Chapter 4

A SPATIAL FRAMEWORK

i. Enabling Movement  
ii. Facilitating Economic Growth  
iii. Building a Sustainable Urban Neighbourhood  
iv. Delivering Sustainable Regeneration  
v. Celebrating the Lee Valley Waterways  
vi. Other Themes
The Enfield ribbon is a new branding element used to bring a distinctive look and feel across all Enfield Council communications. It represents positivity, growth and forward thinking. The ribbon does not replace the logo but works in harmony with it, creating a clear space to ensure the logo is always prominent.

On all colour documents the ribbon is always red (Pantone 485). The web address is a part of the new branding and should always be shown in red below the ribbon. It can be used alone, as in this example or as part of your supporting text/contact details.

www.enfield.gov.uk
What happens next?
How to comment

This document presents the Council’s approach towards development and regeneration in Central Leeside. It provides you with the opportunity to say how Central Leeside should develop. We hope that residents, local organisations, workers, landowners and business owners and everyone else interested in the future of Central Leeside will tell us what they think about the approach. Comments, known as “representations”, should be given to us by 3rd August 2012.

At the same time the Council is consulting on two other Local Plan documents: Meridian Water Masterplan and draft Development Management Document.

You can comment on all of the documents by:

- Visiting our website: www.enfield.gov.uk
- You can comment and view comments online using Objective Online: http://consult.enfield.gov.uk/portal
- Emailing us at: ldf@enfield.gov.uk
- Attending one (or all) of the public workshops or exhibitions being held between May through to August (full details on our website, or on posters displayed locally)
- Writing to: Planning Policy Team Regeneration Leisure and Culture London Borough of Enfield Civic Centre Silver Street Enfield EN1 3XE

Electronic copies of this report along with the supporting evidence base are available to view and download from the Council’s website: www.enfield.gov.uk.

Hard copies of the report and evidence base are also available to view at Enfield’s libraries (see Council’s website for address and opening hours) and at the Civic Centre.

For further information relating to the consultation process please contact the Local Plan’s hotline on: 020 8379 3866.

What happens next?

The next stage is to consider responses received from this consultation, and work with all interested parties to develop the options into policies and actions. A draft version of the AAP will then be subject to further consultation from around the end of 2012.
Chapter 7
WHAT HAPPENS NEXT?
Delivering the AAP

Opportunities to comprehensively plan for a new community and to use the development to stimulate regeneration of existing areas are rare in Enfield. The development opportunities at the key strategic sites offer an important opportunity in the Central Leeside area for the social, economic and environmental benefit of the whole area. Delivering a 15 year vision will require a comprehensive approach and it is therefore important that in order to reduce the concentration of deprivation, reduce unemployment, reduce social mobility, and support existing community and accommodate existing residents – that all development proposals must be derived to fit with the comprehensive approach to regeneration of the area set in this report.

Planning for the delivery of the proposals described within Central Leeside is particularly important because of the many landowners, stakeholders, organisations and partners involved. The vision relies on the delivery of significant infrastructure projects, such as new bridges, station improvements and public realm improvements. Transforming parts of Central Leeside to provide new housing will depend on the provision of social and community facilities to respond to the growth anticipated, such as new schools or health facilities.

Development coming forward in neighbouring areas within Enfield such as Edmonton Green and Ponders End; and those in neighbouring authorities such as Tottenham Hale and Blackhorse Lane (in LB Haringey and Waltham Forest) needs to be managed and coordinated to complement the delivery of development in Central Leeside.

The report sets out a strategic overview of the Council’s approach to future development in the Central Leeside area. It anticipates that development in Central Leeside could bring social, economic and environmental benefits by increasing the choice of housing, jobs and local facilities.

Development Management

Once finalised the AAP will be a material consideration in determining planning applications in Central Leeside, alongside the Core Strategy, the draft Development Management Document and the London Plan. The weight attached to the AAP will increase as it progresses towards the submission stage.

The Council has a positive and collaborative approach to development management and encourages anyone making an application for planning permission to take advantage of the pre-application advice service. Structured pre-application discussions help to provide certainty over the likelihood of planning permission being granted and will help iron out difficult planning issues at an early stage in the development design process.

Development Phasing

Development in Central Leeside will be incremental and driven largely by the market and prevailing economic conditions. Land in Central Leeside is in private ownership and the pattern of ownership is varied and complex. This presents challenges to achieving comprehensive development.

The Council and its partners will work collaboratively to achieve the best possible outcomes in delivering the vision for Central Leeside. The Council and its partners will help to facilitate this process where possible by assisting with negotiations and by working closely with everyone who has an interest in delivering the vision.
Chapter 6

BRINGING IT ALL TOGETHER
v) Angel Road Retail Park

Context

This site was formerly characterised as an out of town retail park and is situated to the north of the North Circular (A406) with access to the retail park off Advent Way. The retail park is in close proximity to Ravenside Retail Park to the south of the North Circular that is part of the Meridian Water masterplan.

Angel Road Retail Park includes a reasonable amount of car parking, with individual car parking for each group of units.

There is good accessibility by car from the North Circular, however, signage from the road into the retail park is limited which makes the retail park difficult to access.

Access for pedestrians throughout the retail park is quite poor, with the park divided by Eley Road where there is a lot of industrial traffic movement going to the industrial estate with no pedestrian crossing provided.

The retail units are basic warehousing buildings made of brick and corrugated iron. The buildings are in reasonable condition and well maintained. However, they are dated.

In terms of extending the SIL boundary to include Angel Road Retail Park, the 2012 ELR suggested that it is unlikely to be viable given the differences in land and property values for retail versus industrial.

The policy context for retail in Enfield is well established through a town centres’ first approach – guiding retail development to town centres and then to the edges of the town centres. Additional retail will be required to undergo a sequential test before it can be accepted here.

A do nothing and keep things as they are approach for this area could be considered, but the Council seeks to deliver an integrated part of Enfield to become an exciting, attractive and welcoming place to live, work, visit and invest. There is therefore a real opportunity here for the Council to work with landowners of the former Retail Park to encourage a better mix of uses, and the creation of more jobs by taking a more proactive approach to the future of this site.

Improvements to the appearance of the area and the encouragement of a range of uses and jobs it offers, which could in turn provide a suitable location for some businesses requiring additional space.

The site is adjacent to Eleys Estate – home to a number of valuable businesses providing local jobs. A better integration of these 2 areas through new development to incorporate commercial space to cater for small businesses could be achieved, whilst at the same time allowing successful existing businesses to continue to flourish.

