and investors,

supporting the sole trader alongside the large industrial and retail employers.

Entrepreneurship and local start-up business will be encouraged, to help build the local economy, generate new enterprises and create sustainable communities. A range of different spaces will be available to support a diversity of employment and investment opportunities.

Meridian Water will be promoted as a hub for green industries, building on the vision of a complete eco-community.

Principles:

- ★ The Council, Enfield Enterprise, the North London Chamber of Commerce and other agencies, will strongly support the establishment of new businesses in Meridian Water, through the provision of advice, training, access to funding and premises selection. Shared facilities will be provided where entrepreneurs can rent spaces and desks in environments that encourage the interaction between like minded individuals where the opportunity for business growth is nurtured;
- ★ A range of business incubation opportunities will help to invigorate the local economy and shape a distinctive place. They will range from "rent-a-desk" to "rent-a-studio" to "rent-a-shed", all supplemented by the required supporting facilities such as meeting rooms, conference facilities and technical infrastructure;
- ★ Distinct new opportunities for investment in green industries will be opened up through improved accessibility, the refurbishment and revitalisation of existing units and the opportunity to connect to the Lee Valley Heat Network; and
- ★ The creation of a growing new destination with dramatic regeneration ambitions will be supplemented by targeted marketing and eco-branding to promote the identity of Meridian Water and to encourage new businesses to locate into the area.

6.4.7 Managing Enfield's Economy

In order to achieve transformational change, the area needs

to achieve a shift in its economic base away from traditional industrial uses, to one based on higher value industry that aims to strengthen the economic competitiveness of the Upper Lee Valley. If managed pro-actively, Meridian Water will deliver a supply of land, premises and successful places capable of attracting innovative and high value added companies, reflecting London's dynamic economic sectors.

Individual business and mixed-use neighbourhoods should be developed flexibly allowing local areas to respond to the specific needs of desirable economic sectors, support clustering, supply chain networks and provide opportunities for agglomeration.

The area's economy should be managed and grown so that the connections are strengthened with the economic sectors of London and with the leading universities and research establishments of London and the south east.

The existing business and employment areas currently safeguarded as either SIL or LSIS should be managed and grown to make them function more successfully as business locations. Efforts should be maintained to improve the safety, appearance, and amenity of neighbourhoods around industrial estates to make them convenient and attractive places for employees, clients and visitors.

Businesses will be required to help ensure that more of Enfield's residents access work and share in increasing levels of wealth. Specifically, developers should:

- ★ Contribute to improving education, skills and training provision in the borough;
- ★ Promote local labour agreements to enable Enfield's residents to secure employment and training from the new jobs that Meridian Water will create, whilst also maximising the use of the local supply chains, so that local firms have the opportunity to the maximum extent possible, to secure benefit from new developments; and
- ★ Support the provision of childcare facilities close to places of employment.

More information can be found in Enfield's adopted Local Plan.

6.5 Shopping and Leisure

To thrive alongside Edmonton Green, Meridian Water will provide a complementary offer by mixing everyday shopping needs with alternative and independent shopping, cafés and restaurants. This will help to create jobs and homes, encourage people to spend more time in the area and minimise the need for travel.

The creation of a 21st Century high street at the Meridian Central neighbourhood ensures that all retail provision will be co-located at the heart of the area, facing onto a series of high quality public spaces. The Causeway creates a lively community focus for the area. It is served by good connections from the surrounding area. This arrangement ensures that the vitality of retail is maintained, while providing a vibrant and dynamic focus to Meridian Water.

The built form has been designed to create a people-friendly street along the Causeway. The existing big-box retail is retained and re-configured to enable a mixture of uses that front onto the street, where previously blank walls created an unwelcoming aspect.

Similarly, the principles of good urban design, active frontages, mixing shopping and leisure uses to generate day and night-time activity, are applied along the entire length of the Causeway, waterfront area and throughout Meridian Water.

Local retail and leisure provision will be distributed along the Causeway and River Lee Navigation within accessible walking distance of residential and employment uses, promoting an intensity of activity at the ground level in these neighbourhoods.

The area's existing retail uses are provided by Ravenside Retail Park, Ikea and Tesco. The Ravenside Retail Park is situated on the southern side of the North Circular, just to the west of the Cooks Ferry roundabout. The retail park benefits from a good frontage, visibility from the dual carriageway and is bordered by the Lee Navigation to the east. To the south of the retail park are the Ikea and Tesco stores, which can be accessed from Glover Drive. Both stores have large areas of surface level car parking that currently serves its customers.

The Banbury Reservoir provides a significant local feature. It is located to the south eastern side of Meridian Water, in the London borough of Waltham Forest, has a raised embankment and is a Site of Special Scientific Interest (SSSI). The reservoir is located at a pinch point in the Lee Valley Regional Park, north of the Walthamstow reservoirs and is separated from Tottenham Marshes by the River Lee and Lee Navigation waterways, and the existing pylon infrastructure.

The Harbet Road towpath is located to east of the Lee Navigation. Recent improvements to the towpath provide a renovated cycle link to the Olympic Village at Stratford to the south and to the London 2012 canoeing venue in Hertfordshire to the north.

6.5.1 Retail Opportunities

This Masterplan includes a mix of shopping, leisure, workspace and apartments that positively add to the area's existing shopping offer. This will also complement the established retail and leisure provision at the shopping centres of Edmonton Green and Angel Edmonton. Although the focus at Meridian Water will be on providing a range of smaller retail, restaurant and café units and workspaces, there

is also the opportunity to expand retail provision in the longer term, subject to a demonstration of retail capacity and, the application of the sequential test.

The reconfiguration of land around the Tesco and Ikea stores will enable the provision of more efficient use of land, active frontages and more commercially appropriate layouts.

The proposed layout in the Masterplan will help to soften the bulk of existing stores and create a lively street frontage that is made up of predominantly small retail units and direct street access for housing above retail. High quality design will help integrate the existing stores and retail park into the new urban form.

Indicative land uses are suggested in the Masterplan, which consolidates guidance and allocations already established in the Local Plan. However, development proposals will be assessed in relation to relevant guidance and policy contained within Enfield's adopted Local Plan and the Mayor's London Plan.

Beyond initial screening measures, there is the opportunity for Tesco to modernise and reconfigure its store to provide a dual frontage, when appropriate. The Masterplan proposes the relocation of the store's car park to the rear of the building to enable an active frontage onto the Causeway. By so doing, an opportunity is created for an advertising frontage onto the North Circular, maintaining the store's frontage and visibility.

The reconfigured Tesco store also provides an opportunity to include new retail units at ground level with the potential for residential development positioned above. The opportunity to intensify the use of the store will also be supported. This could include the creation of a larger footprint and multi-storey car parking.

Ikea has the potential to modernise and reconfigure its store layout, again to provide a more positive frontage onto the Causeway. Consideration will be given to increasing elements of height to the building to ensure the store maintains a strong frontage and visibility from both the North Circular and Meridian Way. New road signage and markings will complement Ikea's accessibility and ensure that people can orientate themselves towards the store within Meridian Water and from the North Circular. As part of its reconfiguration, Ikea will be expected to re-evaluate their parking requirements to determine areas that might be brought forward for alternative uses.

The existing Ravenside Retail Park should take the opportunity to modernise and intensify the use of its site, by including a multi-storey car park facing the North Circular. This would provide an opportunity to develop a more commercially appropriate configuration of its floorspace. The prospect of development along the canal edge will be considered, providing a positive, active frontage to the River Lee. This could include leisure, food and drink uses.



6.5 Shopping and Leisure

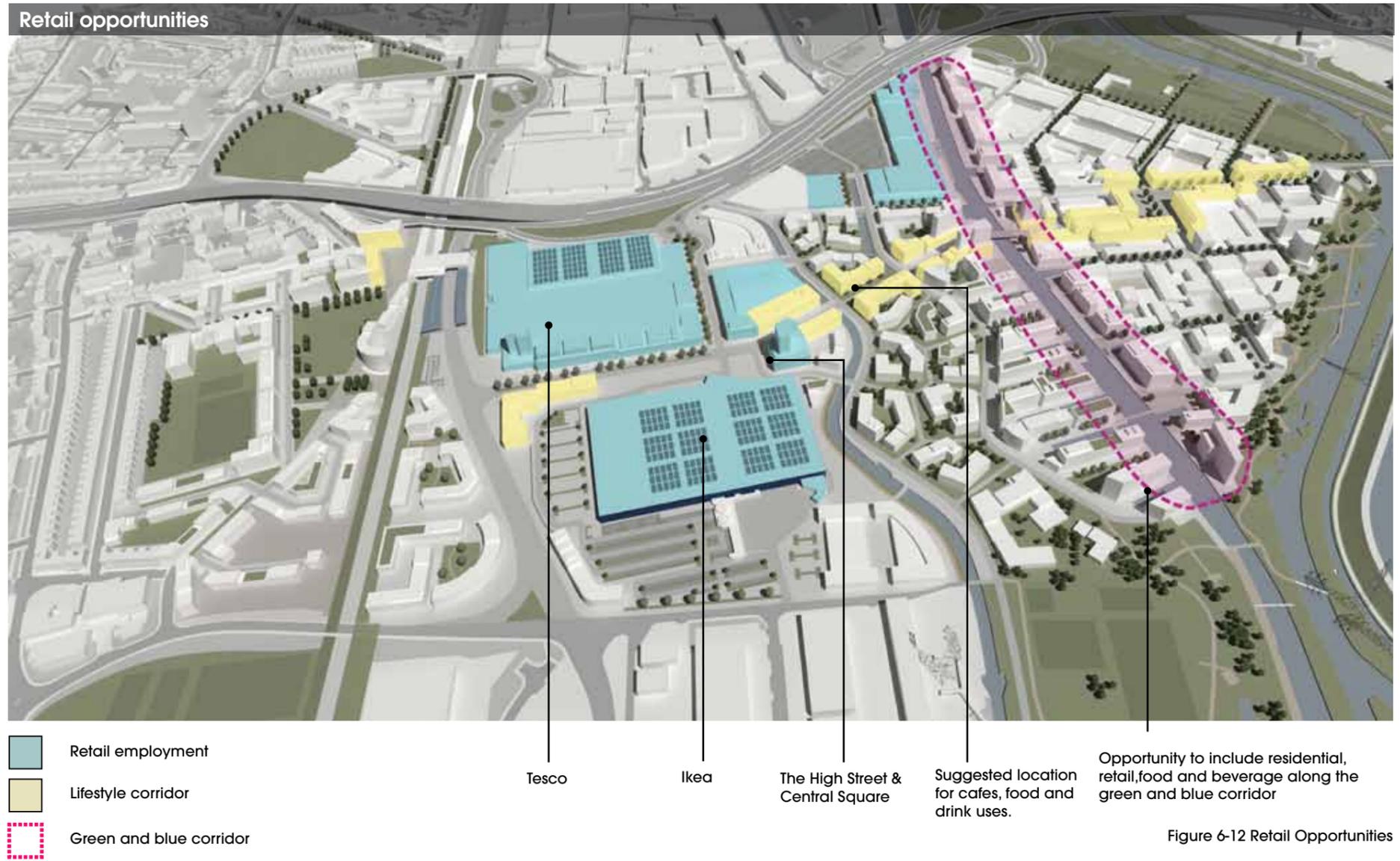


Figure 6-12 Retail Opportunities

6.5.2 Principles

The Masterplan creates a new high street along Glover Drive between Tesco and Ikea, this is proposed as the Causeway, where existing and new retail will be focused.

Retail will have a strong relationship to the Causeway and the central public square. It will be located alongside a range of community, leisure and recreational uses to create an intensity of activity at the heart of the area.

Specifically, development should adhere to the following principles:

Objectives:

- ★ Contribute towards the creation of high quality public-realm by incorporating high quality surfacing and street furniture, to breakdown the site's expansive character and provide an attractive human-scale dimension;
- ★ Complement the existing local shopping provision at Dysons Road, Angel Edmonton and Edmonton Green by providing approximately 2,000 sq m of A1 to A5 uses to meet the day to day needs of the local economy at Meridian Water. This will ensure the vitality and viability of each centre is maintained. However, as the population expands in the longer term, some additional town centre uses such as offices, workspaces, hotels, café units, and restaurants may be considered, subject to a demonstration of retail capacity and an application of the sequential test. This will ensure that there is an appropriate mix of uses in this location;

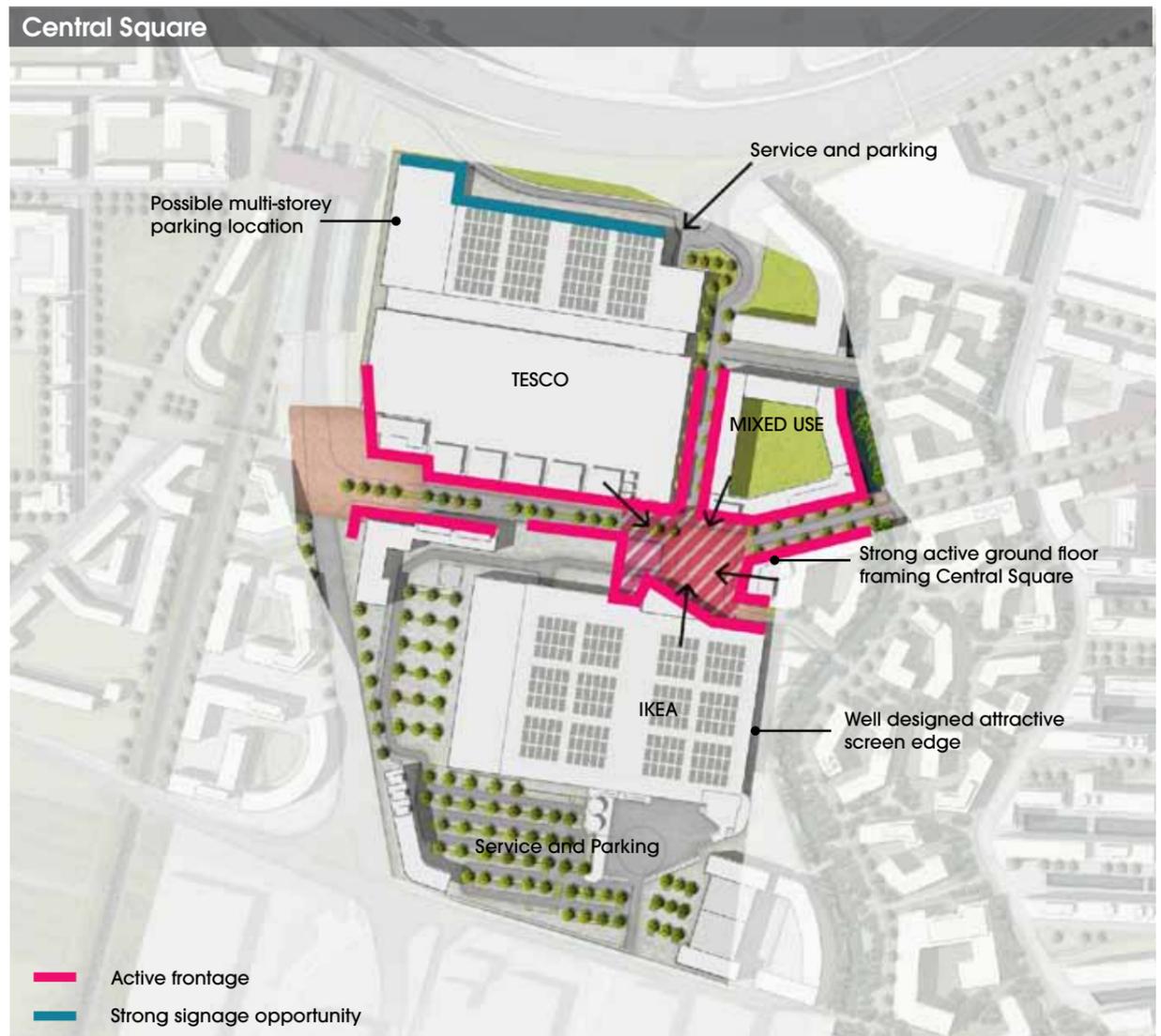


Figure 6-13 Central Square



Figure 6-14 Waterside visualisation

- ★ To the north of the Causeway, the Ravenside Retail Park and Tesco store are currently set back from the North Circular providing a buffer to the residential community at Meridian Central and Islands neighbourhoods. The location of these retail uses benefits from good accessibility and visibility on to the North Circular; and
- ★ Building on existing employment and training initiatives, the Council will work with local retailers to enhance sustainability by encouraging retailers to employ local people where possible and to use local suppliers, including produce grown in Enfield and surrounding areas, which the Council is promoting.

6.5.3 Leisure

Leisure uses that are compatible will be introduced to help create a destination and promote the development of an evening economy. This will in turn help to support the introduction of food and drink uses within the high street. Local leisure provision will be distributed along the Causeway and River Lee Navigation within accessible walking distance of residential and employment uses, promoting an intensity of activity at ground levels and encouraging a healthy lifestyle for all.

Opportunities for the following will be encouraged:

Objectives:

- ★ Restaurants and café units. These uses will complement the public-realm and help to animate the street scene along the Causeway and waterfront. They will also be supported to become informal work spaces;

- ★ Pop-up operations integrated with cafes, art and crafts, and events. These will help to bring the community together and enliven the Causeway and public squares in the area;
- ★ A series of parks, squares and open spaces. The Masterplan provides for the creation of a linked series of open spaces and squares. These not only help to give Meridian Water its own unique sense of place, but also comprise destinations. Here, people can meet, enjoy street entertainment, hear live-music, see permanent and temporary art works or simply relax in adjacent cafes and restaurants. Attractive, vibrant, exciting, inclusive and welcoming, these spaces help to animate the whole of Meridian Water 24 hours a day;
- ★ Maximise access to the Lee Valley Regional Park. This will provide a range of leisure activities, including cycle and canoe hire, football pitches as well as allotments and agricultural production; and
- ★ New routes. These will help to embrace the unique opportunities presented by the area's reservoirs. In particular leisure pursuits of walking, running and cycling will be encouraged and opportunities will be created to engage with the flora and fauna that populates the area.

6.5.4 Principles

Specifically, development should adhere to the following principles:

- ★ Safeguard spaces for leisure uses along the waterfront, at Banbury Reservoir and within the Lee Valley Regional Park. These spaces could include walking, sailing, canoeing and fishing amongst others. These will help to create lively spaces and create a more diverse employment economy;
- ★ Locate and enable a mixture of bars, restaurants, café units and other recreation activities along the banks of the River Lee, where possible, to benefit from good solar gain and public space. The area immediately surrounding the new public transport and pedestrian bridge over the River Lee Navigation is also particularly suitable as it coincides with high levels of public transport accessibility and general movement through Meridian Water;
- ★ Respond to the ecological role of the waterways and respect wildlife habitats where new amenity provision along the Lee Navigation is proposed;
- ★ Although access to Banbury Reservoir is currently restricted, opportunities should be explored to open up links and routes around the reservoir. These could be achieved by creating walking and wildlife opportunities to create linkages towards Walthamstow Wetlands to the south; and
- ★ Space for leisure uses is identified in the north east of Meridian Water, combining flood mitigation measures with improved recreational uses such as playing pitches, play space, urban agriculture and allotments.

6.6 Community

The regeneration of Meridian Water will deliver a new sustainable neighbourhood, in Enfield. With up to 5,000 new homes and up to 3,000 new businesses proposed. Future growth at Meridian Water will attract an estimated 11,500 new residents plus additional, workers and visitors into the area. This means that Meridian Water will require excellent social and community infrastructure to respond to the additional demand and to help integrate new and existing communities. Consequently local services, facilities and amenities will be the anchor for Meridian Water.

The Masterplan ensures that community facilities are centrally located, with proposed new schools, health facilities and learning facilities connecting into community zones where people can meet and

interact. This will encourage community cohesion and ownership in Meridian Water. A hierarchy of open spaces and squares will run through the heart of the area, forming a continuous, activated community spine framed by buildings to create a high street frontage. This spine will be where local services comfortably sit, establishing opportunities for a police presence and other local community services

Strong and self-sustaining communities will be essential if Meridian Water is to develop and reach its potential speedily. Existing and new communities should be of mutual benefit to one another. Together they will shape the development and resolve problems that emerge along the way. Meridian Water is a plan for everyone.

The community are fundamental to regenerating Meridian Water so that it becomes a sustainable neighbourhood. The redevelopment programme will play an important part in creating a balanced, diverse and progressive community. People who live and work in the area will play an essential role in shaping the way in which the area functions, develops and is perceived.

Mixed-use development, shared infrastructure, improved local facilities and direct access to Meridian Water will ensure the integration of new and existing communities and facilitate movement across neighbourhoods.

New facilities, resources and a mixture of housing tenure and types will bring different social groups into the area, and support the creation of a diverse community, adding variety and vibrancy.

6.6.1 Integrated communities

Existing communities, particularly at Upper Edmonton and the Shires Estate, will benefit from and help shape the opportunities, development and improvements delivered by Meridian Water. The new community will equally feel part of the surrounding area and share the infrastructure and facilities that already exist.

Objectives

- ★ Meridian Water will be physically integrated with the surrounding communities through the high quality design and development of a permeable well-connected layout;
- ★ New uses will complement existing facilities, ensuring physical, social and economic integration with neighbouring uses and surrounding communities;



- ★ Community facilities must respect cultural diversity and be fully accessible to all sections of the community;
- ★ The Causeway will be a key focus of the new community, extending through to the existing neighbourhoods of Edmonton Green and Angel Edmonton. It is more than a movement corridor as it will provide a series of spaces for people to pause, congregate and socialise;
- ★ Social and community uses will be in a central location adjacent to retail provision so that it is easily accessible for new and existing residents. Improved public transport services will enhance connections between Meridian Water and the surrounding areas; and
- ★ Surrounding communities will provide the social capital that shapes the way Meridian Water develops. By sharing facilities and infrastructure with existing communities, demand will quickly grow and a thriving place will rapidly emerge.

6.6.2 Balanced and diverse communities

The mix of housing types and tenures will promote a community that is socially inclusive.

Objective:

- ★ Mixed use and innovative house types will be provided within a diverse range of character areas, in order to promote a variety of different lifestyles. These may include live - work units, supported living, and community self-build amongst others.



6.6.3 Community infrastructure

A range of community facilities which meet the needs of the new and existing population will be provided.

Objectives:

- ★ Accessible locations, ideally utilising the squares fronting the Causeway could include multi-use community facilities such as; library facilities, employment services, rentable community space and a technology hub;
- ★ Health and policing facilities will cater for the needs of both the new and existing community and will be situated in a location that is highly accessible to the community;
- ★ Community buildings should be adaptable so that they can accommodate a variety of different uses, providing space for a range of requirements, from meeting rooms to fitness studios. Provision may also include office space to house any management organisation set up to manage social and environmental elements of Meridian Water. Opportunities for business start-up and entrepreneurship will be promoted as part of the community;
- ★ Community groups or organisations will be encouraged to deliver and manage the various community facilities, providing different models and approaches for this will evolve a sense of ownership within the community and encourage sustainability of facilities and services;

- ★ The co-location of different uses and activities will be extended in order to promote healthy lifestyles and wellbeing. The social interaction that occurs as a result will help to build a stronger communities; and
- ★ Community spaces will be adaptable to encourage urban agriculture. This will provide opportunities for the community to grow their own food, which will support the sustainable neighbourhood function of Meridian Water and also bring people together in a stronger and more social way than traditional allotments. This may also create local training and employment opportunities.

6.6.4 Schools

The Masterplan framework creates the opportunity to promote a new educational offer for new and existing residents. St Matthews interim Primary School has already been established adjacent to St John's Church on Dysons Road, with a view to transferring into a new primary school within the Meridian Angel neighbourhood. This creates a closer link to the Upper Edmonton community and provides a natural link and meeting point for both new and existing communities at Meridian Water. It is envisaged that the primary school will be within a child's walking distance and connected to the Causeway.

The Masterplan sets out proposals to deliver a University Technical College (UTC) in the Gateway neighbourhood, with the potential to maximise links between employers and universities to benefit from the area's industrial and green technology clusters, as well as young people, who have been particularly disadvantaged at this point in the economic cycle.

An all-age school is proposed at the heart of the Islands neighbourhood, including early years provision, primary and secondary school facilities. The school is located to maximise the potential for the Lee Valley Regional Park to be used as playing fields that would become a shared community resource.

Evidence suggests that the provision of good schools would have a positive impact on house and rental values, thereby making Meridian Water a more attractive neighbourhood to prospective residents. The proposed location of the all-age school benefits from its close proximity to the waterways and the Lee Valley Regional Park, thus enhancing the area's potential for developers.

Objectives:

- ★ New schools must provide sufficient pupil places for primary and secondary school children in order to meet growing future demand;
- ★ Provision of a UTC will link higher education and training to the adjacent industrial base by using this as a platform for innovation and skills in the Lee Valley;
- ★ New schools will create shared community spaces and facilities where appropriate;
- ★ Schools will be situated at the heart of the community, with safe and accessible routes to encourage walking and cycling to school; and
- ★ New schools will be integrated with the area's green infrastructure and have good access to outdoor play space and natural green space.



Figure 6-15 Community Spaces

6.6.5 Social infrastructure and entrepreneurship

It is important that access to the waterways and landscape is improved, so that facilities can be integrated with the area's natural assets. Through the collocation of different uses and activities, healthy lifestyles and wellbeing will be encouraged which both builds stronger, healthier communities and in turn reduces pressures on health services.

Objectives:

- ★ The collocation of different uses and activities will be extended in order to promote healthy lifestyles and wellbeing. The social interaction that occurs as a result will help to build stronger communities;
- ★ Urban agriculture will provide food growing opportunities and will bring people together in a stronger and more social way than traditional allotments. It can also create local employment opportunities; and
- ★ Opportunities for business start up and entrepreneurship will be promoted as part of the community (See sections 6.4 Business and Employment and 6.5 Shopping and Leisure).

6.6.6 Community organisations

Social enterprise is the fastest growing employment type and brings important opportunities to Meridian Water.

Objective:

- ★ Community groups or organisations will be set up to provide different models of delivering and managing the various community facilities and to evolve a sense of ownership within the community. This will promote decision making and self-guided responsibility for the changes and up keep of facilities. This is discussed further in the delivery section.

6.7 Water

The history of the Lee Valley defines the identity of Meridian Water. Its waterways and tributaries play an integral role in the spatial organisation of the Masterplan and the overall living and working experience in the area.

The Masterplan integrates the unique resource presented by the waterways by integrating it into the area to deliver social, economic and environmental benefits. Access to a waterside environment helps to strengthen the area to create a sense of place.

Significant leisure opportunities are created by capitalising on waterside locations, which in turn, enhances investment values. Access to the waterways is integrated with high quality open spaces, alongside new spaces for eating and drinking, strolling, cycling, sitting and boating. It brings the richness of waterside experiences into the lives of residents and visitors alike

6.7.1 Existing Condition

The area is crossed by several significant watercourses including the Lee Navigation and the River Lee Flood Relief Chanel, which form the eastern boundary of the area, as well as Pymmes Brook and Salmons Brook, which are both tributaries of the Lee. All rainfall run-off generated in the borough drains through this area.

A Strategic Flood Risk Assessment (SFRA) for the borough was published in 2008 and it identified that parts of the Meridian Water area have a 1 in 100 or greater annual probability of river flooding. Consequently a Level 2 SFRA has been undertaken to inform the development of the masterplan and this is discussed in greater detail in Section 7.2.

In recent years, the area has gradually developed from a primarily industrialised space to one that incorporates a significant proportion of large scale retail units, including a Tesco superstore and Ikea. This area is almost completely previously developed, but there are some minor areas of green space along the east and western boundaries.

Around 20 years ago, significant alterations were made to the highway and drainage infrastructure that cross the area as part of upgrade works to the North Circular, which forms the northern boundary of the area. This involved the creation of multi-span flyovers, and culverting and channelisation works to Pymmes Brook and Salmons Brook.

6.7.2 The Vision

Water has an integral role in the holistic success and future of Meridian Water. It plays an important psychological role in people's lives, by creating opportunities for leisure and recreation and attracting investment through employment opportunities. Simultaneously it also strengthens ecological benefits. By enhancing connections and the quality of waterside spaces, communities will be reconnected to the waterways that form an integral component of the area's heritage. The waterways create a unique sense of place and improve the everyday experience at Meridian Water. In conjunction with the green infrastructure, water holds the key to ensuring Meridian Water's future resilience against climate change, bringing benefit to immediate communities and the wider region.

Future development in this area will aim to create mixed-use neighbourhoods, combining residential development with employment and commercial uses.

6.7.3 Opportunities

Enfield's Level 1 SFRA (2008) and Level 2 SFRA (2013) conclude that whilst the area is considered to be exposed to significant flood risk, with appropriate measures, it is feasible to redevelop the area in a way that will reduce flood risk both within Meridian Water, and in the wider area.

The Level 2 SFRA makes specific recommendation for future development and detailed site specific Flood Risk Assessment will be required to support each individual planning application.

Enfield's High Level Sequential Test demonstrates that Meridian Water passes parts (a) and (b) of the Exception Test. Redevelopment of this previously developed land is an opportunity to reduce the gap between housing demand and provision. It provides significant opportunities for employment to boost the local economy. It also offers opportunities to attain wider sustainability benefits by creating new, mixed-use communities that make the best use of the area's unique assets, providing green transport links, and creating a high quality public realm as part of development.

Redevelopment also represents an opportunity to create a safe place that can reduce overall flood risk and thereby pass part c) of the Exception Test and ensure that development will be safe for its lifetime. To achieve this without increasing flood risk elsewhere, it must be shown that there will be no net loss of flood storage and that overland flow routes will not be obstructed. The flood hazard maps that have been developed for Meridian Water are described further in Enfield's Level 2 SFRA.



Maximise the potential of water and open space

The masterplan recognises the individual potential of each waterway and enhances its value and role within Meridian Water.

The River Lee Navigation runs through the heart of the area. The Masterplan maximises this unique offer by providing opportunities to integrate development and its associated living and working experience with the water. The Masterplan envisages a development response by creating a series of attractive, high quality open spaces and buildings to front on to the water. This creates opportunities for residents and the surrounding community to benefit from recreational and leisure facilities along its length. Attractive frontages on to the waterfront and the potential to draw water into the development are envisaged in the Masterplan to increase potential investment value of development.

A high quality, waterside setting, supported by leisure and recreation facilities will encourage day and evening time activity on the waterfront and unlock the employment and economic potential of the area.

Development should respond to the following principles:

- ★ The opportunities presented by the waterside setting should be maximised, by fronting development onto the waterways;
- ★ The opportunities presented by the waterways should be extended where appropriate, by drawing in water from its existing water bodies into the neighbourhoods to increase waterside open space and provide temporary flood storage; and
- ★ Leisure activity should be encouraged alongside the waterway through the provision of open spaces, café units, bars and restaurants.

Improve access and connections

The waterways which naturally divide Meridian Water, now provide spines of movements, with new paths and bridges created along their length to promote permeability throughout the area. Further connection opportunities are created through its extension into the parklands and its potential to create sustainable transport networks.

New connections and routes to the waterways will unlock its potential and ensure that all neighbourhoods can benefit from the added value it brings. Although water has the potential to add value to a scheme, design proposals will be expected to achieve an appropriate approach in relation to frontage and the location of private, semi-private and public space to ensure that the neighbourhood and towpath are permeable and accessible.

Positive visual connections that are envisaged in the Masterplan will reinforce the identity of Meridian Water. Unique and varied paths, bridges and access points will build numerous experiences and physical connections to the water.

By linking various waterside locations and facilities, a network of locations will collectively infuse a strong identity and sense of place.

Development should respond to the following principles:

- ★ The opportunities created by the waterways should be extended to the adjoining communities through the creation of high quality pedestrian and cycle routes alongside the waterways;
- ★ Taller buildings should be encouraged along the southern edge of the area, to maximise the views across Banbury Reservoir and to the wider Lee Valley; and
- ★ Key routes, open space and communities should be linked with the proposed new bridges and crossings.