We could improve the appearance of the area and encourage a range of uses and jobs it offers, which could in turn provide a suitable location for some businesses requiring additional space.

The site is adjacent to Eleys Estate – home to a number of valuable businesses providing local jobs. We could achieve a better integration of these 2 areas through new development to incorporate commercial space to cater for small businesses, whilst at the same time allowing successful existing businesses to continue to flourish.

TELL US WHAT YOU WANT...

Q56: Do you agree with this approach?

Q57: Are there any other uses that could be considered?
The masterplan ensures that Meridian Water is developed as a well-integrated extension of Edmonton. The wider community will share in the resources and facilities, the improved access to the waterways and parklands of the Lee Valley and the new employment opportunities, ensuring the positive benefits of the regeneration and investment reach beyond Meridian Water’s boundaries.

Most importantly, the vision seeks to transform this part of Enfield by delivering an ambitious and practically deliverable approach to sustainability in its widest sense, 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 blueprint 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.

We are preparing and publishing the masterplan alongside this document to maximise and promote the connectivity and interdependencies between them.

55: Comments on the masterplan are welcomed. For more information, please visit the council’s website. Comments welcomed by 3rd August 2012.
iv) Meridian Water

The vision for Meridian Water is radical transformational. Up to 5,000 new homes and at least 3,000 new jobs will be created in the £1.3 billion redevelopment of this vast area of underutilised 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 is nestled 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.

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 two primary schools, a secondary school, a library, a police drop-in centre, a health care facility and new high street retail.

The vision for Meridian Water is also focussed 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 stations, new integrated transport hubs and improved bus services will serve the site, alongside safe and attractive cycle and walking routes and facilities.
• Theme Park – the theme park sector has traded well through the recession, benefitting from holidaying at home and investment from the operators. This approach is a regionally significant development and could have significant economic impacts from operation and visitor spend. However, it is a competitive market, it will have a large quantum of land take, and would require major supporting transport infrastructure;

• Combined sports, leisure and health centre – generally operated by local authorities. This option could include a pool as well as floorspace for dry fitness and health care facilities. The approach meets our health promotion objectives, and could include new gymnastics facility. However, substantial public sector capital and revenue commitment is needed;

• Multi-use trails – for walking, cycling and horse riding. This approach could increase access to green spaces for local residents, can form additional loops for existing trail network in the Lee Valley, reinforcing the regional role of the Park. However, there is the public realm maintenance commitment;

• Skatepark – this would create local recreation provision, and meets identified needs, but could be better located nearer to family housing; and

• Gymnastics facility – this could be an opportunity for capital and revenue funding, the area is identified as a location for this facility and there is an opportunity for synergy with on-site athletics activity; but this approach may incur long term costs and will need to weave in with other public or private sector facility development.

At this stage this is a long list on which further details in terms of options appraisal will be undertaken in the form of a coordinated approach to development through the production of a masterplan or similar.

Approach

The role of Pickett’s Lock to provide a mix of additional recreation and leisure facilities will be supported to deliver the aims that benefit Enfield’s existing and new residents, workers and visitors.

The opportunity to generate additional community benefits will be sought through the redevelopment and regeneration opportunities at Pickett’s Lock.

In addition, the redevelopment and regeneration of Pickett’s Lock provides the opportunity to benefit the local community through the creation of new employment opportunities thereby contributing to the vision of creating at least 3,000 new jobs in Central Leeside.

Depending on the proposed uses at Pickett’s Lock and subject to sequential testing, its regeneration and redevelopment presents the following opportunities for the wider Central Leeside area:

• New and improved leisure and recreation uses for Enfield’s residents and in particular those residents living nearest to the site;

• Provision of a potential heat load to support the expansion of the decentralised energy network in the area, depending on the uses;

• High quality design standards which effectively combines function and form to help address the visual impact on the local landscape;

• Measures to ensure that congestion on the wider transport network is not exacerbated;

• A design-led approach to provide a distinctive and well functioning environment with high quality design, materials and finish;

• Landscape treatment throughout the site to enhance ecological links to the wider Central Leeside area;

• Tree planting to visually improve and enhance the site’s image;

• An integrated long-term landscape and ecological management and maintenance plan;

• Increased biodiversity and an ecological link created by planting more waterside trees, shrubs and wild flower grass mixes;

• Ground water protection;

• Surface water management; and

• Promote sustainable transport for staff.

The Council and LVRPA together with its stakeholders are working together to establish the parameters for the future development of the site. The principles for the future development of Pickett’s Lock will be guided through a coordinated approach to development through the production of a masterplan or similar. It will set out the short, medium and long term actions and delivery plans for Pickett’s Lock. The Council will work with its development partners to ensure that the regeneration of Pickett’s Lock is successfully integrated into Central Leeside to provide benefits for the wider community.

The masterplan will inform the next version of this AAP.

Q53: Have all the main issues and opportunities relating to Pickett’s Lock been identified?

Q54: Do you agree with the proposed approach set out above?
Enfield has established a town centres’ first approach for retail and town centre uses, this includes leisure and entertainment facilities and more intensive sport and recreation uses such as health and fitness centres and cinemas to be located in town centre in the first instance. However, in realising the potential opportunities at Pickett’s Lock our draft Development Management policies provides a more flexible approach to these types of development, and sets the conditions to facilitate new leisure development at Pickett’s Lock if a sequential approach has been undertaken to demonstrate that this is the most appropriate location for the proposed use. The development any new leisure and/or recreation facilities on site would require planning permission and the scheme would be assessed against local, London and national policies.

It is recognised that residents and workers in the area are discouraged from using these facilities because of the relatively poor access to the area. The issues and options report considered 2 possible scenarios for Pickett’s Lock. These include:

- The area could continue in its existing role as a location for leisure activities pepper-potted with employment uses. However, this approach was rejected; and
- The area would play a stronger leisure and recreational role, supported by residential development on underused employment land.

The Council and the Park Authority recognise the need to provide for the needs of Enfield’s residents, in particular those residents living nearest to the site and for the needs of the new community at Meridian Water, both in terms of access to the site and leisure activities that are currently underprovided.

### Development Opportunities

In light of the significant regeneration opportunities in Central Leeside, and the wider Upper Lee Valley area, and taking into account the anticipated improvements to public transport infrastructure in the longer term, there is a significant opportunity to support Pickett’s Lock as a resource not only for elite athletes, but also for the local community. Redevelopment presents a once in a lifetime set of opportunities to reinvent a neglected underutilised space to the north of the area, together with enhanced access to the rest of Central Leeside.