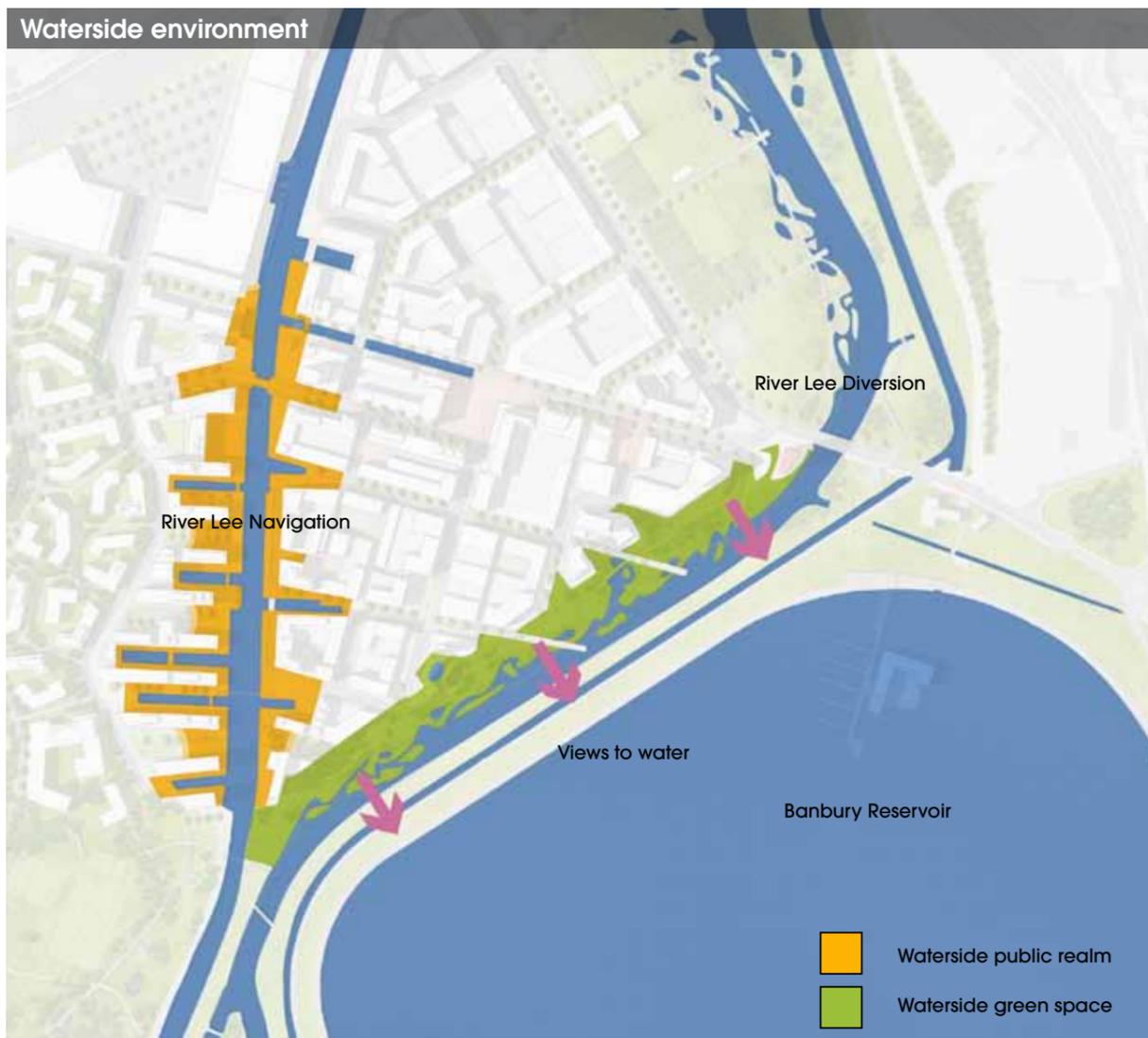


Figure 6-16 Waterside Environment

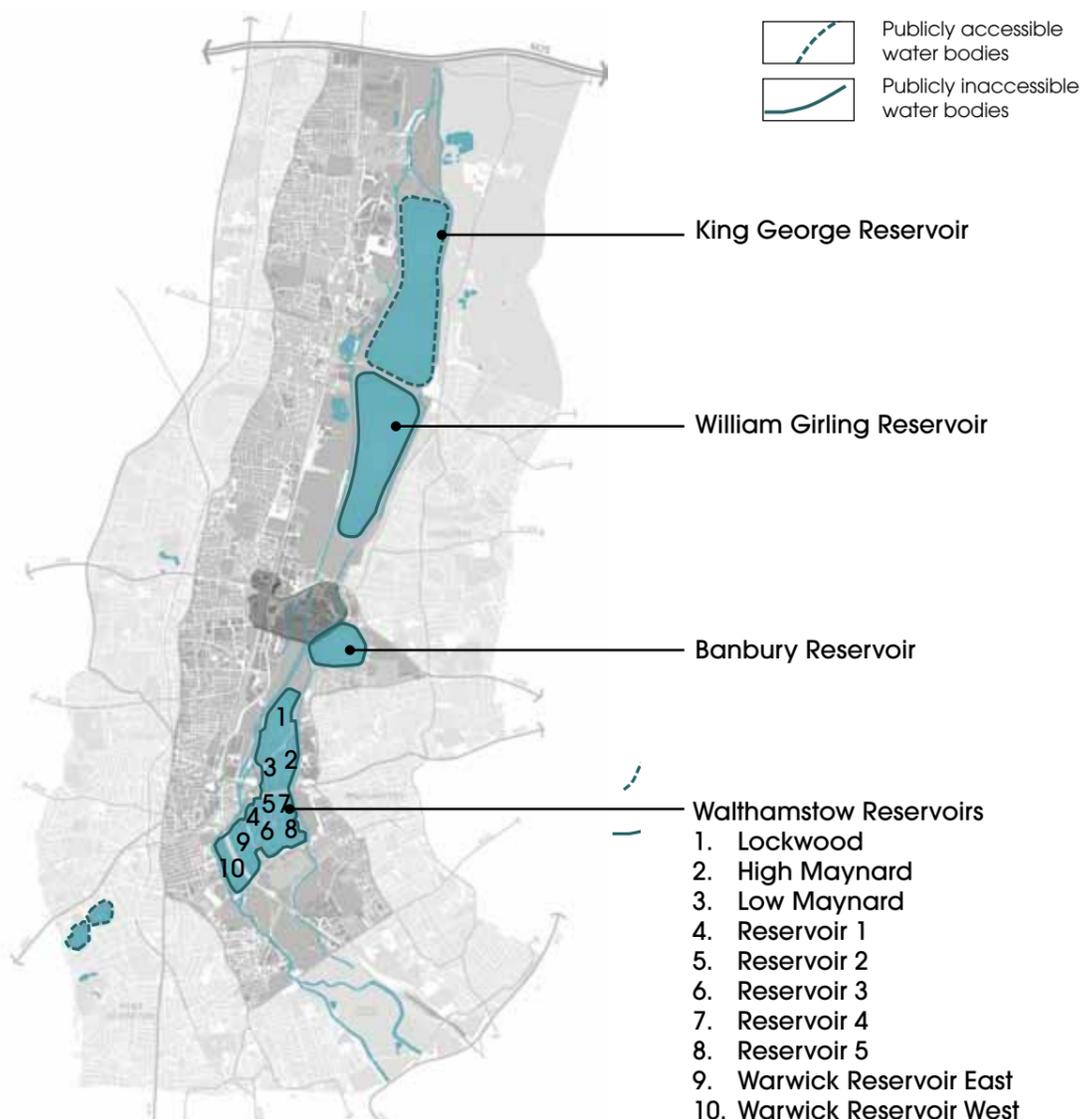


Figure 6-17 Waterbodies

6.7 Water

Enhance activity and value

The Masterplan provides the framework to maximise redevelopment opportunities by strengthening and enhancing the area's inherent qualities and potential of the waterways. Redevelopment should ensure that the ecological and recreational benefit is maximised, and that the unique character of each waterway is enhanced.

The Masterplan envisages a variety of activity and habitats that could be created along each waterway, where development will have the opportunity to respond and enhance its distinct character.

A diversity of activity will encourage investment in the area and provide for balanced sustainable communities.

The River Lee offers the opportunity to exploit water based transport where appropriate, and similarly there may be potential to shift some freight to the railways.

Development should respond to the following principles:

- ★ The potential of the waterways as locations for sport, leisure, recreation, entertainment and nature conservation uses should be maximised;
- ★ Ecological benefit should be maximised, where possible, through appropriate planting and edge treatment; and
- ★ Banbury Reservoir should be improved, through the provision of new walking routes and potential facilities for boating opportunities. Improving access to, and creating development to maximise views over the vast expanse of water held in the reservoir will help to change the perception of the area and become a defining attraction for Meridian Water.

Create Environmental Value

Over time, the natural watercourses and their associated ecological value have significantly been compromised. The Masterplan recognises that encouraging biodiversity and ecological enhancements as part of redevelopment opportunities has potential to add value and respond to the wider regional strategy.

Green and blue infrastructure spines ensure that the area's waterways become a corridor of opportunity, and improve the overall environmental value of the area.

Water will play an important role in mitigating the effects of climate change, such as providing a cooling effect for buildings and public realm in the immediate vicinity.

Development should respond to the following principles:

- ★ Opportunities should be taken to increase planting and habitat creation along the banks. This will help to improve both the water quality and the ecological value of the river corridors; and
- ★ Water sensitive designs should be incorporated into the heart of the neighbourhoods, by integrating flood storage capacity.



Figure 6-18 Waterbodies



Figure 6-19 Waterbodies

The table below summarises areas and quantum of land impacted as identified in the diagrams on the previous page. It describes the areas identified for compensation.

Development Area	Description	Development area to be raised (ha)	Area lowered for flood compensation (ha)	Compensation Area	Description
1	Land in the north west corner of Meridian Water	5.0	5.0	C1	It is proposed to mitigate flood risk by re-shaping the land here, thereby providing 5.1 ha of flood compensation on-site and creating a raised, developable area adjacent to Meridian Way and Conduit Lane that will be considered safe for flood risk. The existing overland flow to the south east of this area across the railway line must be maintained.
2	Land to the west side of Meridian Water	3.2	3.1	C2	A potential solution is to allow development to take place to provide level-for-level on-site storage on the primary school playing fields covering the same area as the current floodplain, but reconfigured to facilitate development. Existing overland flow routes to the south are maintained.
3	Land to the west of the Navigation Channel	5.0	5.0	C3 or C4	A potential solution is to provide flood compensation storage at Tottenham Marshes, to the south on a level-for-level basis. Combining this with appropriate flood defence measures will make areas 3 and 4, i.e. the Islands and Canal-Side West and Meridian East neighbourhoods available for development and central to the delivery of the overall Masterplan. The land here may be contaminated. This issue will need to be thoroughly investigated as part of any future flood storage proposals at this site. The area is re-profiled and enhanced as parkland
4	Land to the east of the Navigation Channel	5.6	5.6	C3 or C4	A potential solution is to provide flood compensation storage at the Lower Hall Lane (LHL) site, to the north on a level-for-level basis upstream of Meridian Water. The LHL site is owned by Thames Water and covers 13.2 ha. It could potentially provide the full compensation required for mitigation purposes, but it is unlikely that it will be wholly available. However, it is anticipated that 3.5 ha of land can be set aside for flood storage.
5	Land running adjacent to the Diversion Channel	6.0	6.5	C5	The area is re-profiled and enhance as parkland. It is proposed to landscape this area to create a distinct area of flooding in this area. This will enable development on the opposite side of the road. The compensation area is 6.5 ha, which is larger than the 0.6 ha currently exposed to flooding
	TOTAL AREA	24.8	25.2		

Flood Risk Mitigation

The Council published its Level 1 Strategic Flood Risk Assessment (SFRA) in February 2008. This examined flood risk issues at the borough-level and identified the requirement for a more detailed analysis of flood risk in certain areas in the east of the borough. Published in 2013, the Level 2 SFRA, increases the scope of the Level 1 SFRA and looks at 2 priority regeneration areas in the east of the borough, including Meridian Water.

There are 4 principal rivers that cross Meridian Water. These include Pymmes Brook, Salmons Brook, Lee Navigation and the River Lee Flood Relief Channel. Fluvial flood risk is therefore the main constraint to the development of the site, although the Level 2 SFRA also considers other forms of flooding. The flood risk areas are shown in figure 1

As a large area of previously development land with extensive flood risk, redevelopment at Meridian Water represents an excellent opportunity to improve flood risk management that will benefit future users of the area and maximise development opportunities.

The Council will apply the Sequential Test within the Meridian Water area in order to direct development to areas of low flood risk. Where this is not possible, the Council will need to be satisfied that development can meet the provisions of the Exception Test (where required by the NPPF), and that development can be made safe in accordance with the definition set out in Enfield's Level 2 SFRA. It should be noted that there are likely to be multiple ways in which this can be achieved and it will not be possible, or desirable, for the Council to predict the exact form of development, nor the precise way in which the provisions of the Exception Test will be met. Detailed site-specific Flood Risk Assessments (FRAs) will be required to support planning applications for individual sites. Where the Exception Test is required, FRAs must demonstrate how the provisions of the Exception Test

have been met through the detailed proposals put forward in the planning application. As such, the FRA must demonstrate that the development will be safe without increasing flood risk elsewhere.

Flood management measures could incorporate modifications to the existing flood risk management infrastructure or alteration of the site topography. These include:

- * Raising and lowering ground levels in key areas to increase safety in some places while creating compensatory flood storage elsewhere;
- * Widening and restoration of the Pymmes Brook, Salmons Brook or Flood Relief Channel rivers. Natural flood management techniques such as these set space aside for water by creating additional flood storage along the edges of the watercourse and provide biodiversity enhancements by creating a green corridor along the riverbank. Any additional future maintenance requirements would have to be accounted for, particularly with regard to the sections owned and managed by the Environment Agency;
- * Creating flood storage upstream and downstream using the natural floodplain upstream and downstream of the site to accommodate additional floodwater;
- * Increasing attenuation of tributaries. The flood risk posed by Pymmes Brook and Salmons Brook could potentially be alleviated by creating flood storage areas higher up in the catchment;
- * Comprehensive redevelopment of the open space across the area and the reshaping of the waterways.

The Masterplan's Options and Flood Risk Modelling Report considers flood risk management options for five discrete areas. It assessed the potential flood risk associated with a 1 in 100 year plus climate change design event and identified the areas most at risk. These areas are identified in Figure.1 above. The report recommends areas that could potentially serve as flood compensation to address the risk of flooding. These areas are shown in Figure 2

Whilst these measures described overleaf may be subject to future amendments, the fundamental criteria is that all developments must be safe and must not increase flood risk elsewhere. Importantly, most of the proposals are to provide level for level, on-site storage and the proposed compensation areas are equal to the areas currently at risk of flooding.

The table above summarises areas and quantum of land impacted as identified in the diagrams on the previous page. It describes the areas identified for compensation.

Detailed development guidance in respect of flood risk assessment and mitigation is set out in section 7.2.18.

6.8 Public space

Meridian Water will deliver a rich variety of open spaces, which help form the spatial hierarchy of the Masterplan. The variety of public spaces proposed includes squares, parks, growing spaces and new habitats, which will collectively provide recreational, learning and environmental benefits whilst adding economic value to the redevelopment of the area.

The organisation, form and function of the public spaces will support the delivery of Meridian Water, influencing its social, economic, cultural and ecological growth and stability. The planned structure of these spaces draws on the unique qualities offered by the Lee Valley Regional Park by acknowledging the historic landscape and the systems which flow through it, and carries these through the heart of Meridian Water, promoting east – west movement.

The open spaces connect new and existing areas, bringing social and physical benefits to surrounding communities, facilitating community cohesion, promotion of cultural diversity and defining a unique sense of place.

The open space network will create stability and growth opportunities in Meridian Water whilst also supporting attractive, safe, sustainable neighbourhoods within the scheme.

6.8.1 Variety

Supporting the London Borough of Enfield's Parks and Open Spaces Strategy (March 2010) a rich variety of quality open spaces are proposed, to support the creation of a high quality physical and social environment in Meridian Water. Social benefits and cultural value will be found through the provision of a range of spaces that support active and passive recreation including leisure activity, community meeting and events. These spaces will allow for community, cultural and social foci to establish, in a way that supports the holistic development of Meridian Water.

A range of well-designed and managed open spaces will attract customers, workers, visitors and residents which will make the area vibrant. This will make Meridian Water more attractive for investment and in turn drive the local economy forward. The wide variety and high quality of the parks, squares and streets proposed will ensure that Meridian Water becomes a dynamic, attractive and vibrant place to live, work and meet.

Objectives:

- ★ Development of the open space network will seek to enhance existing areas of green infrastructure as well as identifying new open space opportunities;
- ★ Each open space should be identified for a primary use, differentiating between local, neighbourhood and regional destinations, and evolving the creation of an appropriate hierarchy across the Masterplan area;

- ★ The open space network will be interdependent; thus each space will complement another and integrate with adjoining spaces. Each space will have a different use criteria which will offer a choice of activity; Diverse open space programmes will support both formal and informal recreation as well as biodiversity, natural habitats, amenity and landscape;
- ★ The open space network must provide both formal and informal recreation as well as biodiversity, natural habitats, amenity and landscape;
- ★ A variety of sports and recreation facilities will be accommodated that complement the existing facilities in the Lee Valley as outlined in Section 2.4.5;
- ★ Local squares will serve as activity hubs for residents nearby, with spaces for meeting and a programme of local community events that will activate residential neighbourhoods; and
- ★ Public squares within the area will form an extension of the surrounding commercial uses. Supporting markets and alternating temporary events will ensure that the central spaces become local destination points.



6.8.2 Accessibility

The network of spaces in Meridian Water will be connected by high quality streets that link into the Causeway - the main arterial route that reconnects east – west. Surrounding communities will be able to access new open spaces, facilities and the Lee Valley Regional Park through the creation of improved, clear, direct access routes throughout the area.

The proposed arrangement of spaces promotes physical and visual breaks between areas, allowing for each to feel distinguished. Simultaneously, high quality connections create permeability and a sense of cohesion between neighbourhoods.

New routes and connections open up the opportunity for surrounding areas to benefit from the open space network and build upon the area's liveability creating social and economic advantages for Meridian Water and the surrounding communities.

High quality connections between the varied open spaces support sustainable movement patterns and healthy lifestyles by encouraging pedestrians to walk and cycle through the area, which in turn has positive environmental and economic implications. The safe, secure and accessible movement corridors through Meridian Water aids community and social development whilst supporting the development of home zones. Improved permeability keeps Meridian Water activated and provides for safer neighbourhoods.

Objectives:

- ★ Open spaces will respond to their immediate context and form legible extensions of the built form;
- ★ The network of open spaces must be supported with footpaths and cycle routes, creating safe access throughout the area. These routes will connect new facilities and surrounding communities, whilst also discouraging car use;
- ★ The structure of new open spaces and public realm will provide a well-designed interface between the local neighbourhood and the Lee Valley Regional Park with clear connections to surrounding communities, which will have the opportunity to draw on these benefits; and
- ★ Green spines and routes will create visual connections and improve connectivity through to the Regional Park and in turn draw the park experience into the heart of the scheme.

6.8.3 Health and Well Being

High quality, usable open spaces lie at the heart of the health and wellbeing agenda and the vision for Meridian Water to be a sustainable neighbourhood. Public open spaces will be within walking distance of homes, with new high quality streets and squares which are easy to access. These will improve the everyday experience of residents and workers and will help to deliver open spaces within Meridian Water that infuse positive social interactions, healthy living and a sense of community.

A programme of activities across a variety of diverse spaces supports the development of the community and encourages social inclusion, acknowledging the desires and demands of all that live there.

The variety, quality and accessibility of open space will bring cultural, health and education benefits to residents, workers and visitors and transform spaces into places. Collectively this network will sustain and support the growth of Meridian Water.

Objectives:

- ★ Views and connections to green space throughout the built environment will create a positive visual amenity across Meridian Water;
- ★ High quality and well maintained streets, parks and spaces encourage activity and social interaction into the public realm;
- ★ Parks provide accessible outdoor learning space, access to nature, formal and informal recreation; and
- ★ A series of squares will provide amenities supporting their immediate context. Unique programmes of activity will be developed for each square with the physical elements supporting this programme.

6.8.4 Environmental Value

New and existing green spaces support a variety of species and habitats bringing significant improvements to both Meridian Water and the area's biodiversity. The open space network provides a framework within which healthy ecosystems, providing essential natural services such as food, flood management and the provision of clean air and water, can grow. The ecologically sensitive design strategy will entwine both the physical and natural environment to collectively mitigate the effects of climate change.

Objectives:

- ★ Enhancing and maximising the ecological value of the Lee Valley Regional Park through increasing habitats and biodiversity;
- ★ Open space, waterways and built form will create an integrated SuDS network;
- ★ Planting and habitat will create, enrich and extend wildlife corridors and create buffer zones between community spaces and transport infrastructure;
- ★ Tree planting, green roofs and swales will help mitigate the effects of climate change within the built environment, whilst habitat creation and re-profiling of some of the waterways will enhance biodiversity; and
- ★ Where possible green spaces will function as temporary flood storage.

6.8 Public space



Figure 6-20 New West End Parkland

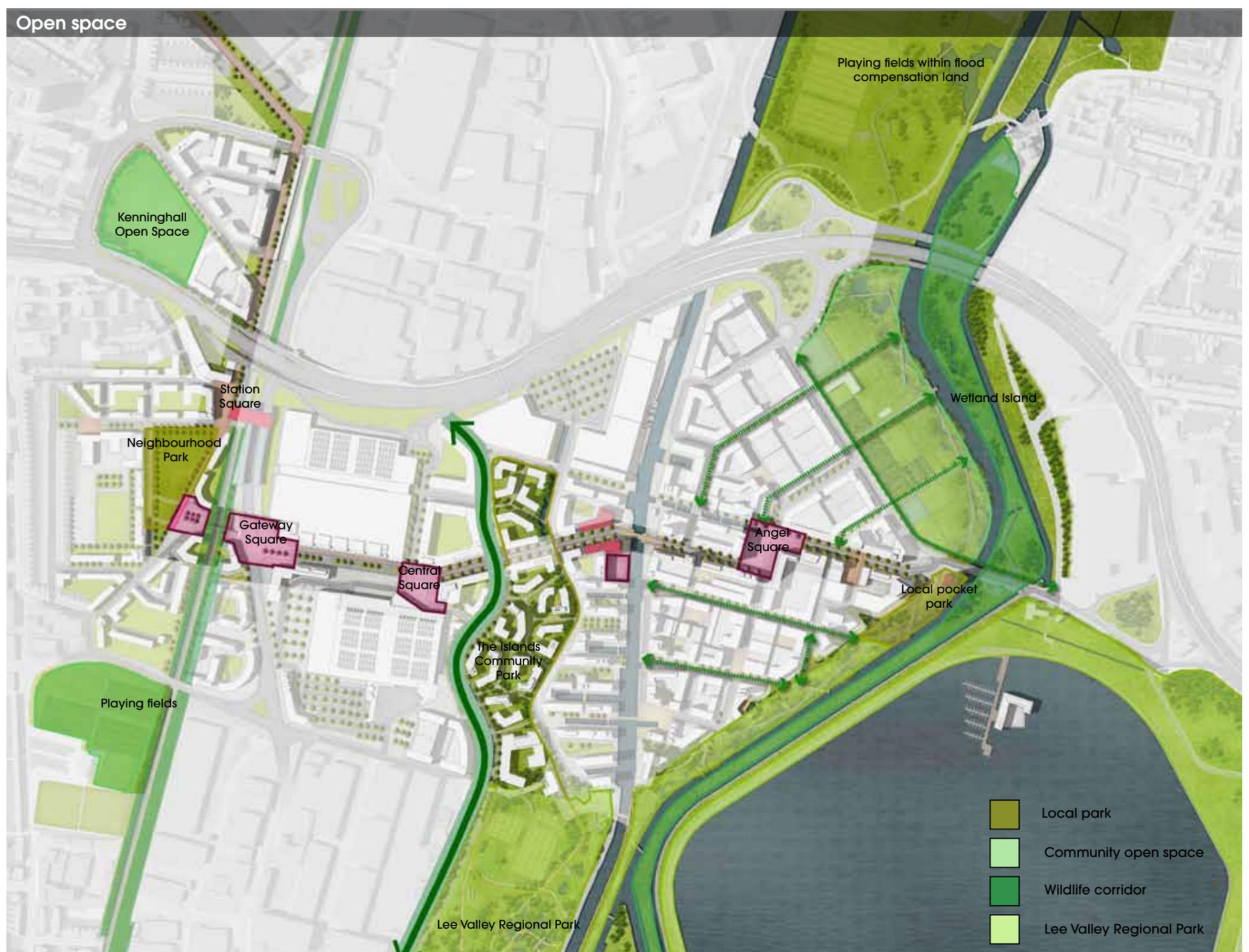


Figure 6-21 Open Space



6.9 Energy

Development in Meridian Water has an important role to play in meeting the Mayor of London’s commitment in the London Plan to achieve an overall reduction in London’s carbon dioxide emissions of 60% (below 1990 levels) by 2025, and to contribute to achieving wider priorities for sustainable development and adapting to climate change.

These priorities include:

- Improving energy efficiency through the energy hierarchy: to use less energy, supply energy efficiently and use renewable sources of energy;
- Connecting to, or contributing towards an existing or planned decentralised energy (DE) network, where practical and viable to do so;

- Ensuring development is future proofed and designed to be capable of connecting to a future area-wide network; and
- Ensuring development takes a flexible and resilient approach to climate change.

Meridian Water is in a good position to support the achievement of these priorities. Development in the area has the potential to deliver future sustainable growth that is supported by an extensive, integrated public transport, pedestrian and cycling network, connecting to a wide mix of housing, employment and leisure uses. The proximity of these activities and the opportunities for future development will help reduce the need for people to travel, and to travel by unsustainable means.

6.9.1 The Vision

Meridian Water will be at the forefront of new environmental technology and innovation. Development will contribute to making the area a cleaner, greener and more pleasant place to live and work. Future developments in the area will need to be energy efficient and make appropriate choices based on the way people live.

6.9.2 Opportunities

A Low Carbon Future and Energy Efficiency

All future development in Meridian Water will need to achieve the highest standards for sustainable design and construction having regard to technical feasibility and economic viability. This is in line with the London Plan and Enfield’s Local Plan, which includes standards for development based under the Code for Sustainable Homes (CfSH) and the Building Research Establishment Environmental Assessment Method (BREEAM), or equivalent scheme or rating if these are updated or replaced.

Environmental Assessment Methods

Enfield’s Submission Development Management Document Policy 50 states that the Council will require developers to demonstrate compliance with the following targets relating to the relevant adopted environmental assessment methods.

For new build residential development:

a) Major Development:

Proposals must achieve the following standards under the Code for Sustainable Homes, or equivalent scheme or rating if this is updated:

- ★ 2013 to 2015 – seek to achieve Code Level 4; and
- ★ 2016 onwards – Code Level 5 and moving towards zero carbon (Code Level 6 often expressed as net zero carbon for regulated and unregulated energy).

b) Minor Development:

- ★ Proposals must achieve Code Level 4 (or equivalent rating if this scheme is updated), where it is technically and economically viable to do so.

For non-residential development:

a) Major Development:

Proposals must achieve the following standards under the relevant Building Research Establishment Environmental Assessment Method 2011 scheme or equivalent rating/scheme if this is replaced or updated:

- ★ 2013 to 2015 – Seek to exceed a “Very Good” rating;
- ★ 2016 to 2018 – “Excellent” rating; and
- ★ 2019 onwards – Moving towards an “Outstanding” rating (often expressed as net zero carbon development).

b) Minor Development:

Where appropriate, minor non-residential development will be required to submit the relevant Building Research Establishment Environmental Assessment Method 2011 (or replacement/equivalent) pre-assessment for consideration.

There may be exceptional circumstances where other planning requirements or site characteristics mean that the required level of the Code/Building Research Establishment Environmental Assessment Method cannot be met (including technical feasibility and economic viability). Unless such circumstances exist and are clearly demonstrated, planning permission is unlikely to be granted for proposals which do not achieve the required standards.

Decentralised Energy Generation

On a sub-regional scale, the Council is working with the neighbouring authorities of Haringey and Waltham Forest, supported by the GLA, on the creation of a new city-scale decentralised energy network, known as the Lee Valley Heat Network. The objective is to capture affordable low carbon heat from waste to energy facilities and dedicated combined heat and power (CHP) plants, and supply it to buildings and industry across the Lee Valley.

These ambitions are supported by evidence from research undertaken to support Enfield’s Local Plan and the Mayor’s Upper Lee Valley Opportunity Area Planning Framework. Work to date includes the Low Carbon and Renewable Energy Study (2010) and feasibility studies on the potential for a Decentralised Energy network in the Upper Lee Valley (2011 and 2012). These feasibility studies have confirmed that a strategic heat network can deliver heat to sites across the Lee Valley, including those in Enfield, and will deliver significant economic, environmental and social benefits. These include the potential to:

- ★ Facilitate inward investment and new jobs;
- ★ Provide affordable low carbon heat to residents, businesses and public sector users; and
- ★ Help to tackle fuel poverty by reducing heating costs and reducing London’s carbon footprint.

The creation of the Lee Valley Heat Network will initially use heat, and potentially steam, from the Energy from Waste (EfW) facility at the Edmonton EcoPark. This facility already generates enough heat to kick-start a strategic network. Over time the network will connect additional heat sources elsewhere in the Lee Valley, including local gas-fired and renewable combined heat and power (CHP) schemes, and will be extended to meet additional heat demand from new industrial customers and buildings.

The resultant strategic heat network could be the boost that London as a whole needs in order to make a step change in its progress towards achieving the Mayor of London’s 25% energy production through the use of localised decentralised energy systems by 2025.

The proposed scale of development, high heat demand, proposed mix of land uses and opportunity for laying pipe infrastructure in an integrated manner means development in Meridian Water is ideally placed to form Phase 1 of the Lee Valley Heat Network.

The route to be taken by the strategic heat network is determined by the expected location of heat demands. The Feasibility Study (2012) proposed a route that ran east-west from the Edmonton EcoPark roughly parallel to the North Circular as far as Silver Street and then turning south. Further feasibility work undertaken to date has led to a revision of this route. The revised route runs south from Angel Road, through Meridian Water, to Northumberland Park and then west into Haringey. The optimum route will be subject to the business case, which is being developed.

The Masterplan, in line with the London Plan and Enfield's Local Plan requires that all future development in Meridian Water should connect or contribute towards an existing or planned decentralised energy network, where practical and viable to do so.

In determining whether development is suitable to connect to the Lee Valley Heat Network, the Council will consider the heat demand of the development and its proximity to the network as well as the feasibility and viability of connecting or including plant equipment.

At this point, it is clear that developments with the following characteristics will be suitable to connect:

- * High heating demand;
- * Mixed energy demands, including a range of heating and electricity demands throughout the day; and
- * Proximity to an existing or planned decentralised energy network – the location of the existing and proposed networks can be found on the London Heat Map www.londonheatmap.org.uk.

Further details are set out in Chapter 8 of Enfield's Submission Development Management Document and the Mayor of London's District Heating Manual for London (2013). Where connection to an existing or future decentralised energy network is feasible or viable, a commitment to a connection may be secured via a legal agreement.



View towards Canal - side West from the River Lee Navigation



7 Delivering



7.1 Making it Happen

7.1.1 Introduction

The ambitious plans for Meridian Water are of a scale to deliver a destination of regional significance. Many of the regeneration and development aspirations in the Masterplan need to be supported by a comprehensive package of physical, social and economic infrastructure investments. Key items of infrastructure will need to be provided to support each phase of residential and commercial development.

The Masterplan provides a holistic site wide vision and includes key objectives and principles to guide future development. It is by no means definitive and there may be alternative solutions for each site. Other ideas may arise through further discussions with particular landowners, stakeholders or other delivery agents or be shaped in response to site constraints that may yet emerge. These options will be considered by the Council as part of the development of individual sites, but they will all have to demonstrate their impact on the site-wide Masterplan.

The following section will address how the Masterplan is envisaged to be delivered. This includes the forecast infrastructure requirements and costs, the financial viability, the outline programme, and the delivery action plan.

7.1.2. Delivery partners

Alongside its regulatory role, the Council presently owns a small portion of the land at Meridian Water, although it has not ruled out land acquisition through negotiation or compulsory purchase, where this would enable development. The main development opportunities at Meridian Water are currently in the hands of nine landowners, which are capable of bringing forward major development projects. This will help to support an effective and comprehensive regeneration of the area. A number of the landowners seem enthusiastic about bringing forward planning applications on their land in the near future, meaning that the Council's first priority has rightly been to put in place a robust planning framework to help determine such applications. This will obviously help to avoid piecemeal development and uncoordinated infrastructure delivery. There is also now increasing awareness and interest in the Masterplan from developers and builders, who are approaching the Council with direct expressions of interest.

There are a range of roles that the Council may adopt in the delivery of the Masterplan, depending on such considerations as the need for it to take a 'hands-on' development role, its assessment of risk, resource commitment and availability of funding. The Council may:

- ★ Adopt a lead 'developer' role (e.g through land acquisition, funding and direct delivery) taking almost an 'investment' interest, for example, in a joint venture redevelopment vehicle etc;
- ★ Allow the landowners to take the lead on any redevelopment in their own time, with the Council relying on its planning/regulatory powers to ensure that separate planning applications will cumulatively result in the delivery of the vision for regeneration set out in the Masterplan; and
- ★ Adopt a role somewhere between the above two ends of the spectrum, as a 'facilitator' (i.e. coordinating and managing cooperation between landowners and other delivery agents, and leading on some elements of the development).

The extent of the Council's present land ownership, prevailing public sector funding constraints, the severability of the main components of the Masterplan (over a number of sites in different ownerships) and the general support and ambition of the principal landowners evident to date indicate that it is appropriate for the Council to at least initially to take a 'Regulator'/'Facilitator' role in the delivery of Meridian Water.

It is envisaged that delivery of the majority of development at Meridian Water will be through a traditional private sector led/funded model, with the Council working with individual landowners and promoters of development and leading where necessary on the delivery of the critical infrastructure elements and, where appropriate, a small number of 'demonstration projects'.

In adopting this role, the Council will:

- ★ Adopt the Masterplan as a 'Planning and Urban Design Guidance'. This will provide a degree of certainty to landowners, potential developers and the local community of the Council's expectations for development. As such it will be used as a material consideration when assessing planning applications (in addition to other relevant national, regional and local planning policies);
- ★ Ensure that individual development proposals contribute to the general infrastructure delivery across Meridian Water. This will ensure that contributions are made in proportion to the scale and uses of each scheme having regard to scheme viability in line with the Council's Local Plan;

- ★ Look to establish a consistent approach to the collection and pooling of development contributions. This will be based on a standard charge per square metre of commercial floorspace and per residential unit to ensure delivery of the necessary infrastructure elements;
- ★ Ensure that each individual planning application adheres to the key principles set out in this Masterplan. This will ensure that they do not compromise the delivery of the overall vision or viability of other sites in the Masterplan area;
- ★ Maintain a capital budget to inject into the project. This will deliver regeneration through prudential borrowing, or by the use of other funding streams, where appropriate business justification can be made;
- ★ Engage in compulsory purchase and direct delivery of development where necessary, for example to bring forward development within defined timescales or to undertake demonstration projects;
- ★ Adopt a key role in the promotion and marketing of the Masterplan. This will give investors/developers confidence of the Council's support and commitment to deliver the opportunity that is Meridian Water; and
- ★ Continue to engage, co-ordinate and work with landowners and developers and a range of other stakeholders. This includes the GLA, TfL, North London Strategic Alliance, neighbouring authorities, local residents, local traders, utility providers and voluntary and community sectors and will ensure that individual proposals and planning applications are brought forward, and that the Masterplan is delivered.

In preparing this Masterplan, the Council is providing a clear and formal planning framework for individual landowners to deliver development on their respective areas. The Masterplan provides the basis for partnership working by bringing forward opportunities and coordinating private and public sector investment. Such an approach will ensure that the efforts exerted by individual partners and stakeholders in progressing their individual agendas will be consistent with, and supportive of, the vision, aims and guidance of the Masterplan. In this sense, the Masterplan provides a key tool in promoting and facilitating development and regeneration of Meridian Water.

The delivery of the public realm, transport improvements and other critical infrastructure identified in the Masterplan will provide an attractive canvas for investors and developers and attract more people to the area. In addition to funding support, the Council may take a key role to play in land assembly and more detailed feasibility appraisals for each phase of development, and in assisting, where appropriate, in the relocation of existing uses where this is necessary to facilitate overall Masterplan delivery.

In order to build momentum in the delivery of those elements of the Masterplan that will bring the most transformational change to Meridian Water, the Council is prepared to work with landowners and developers to bring forward a small number of 'demonstration projects' in which the Council will consider providing an element of funding support and joint working to "de-risk" proposals, if necessary.

In the unlikely event that landowners do not bring forward planning applications on their land consistent with the Masterplan, and implementation is delayed beyond the Council's reasonable expectations, the Council may adopt more of a lead 'developer' role in the delivery of the Masterplan. This would entail the Council undertaking a more significant role in land acquisition and assembly potentially through the use of compulsory purchase order powers and/or direct delivery through partnerships with developers.