The principle requirement for the future development of Pickett’s Lock is to create a leisure destination that is unique to draw people in from across the region and beyond. It has the ingredients there in the form of the Lee Valley Athletics Centre and has the potential for a substantially greater draw. However, it is also clear that the site must provide for the local leisure needs of Enfield’s residents and in particular those nearest to the site.

In terms of the need for recognised leisure facilities in Enfield, the Enfield Sports and Facility Needs Assessment Report (2010) reviewed the current (2010) and future sports facilities in 2026. The greatest need includes:

- Sports halls;
- Swimming pools;
- Artificial grass pitches; and
- Health and fitness.

In light of the aspirations of the Council and the Park Authority, some of the potential leisure uses at Pickett’s Lock have been identified but will be subject to a sequential assessment. Potential leisure uses could include:

- Snowdome – an indoor ski slope, combined with other recreational facilities such as swimming; supporting facilities such as hotels. This option could create an opportunity for regionally significant development, significant economic impact from operation and visitor spend; and could include new gymnastics facility; but it will compete with other recent developments in the south east and cause potential transport congestion issues;

- Health and fitness centres – which could include a combination of indoor and outdoor tennis courts, indoor and outdoor swimming pools, as well as a gym and fitness studios. As well as established health operators such as Fitness First and David Lloyd there is a growing trend of budget gyms, partly in response to pressure on consumer demand. This option could have long term potential, can support some of the local sports development aspirations, and could include a new gymnastics facility. However, it may be difficult to attract development in the short term, it may be better suited to an edge of centre location in planning terms;

- A stadium – this is regionally significant development; but there are no identified users at present;

- Hotel – this approach is a supporting facility for other leisure development at Pickett’s Lock and a supporting facility for local businesses;

- Conference/exhibition space, with breakout rooms – this approach could support facility for businesses in this part of London; it could have significant impact from operation and visitor spend, and builds profile for the area. However, conference centres are not normally profitable in their own right, and new development would have to compete from existing, well established operators;

- Self catering accommodation such as cabins, yurts, narrow boats or hostels – this approach would need a development of at least 15 units to be viable. It is an un-seasonal use, there is little existing local provision, and could help to reinforce destination of the Lee Valley. However, it is not an established location for this type of accommodation;

- Commercial ten-pin bowling provision – this approach complements the existing bowling provision. However, significant private sector interest in new provision is uncertain;
iii) Pickett’s Lock

Context

Pickett’s Lock is a large 58 ha site containing a broad mix of sport and recreation uses established over a number of years. The site is located between the West Anglia Main Line and Meridian Way (A1055) to the west and William Girling and the River Lee Navigation to the east. The western part of Pickett’s Lock is more urbanised and developed. The eastern and northern part of the site contain uses with a broadly open space function. The current uses of the site are shown on Figure 40.

Existing uses at Pickett’s Lock include:

A. The Lee Valley Athletics Centre;
B. A 12 screen Odeon Cinema (and former restaurant block – now closed);
C. The Pickett’s Lock Indoor Bowls Centre;
D. The Lee Valley 18 hole golf course, including the Ponders End Lake;
E. The Lee Valley Camping and Caravan Park;
F. Around 1,100 car parking spaces;
G. A bus pull-in and turn around area; and
H. Several small scale residential buildings to the south of the site.

The policy context is established in Core Policy 11, which encourages specific types of facilities for which current or future demand has been identified. Specific to Pickett’s Lock, the Council will work with the Lee Valley Regional Park Authority (LVRPA) to identify the priority mix for Pickett’s Lock. However, Pickett’s Lock is classed as a Major Development Site (MDS) in the green belt, so Core Policy 33 and relevant national policy must be followed.
The site could become a focus for the creation of a green industrial hub which could also support the OAPF vision to create 15,000 new jobs by 2031 across a range of industries.

The regeneration and redevelopment of the Eco Park presents the following opportunities:

- Sustainable treatment of waste;
- Provision of heat to support the kick start phase of a decentralised energy network in Central Leeside with possible expansion into neighbouring authorities and connection into the Olympic Park;
- High quality design standards which effectively combines function and form to help address the visual impact on the local landscape;
- Measures to ensure that congestion on the wider transport network is not exacerbated;
- Measures to ensure that the internal configuration of roads provide a safe and efficient route for vehicles to access without the need for queuing outside the site;
- Measures to minimise noise impacts along the eastern boundary of the site adjacent to the Lee Valley Regional Park;
- The use of the River Lee Navigation to transport materials to and from the Eco Park;
- A design-led approach to provide a distinctive and well functioning environment with high quality design, materials and finish;
- Landscape treatment throughout the site to enhance ecological links to the wider Central Leeside area;
- Tree planting to visually improve and enhance the site’s image;
- An integrated long-term landscape and ecological management and maintenance plan;
- Waterside improvements adjacent to Salmons Brook for ecological enhancement in combination with landscaping and public amenity improvements;
- Increased biodiversity and an ecological link created by planting more waterside trees, shrubs and wild flower grass mixes;
- Increased connectivity between the Enfield ditch and Salmon’s Brook. Diversity could be encouraged through a mowing regime for this strip, possibly in combination with some plating or seeding;
- Environment Agency’s preference for an 8m buffer strip in the vicinity of Enfield ditch and Salmon’s Brook to provide marginal habitat for wildlife and reduce the potential for pollutants to enter the watercourse;
- Limit light spill onto the watercourses and existing dark areas including Salmon’s, the Enfield ditch and the Lee Valley Regional Park to enhance the value of these sites for wildlife;
- Ground water protection;
- Surface water management;
- Promote sustainable transport for staff;
- Green industry employment; and
- Awareness raising.

The principles for the future development of the Eco Park will be outlined and guided within the Planning Brief. The Planning Brief for the Eco Park will be available for consultation later this year and should be read with this and future documents relating to the AAP.

Issues relating to phasing, in particular the phasing of decommissioning the plant itself will be addressed through the planning brief. In terms of capacity, i.e. the volume of waste that will be handled by the site will be informed by a transport assessment to accompany the planning brief. This section will be informed by the planning brief and its supporting information.

Q51: Have all the main issues and opportunities relating to the Edmonton Eco Park been identified?