7.1 Making it Happen

7.1.3 Delivery zones

An initial assessment of the delivery challenges has been undertaken on a zonal basis. This is to highlight development issues to landowners and development promoters and to identify the critical infrastructure elements in each zone and it highlights the inter-relationships between some of the elements, both in timescale and financial terms. This exercise has also served to identify priority actions for inclusion in the Action Plan (note these 'zones' are distinct from the Neighbourhood Areas described in Chapter 5, and the areas defined for phasing purposes later in section 7.1.6). The six delivery zones are identified in the table and on the fold-out plan overleaf. Critical infrastructure which typically forms part of the Causeway and is essential to the delivery of the Masterplan is highlighted in blue in the table and hatched on the plan. Elements which need to be developed comprehensively are boxed as linked development in the table.

Zone	Element	Notes	
ZONE 1	A	Reconfigured parkland to include flood compensation	Linked development to allow for E, F and G
	B	Primary school	
	C	Residential and hotel/employment/social unit	
	D	Business Use and Kenninghall Open Space	
ZONE 2	E	Angel Road Station upgrade and New integrated bus interchange transport hub	Linked development
	F	Pedestrian and cycle path -1st Phase (Causeway)	
	G	Upgraded underpass or pedestrian bridge in 1st phase	
	H	Pedestrian and cycle Causeway – 2nd Phase	Linked development
	F2	Pedestrian and cycle Causeway – 1st Phase	
	I	Rays Road	
ZONE 3	J	Reconfigured Tesco	Linked development
	K	New illuminated spine street (Ikea section), enhanced frontage & environmental public realm improvements (Causeway)	
	L	Ikea and rationalised parking	
	M	Employment and residential	
	N	Residential	
	O	Employment	
ZONE 4	P	Causeway - new illuminates spine street including bridges over Salmon and Pymes Brooks (Causeway)	Linked development
	Q		
	R	Residential	Linked development
	S+S1	All through school and reconfigured parkland to include flood compensation	
	T	Canal corridor enhancement scheme – Western edge	
	U	Reconfigured retail employment	
ZONE 5	V	Angel Bridge - vehicle bridge over Lea Navigation (Causeway)	Linked development
	W	Demolition of building at Angel Square (Causeway)	
	X	Upgraded street (illuminated) - Angel Bridge to Harbet Road (Causeway)	
ZONE 6	Y	Employment regeneration	Linked development
	S2	Reconfigured parkland to include flood compensation	
	Z	Residential and employment comprehensively redeveloped	Linked development
	S2	Reconfigured parkland to include flood compensation	

 = Critical infrastructure

Figure 7-1 Delivery Zones (pull out plan)



7.1 Making it Happen

7.1.4 Development and critical infrastructure delivery by zone

To support the degree of development envisaged at Meridian Water and to ensure the delivery of the regeneration aspirations of the Masterplan, a range of strategic infrastructure will be required. This will include an improved public transport system, new areas of public realm, new road access and bridges, land raising and flood mitigation measures to protect new development and minimise flood risk.

Where possible, infrastructure has been located to minimise potential land assembly/delivery issues (e.g the bridge landing on the eastern side of the River Lee Navigation and alignment of the Causeway link to Harbet Road utilises land in public ownership through the PSA/DoE).

	Critical infrastructure item	Estimated £(million)*
(E)	Angel Road Station upgrade	3.5
(E)	New integrated bus interchange transport hub	1.00
(F)	Pedestrian and cycle path (illuminated) between station and bridge	0.35
(G)	Upgraded underpass or pedestrian bridge over railway line	1.60
(K)	New illuminated spine street (Ikea section)	1.50
	Enhanced frontage and environmental public realm improvements	0.75
(P)	New vehicle bridge over Salmons Brook	1.00
	New vehicle bridge over Pymmes Brook	1.00
	New illuminated spine street (Dwyer section)	0.75
(Q)	New illuminated internal spine street (Dwyer section)	0.75
(V)	Angel Bridge - new vehicle bridge over Lea Navigation	2.50
(W)	Demolition of building at Angel Square	0.5
(X)	Upgrading of street (illuminated) – Angel Bridge to Harbet Road	0.75
	Total:	15.95

Total for flood compensation	1.84
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* All identified costs in the table are construction only cost allowances. It is expected that as each element comes forward further detailed modelling and testing will be undertaken. Flood compensation costs are based on the supporting Flood Risk Scoping Report.

This 'critical infrastructure' is identified in the table above, and an initial assessment of the cost of each item was accounted for in the viability assessment. The estimated infrastructure costs were updated in November 2013.

As ownership at Meridian Water is predominantly in the hands of third parties, this puts particular importance on the Delivery Strategy and the Action Plan.

The development opportunities in the Masterplan area present a range of delivery challenges. Each project will require a suite of technical assessments and detailed studies in order to work through and address the range of delivery challenges, risks, financial commitments, land ownership and other issues.

In Zones 1 and 2, which predominantly comprise land in 'Meridian Angel' in the ownership of National Grid, the Council, Network Rail and GD Metals, a significant part of the site is subject to flood risk. Residential and business development will therefore require on-site flood mitigation/compensation (defined through a flood risk assessment) and provision of a new primary school. Existing Council-owned green space at Ladysmith Road may be incorporated with National Grid land for flood mitigation purposes and as part of a reconfiguration of green space provision. Alternatively, the Council's land may offer potential for development independently.

Upgrading of Angel Road Station to provide extended platforms, new railway crossings, improved access/drop-off and an integrated bus interchange is a critical component of the improved infrastructure provision necessary at Meridian Water and will entail safeguarding/provision of appropriate land and the creation of the initial (pedestrian and cycle) phases of the Causeway. A detailed design of this station upgrade and interchange facility is identified as an early phase priority in the Action Plan.

North of the A406 North Circular Road, the Council's long-term aspiration is to secure relocation of GD Metals' operation, subject to the identification of a suitable alternative site. This would facilitate the redevelopment of this site and offers the opportunity to re-open and improve access to Angel Road Station and substantially enhance the amenity of the immediate area. In the short to medium term, however, it is recognised that GD Metals remains an important local employer whose existing operation should continue to be accommodated.

Existing Council-owned land at Rays Road offers potential for a new vehicle access to Angel Road Station and for business development.

In Zone 3, which predominantly comprises land in the Gateway and the western part of Meridian Central in the ownership of Tesco, IKEA/LandProp and National Grid (the 'teardrop' site west of Meridian Way), creation of the Causeway as the principal point of arrival at Meridian Water, is a critical infrastructure requirement. The existing Glover Drive corridor is wide enough to provide the street-scene enhancements envisaged in the Masterplan proposals, with the opportunity for new frontage development along this section. Extension of the Causeway eastward to create the link to the Islands (and ultimately linking to Harbet Road) will require some reconfiguration of the existing IKEA car park and road access arrangement between the IKEA and Tesco store sites, creating new road frontage sites for employment and residential use. Delivery of this section of the Causeway will entail a land agreement with IKEA on the basis of a detailed design and feasibility study which would include the proposed bridge crossings of Salmons Brook and Pymmes Brook. This study is identified as an early phase priority in the Action Plan.

Zone 4, which predominantly comprises land in the Islands, Canal-side West and the east part of Meridian Central in the ownership of Dwyer, LandProp and PRUPIM, will form the residential heart of the new community, benefitting from water frontage to the River Lee Navigation and both Salmons Brook and Pymmes Brook, and immediate proximity to the Lee Valley Regional Park to the south.

The majority of the site is subject to flood risk. Development of at least the Dwyer and LandProp areas would, therefore, require land-raising and flood mitigation, a scheme for which should be defined through a detailed flood risk assessment. Land within the Lee Valley Regional Park to the south offers the potential for flood compensation subject to agreement with the Lee Valley Regional Park Authority on a suitable scheme for this area.

Critical infrastructure provision in this zone comprises the Causeway and a new spine road providing vehicle access to the LandProp area. Residential development of the eastern part of the Islands will be expected to address the need for a corridor enhancement scheme on both sides of the River Lee Navigation to deliver an attractive waterfront environment for this new residential community and a buffer to existing employment uses to the east of the canal.

The opportunity is also identified to reconfigure Ravenside Retail Park to provide new retail and employment space.

In Zone 5, which predominantly comprises the link between Meridian Central/Canal-side West and Meridian East in the ownership of Dwyer and HSBC Pension Fund, the key delivery issue is the completion of the Causeway link to Harbet Road crossing the River Lee Navigation. Creation of an enhanced road link from Angel Square to Harbet Road will require land acquisition and some building demolition. A technical feasibility and design study of the bridge and link is identified in the Action Plan as a middle phase priority. The area identified to land the bridge over the River Lee Navigation is in public ownership through the PSA/DoE, and the Council will engage with PSA/DoE to seek early delivery of this site.

Existing properties in Zone 6, which comprises land within the Meridian East area, are predominantly occupied for employment use. The buildings (and the activities they accommodate) are of varying quality, many subject to protected tenancy agreements. There are a large number of businesses in this area that the Council could support and safeguard. There is, however, significant opportunity to enhance this area and to deliver new and more intensive employment space through both selective plot redevelopment and whole-scale area regeneration, including the potential to introduce some residential accommodation and a broader range of commercial space, particularly close to the Causeway.

As Meridian East is currently protected as Strategic Industrial Location (SIL) in Enfield's Local Plan and the Mayor's London Plan, the introduction of non-employment uses into this area will need to satisfy relevant planning policy and address and weigh the displacement of SIL against opportunities new uses will present to deliver higher density modern employment space on site or, potentially, in suitable alternative locations in the Masterplan area.

7.1.5 Financial Viability and Funding

During the preparation of the Masterplan, there has been ongoing assessment of the viability of the development proposals by BNP Paribas Real Estate. High level, but appropriate, development appraisals have been undertaken which have helped shape the final proposals. These appraisals have adopted the approach promoted by the GLA for assessments of economic viability, whereby a 25% premium has been added on top of the existing land value to account for the premium any landowner would require in order to be encouraged to pursue consent for new development rather than simply selling for existing use, with a view to ensuring that any development proposed in the Meridian Water area is ultimately financially advantageous for land owners and potential investors.

These appraisals provide an indication of viability but as usual, are subject to change due to a number of factors, including changing market conditions, refinement of proposals, detailed infrastructure and cost information, as well as phasing and the approach to implementation.

There are a number of potential delivery and funding mechanisms available, and the preferred route may be different for each element. Many of the major development elements (e.g. the residential and commercial space) can be delivered as private sector developments/investment (if necessary, after viability and the market have been proven through a small number of demonstration projects). Strategic infrastructure can be delivered through direct developer provision (where

deliverable on their landholding) supported by pooled developer contributions (e.g. through the Community Infrastructure Levy 'CIL'), but some public sector funding support may be required (for example, the provision of land, assistance in grant funding applications and technical input).

It is heartening that the Council, working closely with Network Rail and the Greater London Authority, has been able to demonstrate the financial and economic benefits of additional investment in rail infrastructure. Network Rail have made provision for £44 million to be invested in three-tracking, whilst the GLA have made provision to fund the balance of £25 million. Three-tracking will run between Stratford and Brimsdown and, when completed, will enable a four trains per hour service at Angel Road Station. The GLA have also made provision to invest another £2.5 million to help upgrade Angel Road Station. Meanwhile, the Education Funding Agency have agreed to provide the funding for the primary school proposed for the Meridian Angel Neighbourhood, whilst discussions about the further funding of the Masterplan's proposed 'all-through' school and University Technical College are also progressing well.

All individual development proposals will be expected to contribute to general infrastructure delivery across the area. Contributions will be in proportion to the scale and uses of each scheme, taking into account scheme viability.

The use of S106 agreements is an important part of the planning application process. It is necessary to ensure that key infrastructure and services are provided to meet the needs arising from new development. The Council's adopted S106 Supplementary Planning Document sets out the circumstances in which a S106 agreement is likely to be required and provides details on the type and level of contribution expected. The purpose of the S106 Supplementary Planning Document is to establish a transparent, fair and consistent process for negotiating S106 agreements in advance of the Council adopting a Community Infrastructure Levy charging schedule in 2014.

The S106 Supplementary Planning Document was adopted by the Council in November 2011 and the requirements set out in the S106 Supplementary Planning Document apply to applications registered on or after 11th November 2011.

Table 5.1 (Appropriate Mitigation Measures) of the S106 Supplementary Planning Document summarises the range of planning obligations that will be sought for different types and scales of development, listing the requirements for development within the Meridian Water Place Shaping Area as set out in the table set out to the left.

Chapter 6 (Contributions) of the S106 Supplementary Planning Document provides further details about the contributions that will be required, for example stating that:

- ★ On developments of 10 or more residential units, 40% affordable housing should be delivered, of which 70% should be social housing and 30% affordable housing; and
- ★ Within the Meridian Water Place Shaping Priority Area, contributions will be sought and pooled for the following;
- ★ Station access improvements to Angel Road; and
- ★ Improved local bus services between Central Leaside and Edmonton Green; and Central Leaside and Angel Edmonton.

In addition to the requirements set out in Table 5.1, the S106 Supplementary Planning Document states that the Council will also seek contributions that are site specific (such as site remediation works for contaminated land and contributions to flood risk prevention and mitigation) and, for each S106 agreement, a S106 management fee. All legal fees will be borne by the applicant.

Type of development and threshold	Appropriate mitigation (priority 1 = highest)
Residential (and mixed use including residential) – appropriate mitigation and priority related to threshold (1-9 dwellings, 10-49 dwellings, 50 dwellings or more)	Affordable housing Learning and skills facilities Transport / sustainable measures Tackling climate change Accessible and affordable childcare Health facilities and services Business and employment initiatives Public art, culture and other community infrastructure Policing Public realm provision Improving the built environment and community safety through good design Open space and recreation Green infrastructure and landscape features Biodiversity Fire and emergency services
Business uses (use class B1, B2, B8 or similar sui generis uses) – creation of 1,000m2 or more of additional floorspace	Transport / sustainable measures (1) Tackling climate change (2) Business and employment initiatives (3) Public realm provision (3) Green infrastructure and landscape features (3) Biodiversity (3)
Retail and leisure – creation of 1,000m2 or more of additional floorspace	Transport / sustainable measures (1) Tackling climate change (2) Business and employment initiatives (3) Public realm provision (3) Green infrastructure and landscape features (3) Biodiversity (3) Policing (3) Improving the built environment and community safety through design (3) Public art, culture and other community infrastructure (3)
Night time economy uses (licensed premises) – all new development including change of use	Policing (3)
Community uses – schools, health care centres / surgeries	Transport / sustainable measures (1) Tackling climate change (2) Public realm provision (3) Green infrastructure and landscape features (3) Biodiversity (3)
All types of development – proposals involving the loss of employment uses or land or the loss of employment	Business and employment initiatives (3)
All types of development – to be determined on a site by site basis (with particular focus on development in or adjacent to sites of metropolitan importance for nature conservation)	Biodiversity (3)

7.1 Making it Happen

Proposals will be considered on a case by case basis having regard to individual site circumstances and the relative priorities for S106, using the GLA's Development Control Three Dragons Toolkit or an appropriate alternative residual valuation viability assessment.

Further guidance is set out in the S106 Supplementary Planning Document at www.enfield.gov.uk/s106.

Under provisions introduced by the Planning Act 2008, local authorities are empowered to levy a charge for new development for pooled contributions towards the local and sub-regional infrastructure required to support new development. Community Infrastructure Levy ('CIL') will be levied in pounds per sq.m of the net additional increase in floor space for development creating 100 sq.m of gross floor space or more, or for the creation of a new dwelling where this is less than 100 sq.m. Community Infrastructure Levy will replace S106 agreements as the main tool for securing pooled contributions for infrastructure after April 2014.

The Council has commenced work on developing its Community Infrastructure Levy Charging Schedule. The Council published a Preliminary Draft Charging Schedule for consultation in June 2013. The S106 Supplementary Planning Document will be reviewed upon adoption of Enfield's Community Infrastructure Levy, scheduled for 2014. Further information can be found at www.enfield.gov.uk/cil.

On adoption of Enfield's Community Infrastructure Levy or after 6 April 2014 (whichever comes first) the Regulations restrict the pooling of obligations to a maximum of 5 planning obligations for an item of infrastructure that is not intended to be funded by Community Infrastructure Levy, thereby significantly limiting the scope of S106. This will result in the scaling back of S106 contributions and the Council will explore the role of Community Infrastructure Levy and S106 in the delivery of Meridian Water through the development of its Charging Schedule.

It should be noted that the Mayoral Community Infrastructure Levy commenced on 1 April 2012. The Mayoral Community Infrastructure Levy is charged on most developments in London and, in Enfield (as a 'Zone 3 borough'), is charged at £20 per sq.m.

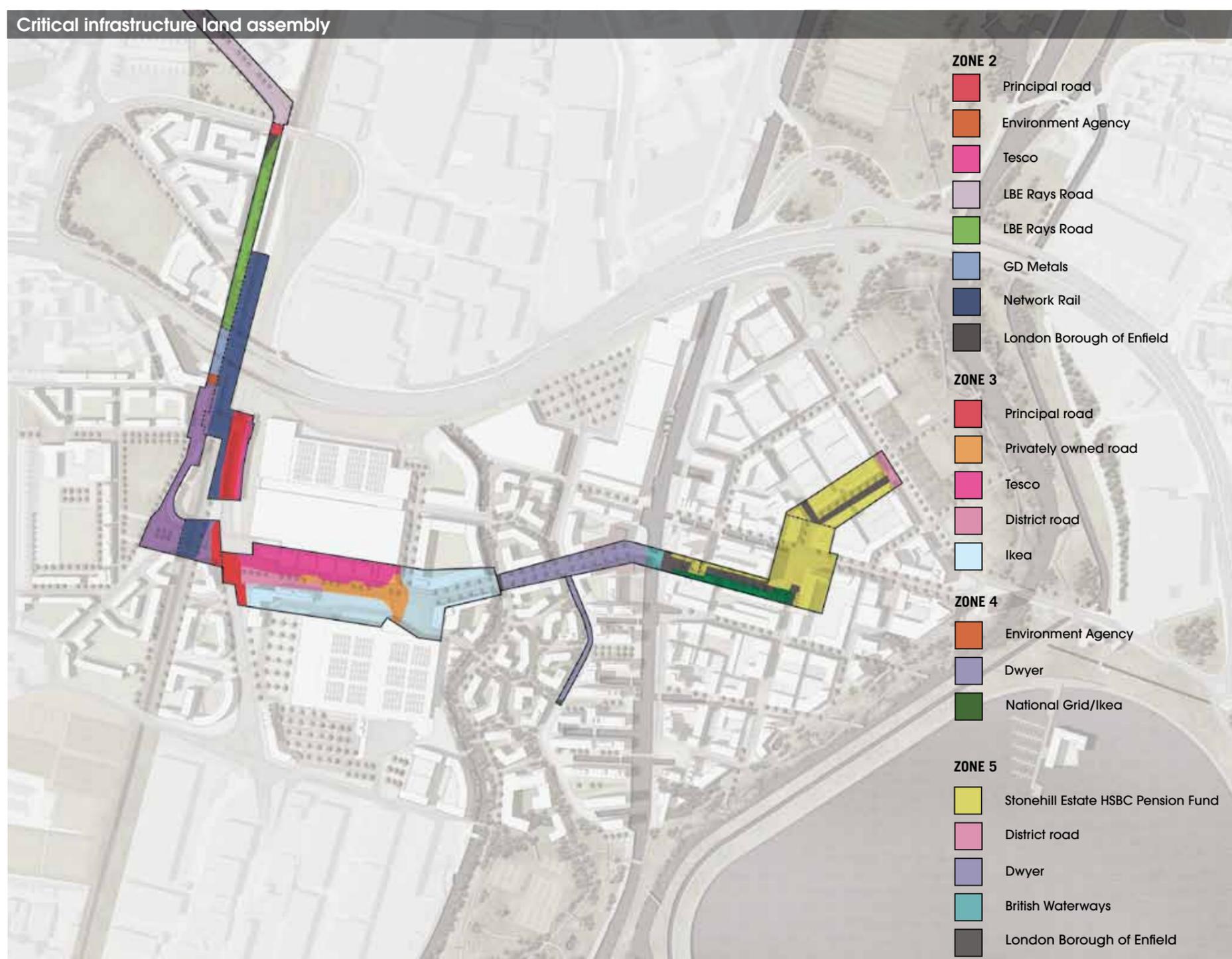


Figure 7-2 Critical infrastructure land assembly

7.1.6 Phasing of Development

Key elements of the Masterplan will be brought forward over differing timescales depending on the nature of that element, delivery mechanism, market considerations, funding availability and land assembly issues. The Council will monitor and keep the delivery of the Masterplan under regular review to ensure that development proceeds in a well-phased and coordinated fashion.

Early phase priority in the delivery of the Masterplan is focused on the areas where ownership and existing circumstances indicate that delivery will be most straightforward. Other areas are planned to be deliverable discretely, through a flexible phasing and implementation strategy. This approach avoids potential delay from the need for complex cooperation and equalisation agreements between landowners, and recognises that delivery of later phases of development will depend on successful completion of earlier phases (building momentum incrementally as successive phases take advantage of rising sales values and the establishment of Meridian water as a 'destination').

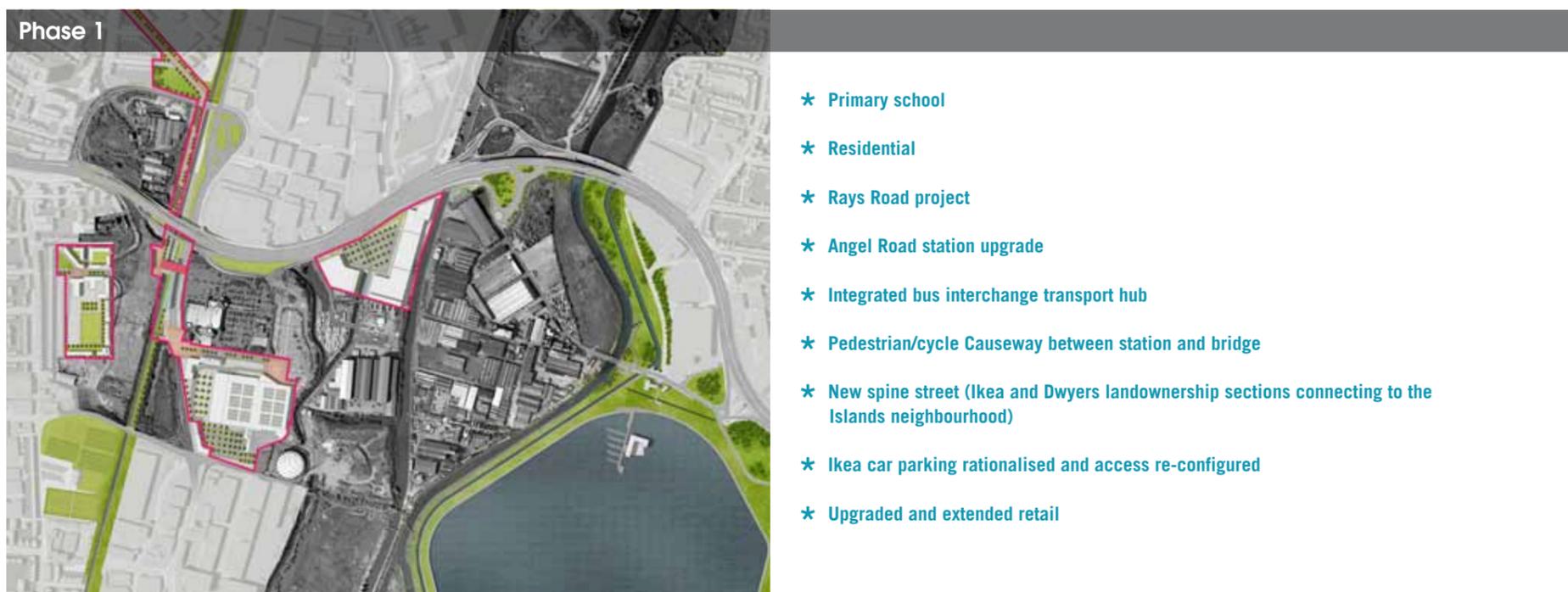


Figure 7-3 Phase One

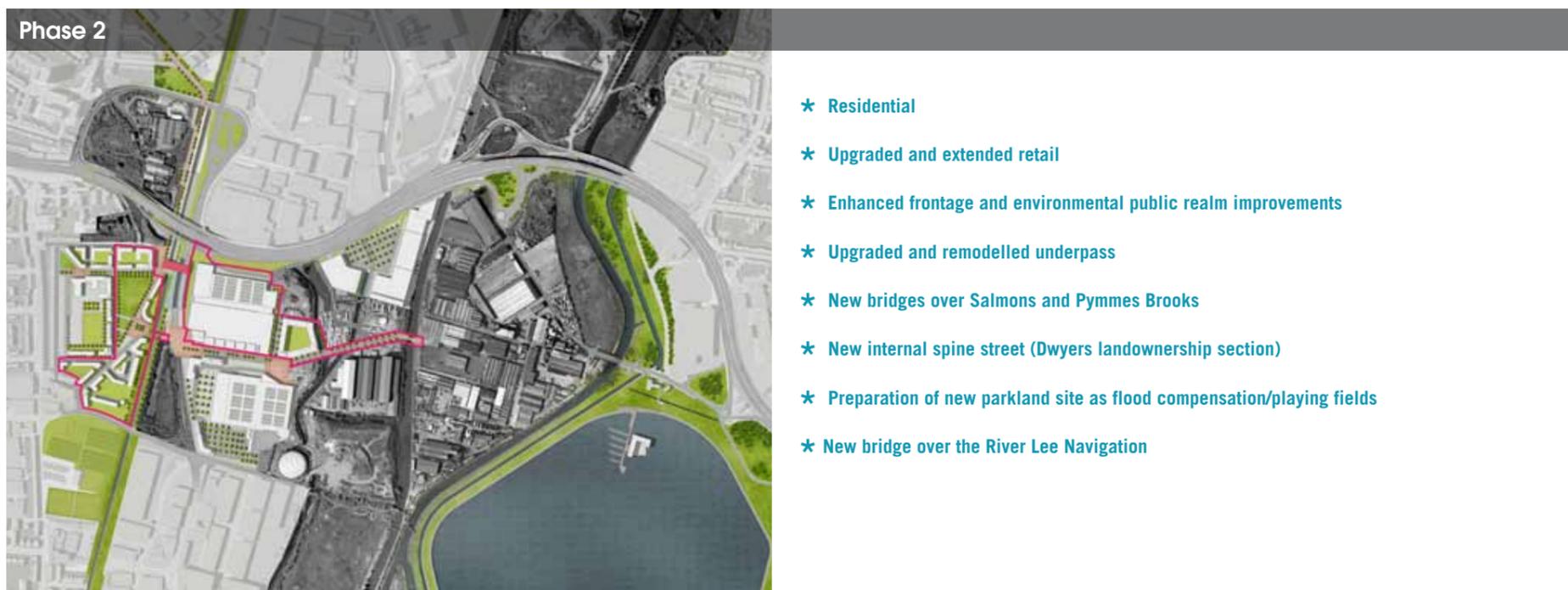


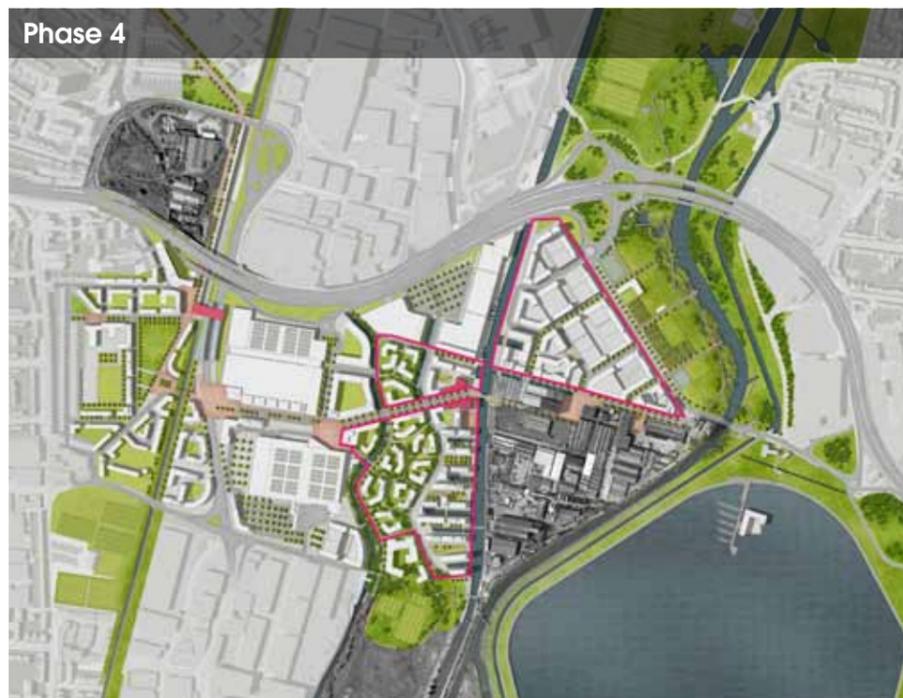
Figure 7-4 Phase Two

7.1 Making it Happen



- ★ Residential
- ★ New hotel/employment/social uses
- ★ SIL
- ★ University Technical College (UTC)
- ★ Demolition of buildings at Angel Works Square
- ★ Upgrading of street from Angel Works Square to Harbet Road
- ★ Upgraded and extended retail
- ★ All-through school
- ★ Completion of new parkland/playing fields

Figure 7-5 Phase Three



- ★ Residential
- ★ SIL

Figure 7-6 Phase Four



- ★ Residential
- ★ SIL

Figure 7-7 Phase Five

7.1.7 Action plan

Key to the success of this Masterplan is that its vision, aims and guidance will intrinsically be linked to an action plan for delivery in the future. This action plan needs to be realistic and based on detailed assessments of what is deliverable and viable. This has been the basis for the production of the Masterplan to date.

An initial 5 year action plan has been prepared, which sets out the main practical steps and exercises that the Council and its delivery partners should undertake to appraise and define more detailed development elements and facilitate the commencement of early phase delivery of the Masterplan.

A series of actions are identified based upon the following timeframes:

- * Year 0: Immediate actions to initiate Masterplan implementation;
- * Year 1-2: Actions to enable early phase development delivery; and
- * Year 3-5: Actions to define middle/later phase and longer term development opportunities.

The Action Plan is intended to support implementation and facilitate delivery, defining who is going to do what, when and how. This Action Plan is intended as a working document and it will require regular review and updating as time progresses, circumstances change, actions are completed and new actions identified. The responsibility for monitoring performance, ensuring completion of identified actions and rolling forward the Plan will be discharged by the Council.

7.1.8 Risk Mitigation

The delivery strategy and Action Plan incorporate a number of risk mitigations which aim to prevent or minimise potential delays to the delivery of the Masterplan. These are summarised in the Table on page 145.

7.1 Making it Happen

Action Plan Table							
Object / Zone	Item	Estimated cost (costs are indicative)	Potential Funding	Key Delivery Partners	Year 0	Year 1-2	Year 3-5
Delivery	1. Master Plan Adoption	N/A	N/A	Enfield Council	xx		
	2. Marketing/Promotion Plan	N/A	N/A	Enfield Council	xx		
	3. Angel Road Rail Upgrade/ Bus Interchange Detailed Design Study	£250,000	TfL, Growing Places Fund, etc	Enfield Council, Network Rail, TfL, TOCs	xx		
	4. Causeway (Safeguarding and Design) Study	£75,000	Growing Places Fund, etc	Enfield Council, TfL	xx		
	5. Development Infrastructure Funding Study	£40,000	Growing Places Fund, etc	Enfield Council	xx		
	6. Critical Infrastructure Delivery Plan	£40,000	Growing Places Fund, etc	Enfield Council		xx	
	7. Engineering Design Three-Tracking	N/A	Network Rail/GLA/TfL	Network Rail/GLA/TfL/Enfield Council		xx	
	8. Development Contingency Plan	£25,000	Growing Places Fund, etc	Enfield Council	xx		
	9. Developer Contributions/CIL Charging Schedule	N/A	N/A	Enfield Council	xx		
	10. Establish MW Capital Budget	N/A	Enfield Council	Enfield Council	xx		
Zone 1	1. Flood Alleviation/Compensation Scheme	£75,000	Landowner	Landowner, Enfield Council, EA	xx		
	2. Primary School Design/Costing Study	N/A	N/A	Enfield Council	xx		
	3. Primary School Implementation	N/A	EFA	EFA/LCLT/Enfield Council		xx	
	4. All-through School Design/Costing Study	N/A	N/A	Enfield Council	xx		
	5. GD Metals Relocation Site Search	N/A	N/A	Enfield Council/GD Metals		xx	
	6. Ladysmith Road Open Space – development opportunities discussions	N/A	N/A	Enfield Council/Nat Grid	xx		
	7. Causeway (Pedestrian/Cycleway) detailed design scheme	£100,000	tbc	Enfield Council, TfL	xx		
Zone 2	1. Flood Alleviation/Compensation Scheme (linked to Zone 1 Study)	N/A	N/A	Landowner, Enfield Council, EA	xx		
	2. Rays Road Project Delivery	N/A	N/A	Enfield Council	xx		
	3. Implement Three-Tracking	N/A	Network Rail/GLA	Network Rail/GLA/TfL/Enfield Council			xx
	4. Implement Angel Road Station Improvements	N/A	GLA/Enfield Council/Network Rail	Network Rail/GLA/TfL/Enfield Council			xx
Zone 3	1. IKEA Land Agreement	N/A	N/A	Enfield Council, IKEA LandProp		xx	
	2. Detailed Design Options	N/A	N/A	Landowners/Enfield Council		xx	
	3. Causeway (Gateway to The Islands) detailed design scheme	£150,000	tbc	Enfield Council, TfL, landowners		xx	
	4. Design and Build UTC	N/A	tbc	Enfield Council/Private Sector		xx	

Action Plan Table (continued)							
Zone 4	1. Flood Alleviation/Compensation Scheme and Lee Valley Regional Park landscape scheme	£65,000	Landowner	Landowner, Enfield Council, EA, Lee Valley Regional Park Authority Enfield Council, TfL, landowners			xx
	2. Causeway (The Islands to Meridian East) and Spine Road detailed design scheme and land requirement study	£125,000	tbc	Enfield Council, Canals and Rivers Trust			xx
	3. Canal Corridor Enhancement Scheme	£75,000	tbc				xx
	4. Design and Build All-Through School	N/A	EFA	Enfield Council/EFA		xx	
Zone 5	1. Angel Square Design Scheme	N/A	N/A	Landowner, Enfield Council			xx
	2. Causeway (The Islands to Meridian East) and Spine Road detailed design scheme and land requirement study (linked to Zone 4 Study)	N/A	N/A	Enfield Council, TfL, landowner			xx
Zone 6	1. Flood Alleviation/Compensation Scheme and Lee Valley Regional Park landscape scheme	£50,000	Landowner	Landowner, Enfield Council, EA, Lee Valley Regional Park Authority, Thames Water			xx
	2. Causeway (Pedestrian/Cycleway) detailed design scheme	£100,000	tbc	Enfield Council, TfL			xx
	3. Business Occupancy and Accommodation Needs Study	£70,000	tbc	Enfield Council, landowners	xx		

Risk Mitigation table		
Cause of delay	Effect	Mitigation
Prolonged economic slump suppressing property values	Pressure on scheme viability	Multiple site phasing across different land ownership areas avoids the potential for a single landowner to delay overall Master Plan delivery. The viability appraisals also assume more conservative density, build and sales rates in early phases, with an expectation that densities increase and absorption improves over time
Failure of landowners to bring sites forward for development	Impact on subsequent phases and later phase critical infrastructure delivery	The Development Infrastructure Funding Study and Critical Infrastructure Delivery Plan will identify how key infrastructure components can be brought forward early to 'pump prime' further investment
The Development Infrastructure Funding Study and Critical Infrastructure Delivery Plan will identify how key infrastructure components can be brought forward early to 'pump prime' further investment	Impact on subsequent phase and critical infrastructure delivery	The phasing plan assumes that 2 developers could be on site at any one time. The diversity of landownerships and development opportunities available, and the flexible phasing strategy minimise the likelihood that delay in progressing one development element will obstruct delivery elsewhere. The Development Contingency Plan will address the risk of non-delivery by existing landowners
Delay to approval of the Master Plan/AAP as part of the planning framework (and the CIL Charging Schedule)	Lack of a robust planning framework on which to base planning application decisions and potential decision-making delays	A Borough-wide spatial strategy, including specific guidance for the Meridian Water Place Shaping Area, is already in place though the Enfield Plan – Core Strategy 2010-2025, enabling planning decisions to be taken by the Council even without approval/adoption of the Master Plan/AAP.
Cost inflation of the critical infrastructure elements	Pressure on scheme viability and potential increase in public sector funding commitment	The Development Infrastructure Funding Study will assess detailed cost and funding options and consider alternative solutions in the event that some elements prove unviable.