Q52: Do you agree with the proposed approach set out above?
**Development Opportunities**

The principle requirement for the future development of the Eco Park is to treat waste in the most sustainable way possible. However, the treatment of the waste also presents a significant opportunity to generate additional community benefits through the provision of heat. Since the publication of the Issues and Options report, the Edmonton Eco Park is supported in the North London Waste Plan and the Opportunity Area Planning Framework for the Upper Lee Valley as the preferred location of a supply hub for the Upper Lee Valley decentralised energy network. Our work on the viability of a decentralised energy network within the context of the Upper Lee Valley recognises that this could be the largest network in London, and is viable. The Eco Park forms an important component of the network providing energy from waste to kick-start a decentralised energy network in Central Leeside and extending to neighbouring authorities and connection to the Olympic Park. As such the Opportunity Area Planning Framework for the Upper Lee Valley sets the requirement to retain any such heat or power generated from the Eco Park and it should therefore not be exported out to the rest of the country.

Initial work indicates that the existing EfW could be adapted so that waste heat can be captured and transferred to an on-site Energy Centre from where it would be connected to the network. After the decommissioning of the EfW, the plot would be used to accommodate another waste treatment technology, the exact nature of which would be determined by the future operator of the site.

**Approach**

The role of the Eco Park for dealing with waste in Enfield and north London in the most sustainable way will be supported.

The opportunity to generate additional community benefits will be sought through the provision of heat. The Eco Park will be a key heat source for the decentralised energy network.

The Council is working closely with North London Waste Authority to successfully integrate the Eco Park into Central Leeside. Through careful design and good management, waste facilities can be successfully located within built up areas and provide wider community benefit to the community.

In addition to the provision of heat, the redevelopment of the Eco Park provides the opportunity to benefit the local community through the creation of new employment opportunities. In conjunction with the wider regeneration opportunities for the area, could mean that the Eco Park becomes a catalyst for new green industries in the Upper Lee Valley.

By shifting towards new waste management technologies, the Eco Park would help to meet changing needs of the economy; an objective which is supported by the GLA’s Industrial Capacity SPG and London Plan. This supports the Vision in Central Leeside seeking to broaden the employment and skills base. Although waste management roles are generally low skilled, there is a growing number of higher skilled jobs which could attract new residents to the area.

Furthermore, the recycling function of the Eco Park could generate materials which could be made available for local re-use and re-processing, thereby contributing to the vision of creating at least 3,000 new jobs in Central Leeside.
ii) Edmonton Eco Park

Context

The Edmonton Eco Park is the largest waste management site in north London and has a critical role to play in managing the area’s waste in the most sustainable way, the site must provide the next generation of waste services. The policy context is established in the London Plan and North London Waste Plan and it is designated as SIL in our Core Strategy. To accommodate more efficient and sustainable waste processing facilities, some of the existing facilities on site must be removed and existing unused space used to contain new facilities. Reorganisation of the site will enable the land to be used more efficiently to maximise the area’s potential for the management of waste.

The Eco Park currently contains an Energy from Waste (EfW) facility occupying 3.65 ha in the centre of the site. It is anticipated that this facility would continue to be used until it is decommissioned around 2020. Initially the new facilities would therefore be located around the existing EfW, primarily at the northern and southern end of the site. New facilities would be designed so as not to compromise the operation of the EfW. The decommissioning of the EfW would then present an opportunity for a further phase of waste related development at the site.

The development of any new facilities on site would require planning permission and the scheme would be assessed against local, London and the NPPF. Environmental permits for the operation of the facility would also need to be obtained from Environment Agency.

![Edmonton Eco Park Diagram](image-url)

**Key**
- A Compost Centre
- B Ash Recycling
- C Bulky Waste Recycling Centre
- D Recycling Centre
- E North Weighbridge
- F Incinerator
- G Sea Cadets
- H Car Park
- I Enfield Vehicle Depot
- J South Weighbridge

Realising the Scale of Opportunity
The Council is keen to ensure that adequate infrastructure is in place to support the delivery of the planned population growth as established in the Core Strategy.

The Council supports the need for the upgrade of the existing Deephams Sewage Treatment Works (STW) plant to meet European and statutory water quality requirements and the needs of a growing population through sensitive, integrated, coordinated and high quality development.

The upgrade to the site presents the following opportunities in Central Leeside:

- Sustainable treatment of wastewater;
- Provision of heat and energy to support the kick start phase of a decentralised energy network in Central Leeside with possible expansion into neighbouring authorities and connection into the Olympic Park;
- High quality design standards which effectively combines function and form to help address the visual impact on the local landscape;
- Measures to ensure that congestion on the wider transport network is not exacerbated;
- Measures to minimise noise impacts along the eastern boundary of the site adjacent to the Lee Valley Regional Park;
- The use of the River Lee Navigation to transport materials to and from the site;
- A design-led approach to provide a distinctive and well functioning environment with high quality design, materials and finish;
- Landscape treatment throughout the site to enhance ecological links to the wider Central Leeside area;
- Tree planting to visually improve and enhance the site’s image;
- An integrated long-term landscape and ecological management and maintenance plan;
- Increased biodiversity and an ecological link created by planting more waterside trees, shrubs and wild flower grass mixes;
- Increased connectivity into the Lee Valley Regional Park;
- Ground water protection;
- Surface water management;
- Promote sustainable transport for staff;
- Green industry employment; and
- Awareness raising.

The consideration of “good design” as a key criteria within the decision making process as set out in the NPS, will be strongly supported as part of any wastewater development proposals. Good design within these schemes is of utmost importance as the resulting developments will form some of the largest and most complex wastewater developments in Europe and therefore need to be designed in such a way to encourage and promote the UK’s leading role in the green industry field.

Due to the size of the Deephams STW plant and the nature of the proposed upgrade, the project is referred to in the Government’s NPS for wastewater, as a “nationally significant infrastructure project” (NSIP). Under the Planning Act 2008, an NSIP requires a development consent order and an application for a development consent order must be submitted to, and examined by the Infrastructure Planning Commission (IPC) or its replacement, the Major Infrastructure Planning Unit (MIPU).

Thames Water are currently working on the options for the upgrade and no decision has yet been made on a preferred option. The upgrade includes only the STW plant. The existing inlet pumping station, inlet works, storm tanks and sludge treatment works will remain on site under all options.

More recently, detailed work emerging from the feasibility of a decentralised energy network has indicated that Deephams STW along with North Middlesex Hospital and the growth proposed around White Hart Lane (i.e. Northumberland Park and Tottenham Hotspurs FC), have emerged as existing heat loads which could be vital to support the kick start phase of the network and offer relatively small risks. A feasibility study is being prepared and will inform this section of the AAP at its later stages.