7.2 Development Guidance

The National Planning Policy Framework (NPPF), the Mayor's London Plan and Enfield's Local Plan (particularly the Core Strategy, submission Development Management Document and emerging Central Leaside Area Action Plan) set the overarching planning policies within which development in Meridian Water will take place.

Part of the role of the Masterplan is to help focus these policies, giving assistance to partners bringing forward developments in Meridian Water.

The following section looks to capture the key points of the Masterplan in a condensed form, enabling potential partners to understand how these policies will help to shape and deliver the vision set out in this Masterplan and how the Masterplan will potentially be used to interpret these policies.

7.2.1 Design of the Causeway

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1, 4, 6, 7;
- ★ London Plan Policy 2.3, 2.6, 2.7, 2.8, 2.13, 2.14, 2.16, 6.2, 6.7, 7.1, 7.2, 7.5;
- ★ Core Strategy Policy 1, 24, 25, 26, 30, 37, 38, 39; and
- ★ Submission Development Management Document Policy 8, 47, 48.

The creation of an east/west link through Meridian Water that connects Edmonton Green with Waltham Forest and Haringey through the creation of the Causeway is an essential piece of infrastructure. By orientating development on to the Causeway and linking it to the growth envisaged at each of the neighbourhoods, the Causeway will help to unlock the opportunities envisaged at Meridian Water.

The preferred route across the area is shown in Section 4 of the Masterplan. This route runs from Montagu Road across to Angel Road Station, underneath the North Circular Road and across Meridian Way to join the existing route of Glover Drive. The route then continues along Glover Drive to the east, crossing Pymmes and Salmons Brooks and the Lee Navigation. It continues through the Harbet Road Industrial Estate and then connects to Harbet Road.

Proposals will be expected to safeguard this route. They should show how this route will be delivered in conjunction with the wider re-development of the adjacent areas, by identifying how the route will connect safely to adjacent areas, and land ownerships, in order to create a continuous multi-functional route through Meridian Water and beyond.

The Council would expect that any such route must be designed to be navigable in both directions by double-decker routemaster buses, along with providing clear, safe and direct pedestrian and cycle provision in order to ensure public transport access, as a minimum.

If there are any cases where this is not feasible or viable, proposals will be expected to identify an alternative suitable route that will serve the same purpose, including connectivity to adjacent sites and adjacent elements of the Causeway

Where applications come forward for sites that are not adjoining the proposed link route as identified within the Masterplan proposals, applicants will be expected to show how their proposals can directly and actively contribute to enable the delivery of the primary Causeway route through their design, layout, orientation and facilitation (including through Planning Contributions) of this route. This may be through the provision of connecting routes, through orientation of buildings towards the Causeway route or other appropriate design measures.

In line with relevant policies, proposals that include designs for part, or the entire Causeway route will be required to prioritise pedestrian and cycle users wherever practical and feasible. Such prioritisation will identify how the proposals have been designed to create distinct, clear and safe cycle ways and footpaths that provide the quickest and most effective route feasible and viable between active street frontages (such as shops), community uses, public transport interchanges, homes and employment uses along the Causeway route.

Applicants will also be expected to show the creation of clear and safe pedestrian and cycle links from within development sites to the Causeway by using the shortest route available that provides an efficient, safe and pleasant user experience in order to effectively prioritise pedestrian and cycle users in Meridian Water.

Proposals will be refused if they are in conflict with the delivery of a continuous link route across the site and beyond, including where proposals inadequately provide for connection and connectivity to adjacent sites, and where proposed route(s) do not adequately prioritise safe and effective pedestrian and cycle linkages.

7.2.2 The Causeway as a place for interaction and communities

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1, 4, 6, 7;
- ★ London Plan Policy 2.3, 2.6, 2.7, 2.8, 2.13, 2.16, 6.2, 6.7, 7.1, 7.2, and 7.5;
- ★ Core Strategy Policy 1, 9, 16, 30, 37, 38, and 39; and
- ★ Submission Development Management Document Policy 28, 34, 47 and 48.

The Causeway will form the primary east/west route across Meridian Water, by connecting major centres of activity and their surrounding neighbourhoods with both adjacent sites and beyond to the wider area.

Development proposals in Meridian Water should identify the prioritisation of this link as the primary route for orientation, navigation and connectivity. Proposals should also show how secondary and tertiary routes are designed to provide connectivity to this route, channelling activity within Meridian Water towards this link. This includes identifying how the proposals are designed to prioritise the Causeway as the centre for activity within Meridian Water.

The Masterplan identifies the opportunity on a number of sites to deliver public squares and spaces along the Causeway route in order to create vibrancy and activity. Where a development site includes a portion of the Causeway link route, and sufficient appropriate space exists adjacent to the route, applicants will be expected to include for the provision of a public space or square in order to facilitate use of the route as a community resource and link.

In line with relevant policies, these spaces must be designed as the primary locations for community infrastructure and for the clustering of active food and drink uses, with active frontages on all sides and a prioritisation of pedestrians over highway traffic.

These squares and spaces will be designed to encourage 24-hour use and activity where possible and appropriate, taking into account adjacent uses (including residential premises) and the safety of users in relation to the highway network.

7.2.3 The Causeway as an infrastructure corridor

This section provides further guidance on the following Policies:

- ★ National Planning Policy Framework Section 1, 4, 5, 6 and 7;
- ★ London Plan Policy 2.3, 2.6, 2.7, 2.8, 2.13, 2.16, 6.2, 6.7, 7.1, 7.2 and 7.5;
- ★ Core Strategy Policy 1, 16, 30, 37, 38 and 39; and
- ★ Submission Development Management Document Policy 28, 47 and 48.

The Causeway will form the primary or secondary trunk route for essential infrastructure, including high speed broadband, decentralised energy, gas and electricity networks and other infrastructure.

Proposals should show how the Causeway route through each site will act as the trunk route for servicing and subterranean infrastructure, including details of how the routes will positively and proactively connect to the Causeway route and servicing on adjacent sites.

Infrastructure provision within the Causeway route should be designed to minimise disruption in the form of future maintenance and road works, wherever possible using shared channels and space set away from the main highway in order to allow maintenance and servicing to take place without disrupting the highway network.

7.2.4 Enabling low carbon development

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1 and 10;
- ★ London Plan Policy 5.1, 5.5, 5.6 and 5.8;
- ★ Core Strategy Policy 20 and 38; and
- ★ Submission Development Management Document Policy 52 and 53.

The Council is working closely with neighbouring boroughs, the GLA, and other partners on the development of a decentralised energy network. This is known as the Lee Valley Heat Network, and it will capture affordable low carbon heat from waste to energy facilities and combined heat and power plants, and supply it to buildings and industry across the Lee Valley.

The Council's Feasibility Studies published in 2011 and 2012 have confirmed that this strategic network can deliver heat to sites across the Lee Valley, as well as economic, social and environmental benefits.

Development will be required to connect to or contribute towards the Lee Valley Heat Network or any other existing or planned decentralised energy networks.

Meridian Water has been identified as one of the major heat opportunities to enable the delivery of the Lee Valley Heat Network. In order to facilitate its delivery DMD Policy 52 supports, and in some cases facilitates the provision of infrastructure to support new and expanding networks, this includes safeguarding routes and land for such uses. Detailed route planning for Phase 1 of the Network, including Meridian Water, is currently underway and further details of the preferred route/s will set out in the Central Leaside Area Action Plan to be published later in 2013.

7.2.5 Housing in Meridian Water

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 6 and 7;
- ★ London Plan Policy 2.6, 2.7, 2.13, 2.14, 3.1, 3.3, 3.4, 3.7, 3.8, 3.9 and 3.15;
- ★ Core Strategy Policy 1, 2, 4, 5 and 38; and
- ★ Submission Development Management Document Policy 1, 2, 3, 6 and 8.

As set out in Core Policy 38 of the Council's Core Strategy and DMD Policy 8, the Council will look to achieve the delivery of up to 5,000 new residential units within Meridian Water.

It is acknowledged that density will vary significantly depending on the nature of sites and proximity to public transport in line with other relevant policies within the Council's Local Plan, the London Plan and development viability.

As a result, the Council has identified target housing numbers for each Neighbourhood within the masterplan, identifying the potential for development over the lifespan of the vision within the masterplan.

Applicants will be expected to show how they have either achieved this number of units within their proposals, exceeded them if appropriate, or demonstrated why this level of development cannot be achieved.

Neighbourhood	No. Dwellings
Meridian Angel	990
Meridian Central	584
The Islands	827
Canal - side West	1056
Meridian East	979

7.2.6 Housing mix

Core Policy 5 of Enfield's Core Strategy seeks to ensure that new developments offer a range of housing sizes to meet housing need. The policy sets out that over the lifetime of the Core Strategy the Council will plan for the following borough-wide mix of housing:

- ★ Market housing: 20% 1 and 2 bedroom flats (1-3 persons), 15% 2 bedroom houses (4 persons), 45% 3 bedroom houses (5-6 houses) and 20% 4+ bedroom houses (6+ persons) houses;
- ★ Social rented housing: 40% 1-2 bedroom units, 30% 3-bedroom units, 30% 4+bedroom units; and
- ★ Intermediate housing: The Council will seek a range of housing types including affordable homes for families. The mix will be determined on a site by site basis.

With up to 5,000 new homes envisaged on an 80 ha site, high density development is promoted in the Masterplan. Higher densities will be expected close to Angel Road station, near bus routes, and along the waterways.

Residential development must meet the standards set out in the Council's Submission Development Management Document and in the Mayor's Housing Design Guide.

Dwelling Mix	Percentage
1 bedroom	20-30%
2 bedroom	30-40%
3 bedroom	20-35%
4+ bedroom	10-20%

7.2.7 Open Space and the Lee Valley

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 11;
- ★ London Plan Policy 2.18, 3.2, 7.18 and 7.19;
- ★ Core Strategy Policy 1, 30, 33, 34, 35 and 38; and
- ★ Submission Development Management Document Policy 8, 77 and 81.

Given Meridian Water's prime location adjacent to Tottenham Marshes and the Lee Valley Regional Park, the Council will expect proposals to ensure that areas of open space within Meridian Water integrates, promotes awareness, and creates access to the Park, particularly where direct physical linkages can be made.

7.2.8 Childcare in Meridian Water

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1;
- ★ London Plan Policy 3.16 and 3.17;
- ★ Core Strategy Policy 7 and 8; and
- ★ Submission Development Management Document Policy 16 and 18.

In line with relevant policies, the Council supports proposals for appropriate new community facilities and requires development to ensure the creation of prosperous and sustainable communities.

Early years facilities include nurseries, pre-schools, playgroups, and crèches. Proposals for early years facilities will be encouraged to co-locate with other community uses and use existing community facilities where appropriate. The focus for such facilities is expected to be within Meridian Central and close to schools. The Masterplan promotes the provision of these facilities in order to bring benefits to the community by reducing barriers to work for parents and carers.

Support will be given to proposals for facilities that meet the needs of employees of workplaces within the Meridian Water area and adjacent employment sites in order to reduce unnecessary travel and promote productivity.

7.2.9 Enhancing the Waterways

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1, 4 and 11;
- ★ London Plan Policy 7.24, 7.25, 7.26 and 7.27;
- ★ Core Strategy Policy 35; and
- ★ Submission Development Management Document Policy 62, 63 and 75.

One of the key features of Meridian Water is its proximity to the Lee Valley, its waterways and reservoirs. This presents an opportunity to intensify their use and to enhance them to create a leisure and recreation destination.

In line with DMD Policies 62 and 63 in relation to the protection and improvement of watercourses and flood defences, new development must make space for water and not harm the integrity of flood defences. The protection of existing flood defences is important because the failure of these assets could have severe consequences and pose a risk to life and property. Development must be set back from watercourses to preserve their settings and to minimise risks to development.

The naturalisation of watercourses releases the potential for additional waterflow and flood storage, and provides amenity and biodiversity values. Development must realise opportunities for de-culverting existing watercourses, where appropriate and there will be a general presumption against further culverting.

In line with DMD Policy 75, the Council promotes proposals that seeks to maximise the opportunities waterways have to contribute towards the quality of the environment. These include the introduction of recreational and residential uses, and their use for transport.

Where development proposals are located adjacent to existing waterways, applicants will be expected to demonstrate how their designs create a positive relationship between that development and the waterways. Proposals must also ensure that the waterside is publicly accessible and that opportunities to de-culvert and naturalise waterfront areas wherever practical and feasible, should be explored.

7.2 Development Guidance

7.2.10 Air Quality

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 7, 8 and 11;
- ★ London Plan Policy 7.14;
- ★ Core Strategy Policy 7 and 32; and
- ★ Submission Development Management Document Policy 65 and 81.

Given the proximity of the North Circular Road to Meridian Water, proposals for sensitive uses such as schools and residential development, should be located away from major sources/areas of air pollution. However, where this is not possible, developments must be designed and sited to reduce exposure to air pollutants by incorporating mitigation measures. These could include:

- ★ Setting back development and creating screening/buffer zone between the development façade and pollution source;
- ★ Ventilation provision (including maintenance arrangements);
- ★ The location and orientation of amenity space/balconies, opening windows and doors;
- ★ The internal layout, particularly the placement of habitable rooms away from the elevation fronting the pollution source;
- ★ Restricting residential use to upper floors;
- ★ Ensuring the design of the development does not create a canyon effect (the design should create gaps in building façades to help free flow of air); and
- ★ Transport related measures (such travel plans, car clubs, public transport, car free/minimal car parking/preferential parking for low emission vehicles).

To this end, the Council will look favourably on proposals that identify opportunities to use pollutant suppression technologies, absorbent construction materials, landscaping and other means to improve air quality in the local area.

Similarly the Council will work with developers to identify opportunities for tree planting along the route of the North Circular to provide a buffer to PM10s and other air quality contaminants.

7.2.11 Gas Holders

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 172;
- ★ London Plan Policy 2.13, 2.14 and 5.22;
- ★ Core Strategy Policy 1, 32, 37 and 38; and
- ★ Submission Development Management Document Policy 67.

Whilst the Council acknowledges the role that the gas network has had in the development and history of Meridian Water, the current infrastructure is considered neither necessary nor fit for purpose given its disconnection from the wider gas network, unless National Grid advise otherwise.

In line with relevant Policies the Council will therefore

seek the removal of the existing gas holders and associated infrastructure as appropriate and the revocation of any unnecessary hazardous substances consents on the sites as part of redevelopment proposals.

The Council considers that the existing three gas holders, associated pumping stations and pipelines form a single unit, and will expect redevelopment proposals to identify and plan for the removal of all three gas holders and associated non-essential infrastructure as part of the redevelopment of any site containing sub-regional gas network infrastructure.

The Council does not expect any of the areas currently occupied by redundant gas-related infrastructure to be utilised for temporary uses, including storage, and any such applications are to be resisted

7.2.12 Noise Pollution

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 11;
- ★ London Plan Policy 7.15;
- ★ Core Strategy Policy 32; and
- ★ Submission Development Management Document Policy 68.

Given the proximity of the North Circular Road, existing mix of land uses and their associated activities, and the need to make the most sustainable use of land, there is the potential for some conflict between noise sensitive and noise generating developments. The impacts of noise are a material planning consideration, and these should be carefully managed through the development process.