**Approach**

The Council will work closely with Thames Water and its development partners to refine proposals for the area that provides development that is complementary to the Central Leeside area. Any wastewater development in terms of odour, noise, visual impact, flood constraints and the loss of green belt and open space are overcome and that development is safe. Development will also need to ensure that existing employment operations and existing and new communities within the area are not undermined by conflicting land uses.
i) Deephams Sewage Treatment Works

The Deephams Sewage Treatment Works (STW) is located in the south eastern part of the borough, off Pickett’s Lock Lane and lies within the Central Leeside Strategic Growth Area. It currently serves a population equivalent of 883,000.

Importance is attached to the Deephams STW plant due to its position within the strategically important Upper Lee Valley Opportunity Area and its proximity of some 1.5 km north of the Council’s regeneration area of Meridian Water.

The Deephams STW plant is located in a largely industrial and commercial area, reducing its impacts of noise and odour on households in the borough. It is approximately 26 ha and is owned, operated and maintained by Thames Water.

Development Opportunity

A proposed upgrade is driven by a new discharge consent set by the Environment Agency, which will come into force in March 2017, requiring Thames Water to have brought into operation an upgraded treatment plant that will significantly improve the quality of the effluent discharged to Salmon’s Brook and the River Lee. The proposed upgrade will also increase treatment capacity to cater for population growth within the catchment area and replace parts of the sewage treatment works, which are approaching the end of their useful life.

The Council acknowledges the need for improvements to the strategic wastewater infrastructure within the UK, and particularly to deal with the ever-increasing levels of growth within London. Given the levels of growth anticipated in the borough particularly in the key regeneration site of Meridian Water, significant improvement to existing sewage works within the borough is welcomed and therefore the framework presented in the National Planning Statement (NPS) is of significant relevance and importance to the residents of the borough.
Realising the Scale of Opportunity and the Opportunity of Scale

Key
- Central Leeside Area Action Plan
- Rail
- A Roads
- Water

Development Areas:
1. Picketts Lock
2. Deephams Sewage Treatment Works
3. Edmonton Eco Park

Mixed-Use Opportunity Areas:
4. Angel Road Retail Park
5. Meridian Water
There are a number of development opportunities throughout the area, which will contribute significantly towards achieving the vision for Central Leeside. The scale of change is considerable with a number of sites subject to associated changes. These sites are in multiple ownership, some owned by the Council and will be brought forward in association with private developers. There is likely to be a prominent role for the public sector in an enabling role, for example through the provision of associated infrastructure or compulsory purchase processes on many of the sites owned and to be developed by the private sector.

Opportunities have been identified at
1. Deephams Sewage Treatment Works;
2. Edmonton Eco Park;
3. Pickett’s Lock;
4. Meridian Water; and
5. Angel Road Retail Park.

The following section provides more detail on the development sites and outlines the Council’s initial thoughts and how the key AAP principles could be applied to the opportunity sites. This guidance is not exhaustive and development proposals will need to take into account other national, regional and local planning policies.

**TELL US WHAT YOU WANT...**

**Q48: Are there any other sites where development opportunities could be considered?**
Chapter 5

REALISING THE SCALE OF OPPORTUNITY AND THE OPPORTUNITY OF SCALE

i.  Deephams Sewage Treatment Works  
ii.  Edmonton Eco Park  
iii.  Pickett’s Lock  
iv.   Meridian Water  
v.    Angel Road Retail Park
Why are we doing this?

Improving connections to the waterways is recognised in the London Plan, the ULV Opportunity Area Planning Framework and the Core Strategy.

The Lee Valley is an important asset in the area. Reclaiming the waterways through improving connections and activating the waterways will help make the Lee Valley more accessible to surrounding communities, raise the profile of the area and help to provide an attractive setting for new development. The approach complements the Park Authority’s work on reducing severance and improving access to the Park for surrounding communities. It also accords with the aims and objectives of the ULV Landscape Strategy, OAPF and Core Policy 35 of the Core Strategy seeking to improve access to the Park and make better use of this resource.

Improvements to the Lee Valley will help raise adjacent land values, providing additional money to help cross fund environment and infrastructure improvements.

The Council recognises the role of Central Leeside’s larger open space in helping to reduce flood risk.

Relevant evidence base:

- Core Strategy;
- ULV Landscape Strategy;
- ULV Opportunity Area Planning Framework; and
- Meridian Water and its technical studies.

Promoting Biodiversity

The area currently has very little biodiversity and residents have poor access to nature. This makes it particularly important to ensure that existing areas of natural value are retained. The draft Development Management Document provides the policy context requiring developments to include “living roofs/walls” which can also improve local nature habitats. Mature trees also promote biodiversity, as well as moderating local summer temperatures. However, many parts of the area have an absence of street trees.

Approach for promoting biodiversity

The Policies Map supporting the Enfield’s Local Plan identifies wildlife corridors, areas of ecological enhancements, nature conservation sites (metropolitan, borough-wide and local).

Priority areas and streets for increasing tree cover could be identified and adequate replacement provision where development proposals involve the removal of trees could be required.

vi) Other Themes

There are also other issues and opportunities that this area faces that will be addressed by the Core Strategy and other Local Plan documents therefore some of the key issues are not repeated. In some cases the Core Strategy will be able to address these issues sufficiently such as housing tenure and affordable housing, sustainable design standards. However, in some occasions there may be a need to adopt a more local approach. This will be resolved as the Council moves forward to the next stage.

In terms of existing housing, although Central Leeside has a relatively small resident population, there are concentrations of existing housing to the west of the railway lines at Pickett’s Lock and to the west of Montagu Road Industrial Estate. The quality of the existing housing stock is variable and in some places in need of improvement.

The Council will seek to protect and improve the existing housing stock within and immediately adjacent to Central Leeside. The Council seeks to work with our partners to reduce the current level of vacant homes and improve the physical condition and energy efficiency of the existing stock. This could involve the retrofitting of properties to promote greater water and energy efficiency and the aspiration to reach higher levels of the Code for Sustainable Homes.

There is strong support for opportunities to retrofit flood resilience and resistance measures in areas at risk of flooding.

---

**TELL US WHAT YOU WANT...**

Q45: Have all the main issues and opportunities relating to biodiversity been identified?

Q46: Do you agree with the proposed approach set out above?

Q47: Do you support this approach on existing housing in the area?
British Waterways, the Park Authority and the Council are working together to introduce activities along the watercourses, considering options for visitors and/or permanent moorings, canal boat hire or marina uses. The findings of the options study will help to inform the final version of the AAP.

In partnership with the Park Authority and the Environment Agency, the Council will protect and enhance the biodiversity value of the Park and waterways. Habitat and water quality will be enhanced, delivering an unbroken network of high quality habitats along the length of the Park.

Connections over the waterways will also help to enhance connectivity in the area. This is discussed in the Enabling Movement section of Chapter 4 of this report.

**FIGURE 35 Aspirations to open up public access to Banbury Reservoir**

![Diagram](image-url)
Approach

Redevelopment in Central Leeside should aim to maximise its waterfront location to create vibrant places connecting the waterways to the new and existing communities through the following principles:

- Carefully designed to be in keeping with the river setting and ensure enhanced visual, psychological and physical access to the waterspace and park;
- Development close to or adjacent to the River Lee Navigation should increase its permeability for adjacent communities living in the built up urban areas to access and enjoy the Lee Valley;
- Continuity of high quality pedestrian and cycle access along the towpaths and extending routes to surrounding communities;
- Active uses of the water, particularly for freight, efforts to deliver materials by barge, water based recreation, sport and entertainment, and nature conservation;
- Active uses along the waterways, particularly for cafes, bars and restaurants; and
- A step change in the attractiveness and function of the waterways through the restoration of these waterways to turn them into an asset that can have ecological, amenity and flood risk benefits and in turn assist in increasing property values.

Redevelopment adjacent to the Park should aim to maximise its location through the following principles:

- Development should front onto the Park;
- Where possible useable public open space should be provided adjacent to the waterways;
- Maximise access to the Park, with safe, attractive and overlooked routes provided, particularly for pedestrians and cyclists, reinforcing both north-south and east west connections in the area; and
- The introduction of an extension of the Park on a north-south axis will be supported where it is currently disjointed on the western edge of Harbet Road Industrial Estate and the eastern edge of Pymmes Brook. Improvements along this axis will help provide an attractive setting for new development and is explored through the Meridian Water masterplan through the reinforcement of pedestrian and cycle routes along the River Lee and the provision of a community park to help reconnect the Park either side of the North Circular.

Opportunities also exist within the Park to reduce flood risk as well as improve water quality. The Council will work with the Park Authority and Environment Agency to ensure that improvements are achieved through development opportunities. These could include:

- River restoration;
- Sustainable urban drainage systems (SUDs); and
- Flood management schemes.

There is a long-term aspiration to open up public access to Banbury Reservoir through the provision of new walking routes and boating. Improving access to and views over Banbury Reservoir as part of the Meridian Water masterplan will help create a step change in the perception of the area. This section of the report should also be read with the parts dealing with: connections over waterways and waterbuses/taxis in section 2: Enabling Movement of this Chapter.
v) Celebrating the Lee Valley Waterways

The Lee Valley waterways is London’s second largest river network and forms a considerable contribution towards London’s Blue Ribbon Network. The River Lee is canalised and runs north-south through the eastern side of the area. It forms the principle watercourse passing through the opportunity areas in the area. It is maintained at a constant level by a series of locks, this waterborne transportation channel connects the area to the River Thames. It is broadly rural in character with the route of the Lee Valley walk towpath running alongside its entire length making it a valued regional asset and a key feature of Central Leeside.

There are two canalised tributaries of the River Lee with Pymmes Brook and Salmons Brook also crossing the area east to west. These hard-edged channels contain bank planting which screens the water’s edge. Work undertaken by the Environment Agency upstream is set to improve the water quality.

Banbury Reservoir is an asset located immediately adjacent to the area. Although it is visually concealed by its elevated height above ground level, it is designated as a Principal Site of Nature Conservation Importance and has an important ecological role within the Lee Valley Regional Park. With proposals to permit public access, it will form an important a unique recreational resource for Meridian Water and the wider area.

Despite improvements in recent years, the waterways still remain difficult to access, and are underutilised and have limited biodiversity value. The A1055 and railway line create a barrier to accessing the waterways and the Park on foot from local areas. Additionally, connection points to routes are often low key and uninviting, which is hostile in character.

The Opportunities

The waterways are an important asset of recreation and sport for the existing community and visitors. The planned growth represents a major opportunity to reclaim the Lee Valley waterways with redevelopment to make this area one of the most enjoyable segments of the waterscape in Central Leeside. Redevelopment will help to provide better access between places, both visually and physically, and reinvigorate waterscape through supporting development of active frontages along the waterways as set out in Upper Lee Valley Landscape Strategy (2010) and Upper Lee Valley Opportunity Area Planning Framework (2011).

Running through the heart of the area, the River Lee Navigation provides the opportunity to integrate water into the everyday living and working experience.

There is significant potential to develop the courses into corridors of recreation, leisure and new habitat reinstating their presence as a unique resource and defining new character in Central Leeside.

Responding to the waterways, there are the opportunities to create a series of high quality open spaces and buildings to front onto the waterways where residents, workers and the surrounding community can benefit from recreational and leisure facilities along its length.

There are the opportunities to create active frontages on to the waterways and drawing water into the heart of development helping the investment value of development to increase.

The creation of high quality open spaces as part of the development opportunities in the area within a riverside setting will help encourage activity on the waterfront and unlock the development potential of the waterways. Supported by leisure and recreation development opportunities, day and night time activity will evolve helping to unlock employment and economic potential.
Managing Surface Water Flooding

There is a risk of surface water flooding. Following work undertaken for Drain London in 2011, the level of risk across London has been established. This indicates a relatively low risk in Central Leeside. Those with a higher risk are outlined below. There are also some areas of particular surface water risk just outside of the area, for example further east and west along the North Circular and along Seven Sisters Road.

Areas with a higher risk:

- Markfield Recreation Ground, LB Haringey;
- Immediately west of West Anglia Rail Line of Brimsdown, LB Enfield;
- Sports Pitches north of Spring Hill, LB Hackney;
- Cabinet Way in Chingford; and
- Several areas close to Dagenham Brook, Leyton.

The key tool for reducing surface water flood risks is the application of sustainable urban drainage systems (SUDS). In line with the Core Strategy, all new developments will be required to incorporate SUDS techniques. SUDS reduce or slow down rainfall run-off by storing, diverting or infiltrating rainwater. This approach is set out in the sustainable drainage hierarchy in the London Plan (Policy 5.13) and in the Council’s draft Development Management Document. Any drainage solutions should seek to not only minimise the rates and volumes of surface water runoff, but also provide multiple benefits including improved water quality, amenity benefits and improved biodiversity.

Approach

The Council will be publishing its Surface Water Management Plan this year and seeks to manage the risks of flooding and surface water flooding in Central Leeside. Developments will be required to:

- Minimise the risk of flooding. Planning applications should be supported by a specific flood risk assessment (FRA) in accordance with the NPPF;
- Minimise the risk of surface water runoff through the effective use of sustainable urban drainage system techniques set out in the draft Development Management Document; and
- Satisfy the requirements of relevant Code for Sustainable Homes or BREEAM levels with regards to the management of surface water runoff.