The effect of noise can be minimised by separating conflicting developments. Noise sensitive developments/land uses should not be located close to major sources of noise (such as road, rail and certain industrial development) without appropriate levels of mitigation. New noise generating development must be located away from noise sensitive development/uses (such as schools, hospitals, residential units, open space, and nature conservation sites), unless mitigation measures are used effectively to reduce noise levels.

In line with the relevant policies, and the London Plan's Sustainable Design and Construction Supplementary Planning Guidance, developments should minimise the adverse impacts of noise. Good design measures and an effective layout to minimise the adverse impact of noise should be part of any overall package of noise reduction, and should be considered in advance of, and in addition to, sound insulation.

The Council will look favourably on policy compliant proposals within the Meridian Water site that identify opportunities, where viable and feasible, to use landscaping, planting, fencing and other appropriate means to reduce noise pollution in the local area and to provide noise baffling.

7.2.13 Employment in Meridian East

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1 and 7;
- ★ London Plan Policy 2.13, 2.14, 2.17 and 4.4;
- ★ Core Strategy Policy 1, 14, 15, 16, 30, 37 and 38; and
- ★ Submission Development Management Document Policy 19, 20, 22, 23 and 24.

Parts of the masterplan area are currently safeguarded for employment uses. Policies in the Local Plan are informed by robust evidence and recognise that the borough needs to continue to redevelop and renew existing industrial locations in order to meet the changing needs and demands of businesses.

The Meridian East neighbourhood is currently made up of the Harbet Road Industrial Estate. This estate is safeguarded as Strategic Industrial Location (SIL) in Enfield's Local Plan and the London Plan. Core Policy 14 and DMD Policy 19 indicates that only industrial related proposals will be permitted. Proposals involving the loss of industrial capacity will be refused.

The northern part of Meridian Angel is currently occupied by an existing Metals and Waste recycling facility. This facility is safeguarded as a Locally Significant Industrial Site in Enfield's Local Plan. Core Policy 15 and DMD Policy 20 states that proposals involving the loss of industrial uses within such areas will be refused unless it can be demonstrated that the development is no longer suitable and viable for its existing or alternative industrial uses.

The London Plan and Enfield's Core Strategy require the provision of flexible employment space for small enterprises within the borough. Small businesses have a crucial role to play in expanding employment opportunities. DMD 24 promotes the provision of small business units as part of proposals for the redevelopment of an existing employment-generating site and as part of mixed-use schemes in appropriate locations.

The 2012 update to the Employment Land Study concluded that there is strong demand for small, managed workspaces with flexible, short-term leases, especially for new business start-ups. It is therefore essential to ensure there is sufficient space within the borough that is flexible enough to accommodate and facilitate the growth of such businesses. The Council will consider proposals for small business favourably as part of redevelopment schemes in appropriate locations identified to the south of the Causeway, as shown in the Masterplan.

Proposals for slightly larger units (approximately 1,000 to 3,500 square metres) will be considered favourably to the north of the Causeway route, as shown in the Masterplan. This is to enable larger units to make better use of the road and waterway networks for freight opportunities, whilst ensuring sufficient space is set aside for smaller units that have a key role to play in Enfield's employment offer in London. Proposals that fail to maximise the potential for high density employment uses in this area are likely to be refused.

In line with the National Planning Policy Framework, the Council will review industrial land allocations in the borough on a regular basis. The aim is to ensure only land which has a reasonable prospect of being used for such purpose remains safeguarded. Allocations are informed by objectively assessed need with significant weight placed on the priority of supporting economic growth in the borough. Some existing employment land may ultimately offer the potential for the intensification of industrial uses to facilitate wider regeneration opportunities.

The Council is preparing a Strategy and Action Plan for Enfield's industrial estates to maximise the contribution of existing industrial land in facilitating job growth and diversification of the borough's economic base. The recommendations from this Study will inform the wider vision for the future of industrial land in the Central Leaside area, including Meridian Water. This will be considered further in the Central Leaside Area Action Plan which will be published for consultation later in 2013.

7.2.14 Tall Buildings

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1, 6, and 7;
- ★ London Plan Policy 2.13, 2.14, and 7.7;
- ★ Core Strategy Policy 30 and 38; and
- ★ Submission Development Management Document Policy 37, 38, 43 and 44.

The Council is committed to high quality urban design. In order to achieve the aspiration to achieve up to 5,000 new homes at Meridian Water, the Masterplan identifies opportunities for a variety of different building heights across area, and these are set out in the table below

Neighbourhood	Building Height
Meridian Angel (adjacent to Kimberley Road)	3 – 4 storeys
Meridian Angel (adjacent to park)	6 – 7 storeys
Meridian Angel (adjacent to transport hub)	8 – 10 storeys
The Gateway (along Meridian Way)	5 – 6 storeys
The Gateway (adjacent to Gateway Square)	Up to 15 storeys
Meridian Central (adjacent to Causeway)	Up to 15 storeys
Meridian Central (between Causeway and North Circular)	3 – 7 storeys (car parking must be subservient to primary buildings)
The Islands	2 – 6 storeys
The Islands (adjacent to Causeway)	6 - 10 storeys
Canal-side West (waterside)	6 – 7 storeys
Canal-side West(adjacent to Causeway)	6 – 10 storeys
Meridian East	3 – 5 storeys
Meridian East (waterside)	6 – 8 storeys
Meridian East (facing Banbury Reservoir)	Up to 12 storeys
The Parklands	2 – 3 storeys (where appropriate)

7.2.15 Design Typologies

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 7;
- ★ London Plan Policy 7.4 and 7.6;
- ★ Core Strategy Policy 30 and 38; and
- ★ Submission Development Management Document Policy 37, 38 and 39.

In line with relevant design Policies, the design of residential properties in the Meridian Angel Neighbourhood should take design cues from the existing residential typologies in the Kimberley Road and Dysons Road area. The Council will actively support and look favourably on development proposals that pay homage to the design of the existing surrounding neighbourhoods, whilst creating a distinctive sense of place and character, so that the two areas can be seen as linked in form and massing, but with its own distinct sense of place.

Development in other Neighbourhoods within Meridian Water, particularly in The Islands and Canal-side West areas, should look to create their own distinctive typology focused around integration with the neighbouring park land and waterways, maximising the opportunity to engage with these areas.

The Council will support proposals for development that take the opportunity to create a new and distinct typology for residential and business premises in this area.

Conversely, the Council will seek to resist applications that do not address the potential for high quality innovative design that exists in this area, that do not embrace the nearby parklands and waterways or that simply mimic existing designs and typologies in the surrounding area.

7.2.16 Public Transport Accessibility

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 4;
- ★ London Plan Policy 6.7, 6.9 and 6.10;
- ★ Core Strategy Policy 12, 25, 26, 30 and 38; and
- ★ Submission Development Management Document Policy 37.

Public transport accessibility and particularly providing public transport links along the Causeway link forms a major focus of the development proposals in Meridian Water.

Proposals should ensure that every part of the development area is within either 400m of a bus stop or 400m of the Causeway route (either established or proposed).

Proposals adjacent to the West Anglia rail line must be designed to ensure that safe access can be provided to Angel Road station by the quickest and most effective route feasible through their design, layout, orientation and facilitation in order to encourage the use of Angel Road Station, which is due to be improved.

Where appropriate, planning contributions will be sought to improve accessibility to, and patronage of, public transport in Meridian Water. This will include provision of new bus routes, improvements to Angel Road station and ancillary measures to improve awareness of and usage of public transport in line with Core Policy 26 of Enfield's Core Strategy.

Applicants should identify opportunities for the provision of secure cycle parking at transport interchanges and at key trip generators within the site.

7.2.17 Bridging the Waterways

This section provides further guidance on the following policies:

- ★ National Planning Policy Framework Section 1, 4, 6 and 7;
- ★ London Plan Policy 2.3, 2.6, 2.7, 2.8, 2.13, 2.14, 2.16, 6.2, 6.7, 7.1, 7.2 and 7.5;
- ★ Core Strategy Policy 1, 24, 25, 26, 30, 37, 38 and 39; and
- ★ Submission Development Management Document Policy 8, 47 and 48.

In order to ensure accessibility and connectivity across Meridian Water, proposals for sites directly adjacent to existing waterways will be expected to identify how residents and visitors will be able to quickly cross the waterways to ensure east/west connectivity through the site.

This connectivity should be provided in the first instance via the Causeway link in line with the overall vision for Meridian Water. Ancillary crossings in appropriate locations, will be acceptable provided they provide a secondary crossing to the main Causeway link.

Where bridges are proposed over the Lee Navigation, all crossings should ensure a minimum waterway width of 5.69m and a minimum air draft of 2.45m at all points in order to maintain its navigability.

Development proposals in Meridian Water, particularly but not limited to sites adjacent to the River Lee Navigation should show how non-public transport based vehicular traffic flows are designed and orientated to avoid crossing the River Lee Navigation, unless in exceptional circumstances, such as flood events dictate otherwise, in order to ensure highway safety, minimise traffic congestion and prioritise pedestrian and cycle usage in line with relevant Policies.

7.2.18 Managing Flood Risk

Development proposals should:

- ★ Include a detailed site specific Flood Risk Assessment (FRA) with each individual planning application. These should be prepared in accordance with the requirements set out in National Planning Policy Framework and Enfield's Level 1 and 2 Strategic Flood Risk Assessments;
- ★ Apply the Sequential Test to steer development towards areas of low flood risk, where possible.; Where this is not possible, the Council will need to be satisfied that the Exception Test can be met. Flood Risk Assessments accompanying the planning applications must demonstrate how this will be achieved in each instance, including how the development will be safe without increasing flood risk elsewhere, to be classed as "safe" as defined in Enfield's Level 2 Strategic Flood Risk Assessment;
- ★ Include a map of the site in the Flood Risk Assessment, to show the extent of the area that is within 300 mm of the 100 year plus climate change flood level. Proposals that include basement dwellings and any other types of "highly vulnerable" development, as defined in Table 2 of the Technical Guidance to the National Planning Policy Framework, should not be considered in this area;
- ★ Where flood risk management measures are proposed to reduce flood risk and increase the scope for redevelopment of the area, these must be carried out in accordance with the Thames Region Catchment Flood Management Plan and the requirements of the Environment Agency;
- ★ In respect of the area between Meridian Way and Pymmes Brook, any future site specific Flood Risk Assessments should address the residual risk of a blockage in the Pymmes Brook culvert that is potentially causing significant flooding;
- ★ Where site-specific Flood Risk Assessments identify areas of residual flood risk (for example through failure of flood risk management infrastructure such as culverts), this should be mitigated by implementing flood resilience or resistance measures to individual properties;
- ★ Employ Sustainable Drainage Systems (SUDS) for all new developments and provide attenuation for an up to 1 in 100 year event with climate change. It is likely that overland storage will be required to achieve this, which may create opportunities to provide enhanced green spaces within the site. Storm water collection, green roofs, flood flow routes and swales will create a unique landscape that is resilient to flooding;

- ★ Aim to incorporate any relevant measures identified by the Surface Water Management Plan for Enfield;
- ★ Address any fluvial flooding surrounding the Lee Valley Navigation by increasing the available flood storage capacity within the floodplain; and
- ★ As part of the flood mitigation strategy, support the naturalisation of the River Lee Diversion Channel, replacing edges with widened natural sloped banks, creating recreational and bio diverse benefits.

These recommendations accord with the objectives of the Thames Region Catchment Management Plan and the Lower Lee Valley Flood Risk Management Strategy. Enfield's Level 2 Strategic Flood Risk Assessment should be read in conjunction with the Masterplan.

Information on the use of sustainable drainage techniques is one of the outputs of a Level 2 Strategic Flood Risk Assessment. General information on the purpose and use of Sustainable Urban Drainage Systems can be found in Chapter 6 of Enfield's Level 1 Strategic Flood Risk Assessment.

An important point to note is that since the publication of the Level 1 Strategic Flood Risk Assessments, the Flood and Water Management Act 2010 has re-defined the way that Sustainable Urban Drainage Systems for new development will be approved and adopted in the future. Although secondary legislation is required it is anticipated that the new regime for Sustainable Urban Drainage Systems will be implemented in April 2014 or soon afterwards. Prior to this the Department for Environment, Food and Rural Affairs will publish National Sustainable Urban Drainage Systems Guidance. Once the new legislation is in force all new developments will be required to implement Sustainable Urban Drainage Systems designed and constructed in accordance with this guidance. The Flood and Water Management Act defines all Unitary Authorities such as the London Borough of Enfield as Lead Local Flood Authorities.

The Council's policies on managing flood risk and sustainable urban drainage systems are set out in Policies 59-63 of the Development Management Document. These policies may be supplemented in the future by the forthcoming National Sustainable Urban Drainage Systems guidance, however, the current proposals, which are in line with the London Plan and Environment Agency requirements, are as follows:

- ★ All major developments must achieve greenfield run off rates (for 1 in 1 year and 1 in 100 year events); and
- ★ All other development should seek to achieve greenfield run off and must maximise the use of SUDS, including at least one 'at source' SUDS measure resulting in a net improvement in water quantity or quality discharging to sewer in-line with any SUDS guidance or requirements.

Development should respond to the following:

- ★ Drainage design will have to account for the effects of restricted discharge rates caused by high river levels during storm events. Because parts of Meridian Water are not much higher than the rivers themselves, as river levels rises the capacity of surface water outfalls will be significantly reduced, possibly even prevented altogether. This is likely to have implications for the amount of storage required; and
- ★ Enhance storage capacity, and therefore reliance, on surface water run-off infrastructure, through the use of permeable surfaces throughout a development. As well as buildings, opportunities to provide permeable surfaces across car parks and highways should be exploited wherever possible.

7.3 Land use

7.3.1 Land use

The masterplan supports an allocation of land use as set out in the diagram below:

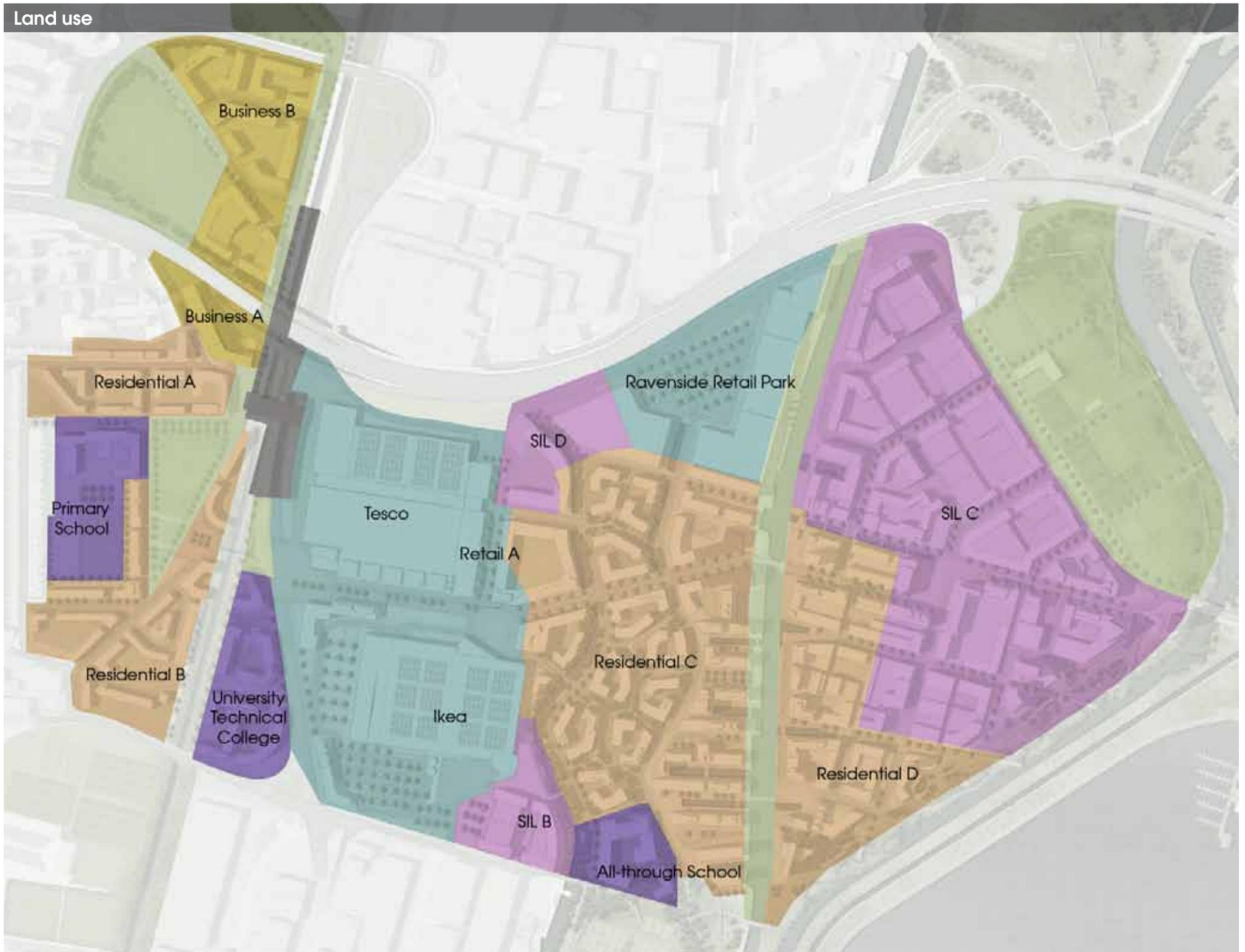


Figure 7-8 Land use plan

- Residential
- Business space
- Strategic Industrial Location
- Retail / mixed use
- School
- Open space

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Meridian Water Masterplan

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