The Council will continue to work in partnership with the Environment Agency, the Lee Valley Regional Park Authority, Thames Water and British Waterways, to secure an integrated and sustainable approach to the management of development and flood risk through complementary flood mitigation and water management measures to ensure sustainable growth and development into the future.

TELL US WHAT YOU WANT...

Q41: Have all the main issues relating to managing flooding and surface water flooding been identified?

Q42: Do you agree with the proposed approach set out above?
There are 2 areas considered as suitable locations for flood compensation storage, these being Lower Hall Lane and Tottenham Marshes sites as shown on figure 33: Flood Storage in Central Leeside “Lower Hall Lane – potential increased areas available, and potential minimum area available” and “Tottenham Marshes – compensation area available”.

The findings indicate that the Lower Hall Lane site for flood storage would be the best case scenario. However, if this cannot be achieved, then part of the site would be to used and with the shortfall absorbed by Tottenham Marshes taking into consideration other sites to come forward during the lifespan of the proposal. The provision of additional flood capacity upstream of Central Leeside that will be identified in the North East Enfield Area Action Plan will also help mitigate the impact of developing in areas of flood risk.

Thames Water retains significant land holdings within Central Leeside including the Lower Hall Lane site. The potential for some of this land to provide additional flood mitigation measures and a unique biodiversity habitat will be explored further. Given the aspirations for Thames Water to develop the existing Deephams Sewage Treatment Works [see chapter 5, section on Deephams] there is an opportunity to provide a joined up approach to water management within Central Leeside, resolving the issue around flooding and sewage treatment.

In terms of addition flood alleviation schemes in the area, the Environment Agency (EA) are proposing to submit a planning application in relation to the Salmons Brook Flood Alleviation in April 2012. The £15m scheme is designed to reduce the risk of flooding to approximately 2,600 properties. Most of the beneficiaries will be in the area between Edmonton Green and Montagu Roads. Work has already started on some elements of the scheme that do not require planning permission in the Ponders End area. Subject to planning approval, it is anticipated that works to construct a flood storage area at Enfield Golf Course will commence later this year. Works to construct flood defences along Salmons Walk and at Montagu Recreation Ground further downstream will take place later in 2013.
Central Leeside Fluvial Flood Risk
London Borough of Enfield Level 2 SFRA

Source: London Borough of Enfield
Given that this is the first step in the project cycle, the project has not developed anything beyond a high-level view of the physical constraints imposed on network design. There are a series of linear constraints aligned north-south consisting in railway lines, reservoirs and a major road that must be crossed to link between the heat sources identified at the western demand clusters.

The next stage of the project will be through the identification of cost-effective crossing points to these barriers in suitable locations to link the network load clusters.

A full feasibility study is underway which will inform the basis for discussions with the GLA and to develop the results of the feasibility study into a business plan and progress to implementation. It is proposed that the feasibility study would form the basis of a bid for support from GLA’s ELENA facility. ELENA would support viable projects to develop their business plan to take the project forward.

**Approach**

The Council seeks to prioritise actions to promote a low carbon future in Central Leeside by supporting the delivery of a decentralised energy network in the area. All three potential route configurations start off with the Central Leeside area acting as a “supply hub”.

Subject to the outcomes of the detailed feasibility study, a preferred route will be established identifying how the decentralised energy network will be developed. Key landowners and developers will be expected to work collaboratively with the ULV boroughs comprising of the Council, the London boroughs of Haringey and Waltham Forest and the GLA. Developments will be required to connect to a decentralised energy network when it becomes available in line with the requirements set out in the draft Development Management Document.

Technical standards to ensure compatibility between developments and cluster heat networks are designed in a manner compatible with the emerging strategic DE Network will be informed by outcomes of the Feasibility Study. The next version of the AAP will provide more detail on how this may be achieved.

This stage of the Area Action Plan preparation process presents an important opportunity for members of the public to comment on the significant emerging proposals. The Council would like to receive comments on the DE Network and would also like to hear views on the principle, scale, nature and location of the DE Network.

**Managing Flood Risk**

Central Leeside lies within a combination of Flood Zones 2 and 3 as shown in figure 32: Flood Risk in Central Leeside. This means that certain parts of Central Leeside have medium to high probability of flooding based on the Environment Agency definition of flood risk. In responding to and managing the impact of flood risk, there is an opportunity to adopt a sequential approach to development layout by locating more vulnerable and essential infrastructure within Flood Zone 2 areas and water compatible uses within Flood Zone 3 and closer to the watercourses. The location of more vulnerable and essential infrastructure uses within Flood Zone 3 will require the Exception Test as set out in the NPPF.

The area is crossed by several significant watercourses including the Lee Navigation and the River Lee flood relief channel, which forms the eastern boundary of Central Leeside, as well as Pymmes Brook and Salmon’s Brook, which are tributaries of the Lee. Rainfall runoff in the borough drains through Central Leeside. It is a relatively flat area varying in height of about 8 metres above sea level at the lowest point to 12 metres or so at the highest. Significant alterations were made in the 1990s to the highway and drainage infrastructure that cross Central Leeside as part of the upgrade works to the North Circular.

A more detailed flood risk assessment was undertaken to accompany the plans at Meridian Water. The findings presents the outline flood mitigation measures required to enable development and recommends actions that move the areas of flood risk and create alternative floodable areas – meaning that land currently at risk of flooding can be raised and developed on.
**Central Leeside Area Action Plan**

**Figure 31: Potential Decentralised Energy Network**

Key:
- Central Leeside Area Action Plan
- Energy Demand hubs
- Rail
- A Roads
- Water
- A. Enfield Power Station acting as a supply hub
- B. Olympic and Tottenham configuration
- C. Deephams STW, North Middlesex Hospital and adjoining housing estates acting as supply hub

Towards Enfield Town

Towards Cheshunt

Towards Stansted

Towards William Girling Reservoir

Towards North Circular A406

End of A Special Framework
Approach

The delivery of a decentralised energy network in Central Leeside will play a crucial role not only supporting the growth in the Green and Low Carbon Sector but also to help secure at least 1,700 jobs and provide energy that is increasingly decoupled from fossil fuel price volatility over the coming years. It will help reduce heating costs for residents experiencing fuel poverty living in some of London’s most deprived neighbourhoods and help protect them in the future. Furthermore, it could cut carbon emissions by 41,000 tonnes pa, this is equivalent of the CO2 production of around 10,000 homes and improve resource efficiency through a system recovering heat that would otherwise be rejected to the atmosphere.

The Council seeks to prioritise actions to promote a low carbon future in Central Leeside by promoting energy generation hubs to support the expansion in the renewable energy and low carbon development sector. A number of more detailed policies for how this may be achieved will be set out in the next stage of consultation on the AAP.

To kick-start the decentralised energy network in this area, the Council seeks to protect the areas around Deephams Sewage Treatment Works, Edmonton Eco Park and a small area at Harbet Road Industrial Estate as energy generation hubs.

Decentralised Energy Network

The pre-feasibility study recommended that 2 potential development opportunities can be pursued as viable DE networks with heat sources for the DE network from either the Kedco gasification plant as part of the core scheme or through the possibility of accessing a portion of heat from the Edmonton Incinerator to serve a DE network. This is shown with a blue line on Figure 31.

Emerging findings have suggested a third potential strategic network with North Middlesex Hospital, the housing estates (Shires, Joyce and Langhedge) and Deephams STW acting as supply hubs. This is shown with a green line on Figure 31.

TELL US WHAT YOU WANT...

Q38: The areas identified above are currently occupied by a mixture of industrial and commercial uses and already copes with large vehicle movement. Are there any other sites you are aware of that may support the growth of a decentralised energy network?

Q39: Do you agree with the principle of the proposed approach?
Central Leeside Area Action Plan

FIGURE 30: Potential Energy Generation Hubs

1. DEEPHAMS SEWAGE TREATMENT WORKS - POTENTIAL ENERGY FROM WASTE
2. EDMONTON ECO PARK - POTENTIAL ENERGY FROM WASTE
3. PREFERRED AREA FOR LOCATING AN ENERGY CENTRE FOR PHASE 1 OF MERIDIAN WATER DEVELOPMENT

Key:
- Central Leeside Area Action Plan
- Green industries/energy generation hubs
- Rail
- A Roads
- Water
The results from this assessment identified two immediate development opportunities which, can be pursued with the initial development of the DE network based on heat from the Kedco gasification plant to a “core scheme” area includingCentral Leeside and Pickett’s Lock. Alternatively, heat to serve this area could be sourced from the existing Edmonton Incinerator. The opportunities could be supplemented in the medium term by local gasifier plant installation on the Eco Park site, producing heat and power from local waste streams. The Solid Recoverable Fuel (SRF) that is currently being procured by the North London Waste Authority (NLWA) could be a key fuel source for the medium term gasifier plant.

However, since the publication of the prefeasibility study, the landowner of the Kedco gasification plant expressed doubts over the development, which has had implications for the feasibility of the strategic network. The uncertainties are being factored into the scenario modelling of the network and will be published in the next stage of the project.

Despite the uncertainties surrounding the proposed gasification plant with Kedco, there is significant potential to access a portion of the heat generated from the existing Edmonton Eco Park to serve the potential decentralised energy network. Taking advantage of this local resource, existing and new users could benefit from significant carbon savings and a secure supply of heat. In addition, the establishment of the network could help to reduce fuel poverty for vulnerable residents adjoining this area. In light of these opportunities, the approach in the AAP will expect all new development to connect to an existing or future decentralised energy network, where feasible.

A feasibility study developing the concept of an area-wide strategic decentralised energy network and testing the economic viability of a kick start scheme – is being progressed and will inform the final version of this AAP. Despite the uncertainties surrounding the gasification plant, initial findings have indicated that the North Middlesex Hospital, Deephams Sewage Treatment Works, a small area in Meridian Water and the area aroundWhite Hart Lane have emerged as existing heat loads which could be vital to kick starting a network and offer relatively small risks. The delivery of Meridian Water will also be a potential heat load as development progresses. These initial heat loads could be supplemented in the kick start phase by clusters of social housing adjoining Central Leeside as existing boilers come to the end of their produce life cycles. These estates adjoining the area include the Shires, Joyce and Langhedge Estates.

In order to kick start a DE network and to promote economic development in the low carbon sector in the area, the Council seeks to support the expansion in the renewable and low carbon development sector by first establishing the areas around the Edmonton Incinerator, Deephams and an area within Meridian Water as energy generation hubs to provide an initial catalyst for expansion of the renewable energy and low carbon sector. These areas shown on figure 30: Potential Energy Generation Hubs.
The Council’s Renewable Energy and Low Carbon Development Study (2010) recognised that there is significant potential to maximise energy performance and renewable energy provision including decentralised energy networks within the Central Leeside area as shown in Figure 29.

It highlighted that the implementation of district heating and wind turbines provides the potential to play a particularly important role in meeting the renewable energy targets in Enfield. The study recommended that the heat density throughout most of the area is suitable for the extension of district heating networks with the impetus for a district heating network coming from the proposed development at Meridian Water. Lastly, it suggested that there is the potential to utilise heat or power from Edmonton Eco Park but realising that this would be highly dependent on the future plans for the site. However, a decentralised energy (DE) network would make connection a possibility.

An Energy Strategy for the Upper Lee Valley was prepared by the LDA (now GLA) in April 2010 with the objective to accompany the Opportunity Area Planning Framework. It identified the potential for a decentralised energy network in the Upper Lee Valley considering the heat potentially available from existing and planned power plants in the area and existing and future green industry developments.

Three main heat supply options were considered. One of the options it considered included the Central Leeside area to act as a supply hub – essentially this covers the areas of Edmonton Eco Park, new development at Meridian Water and the adjoining industrial areas.

Since then, the outcomes of both the studies were taken forward into a DE masterplan in the form of a pre-feasibility study – completed in March 2011 setting out the potential for a DE network in the Upper Lee Valley. The pre-feasibility study determined that there is a unique opportunity to deliver a commercially sustainable DE network which would put the Upper Lee Valley at the forefront of energy production in London and give it a clear competitive advantage over other areas.

The Vision underpinning the DE masterplan is to deliver cost-competitive, low to zero carbon energy supplies (heating, cooling and power), which will assist with job creation, reduce overall carbon emissions, facilitate the transition to a low carbon economy, and support development in a coherent, unified fashion that prevents the emergence of piecemeal, standalone and sub-optimal energy solutions.

A number of key areas of search to kick start a decentralised energy network was undertaken as part of a technical assessment of a pre-feasibility study.
Figure 28 - Energy Demand and Energy Users in Central Leeside

Key:
- Central Leeside Area Action Plan
- Rail
- A Roads
- Water
- Demand hubs

Heat users in Central Leeside:
1. Harvet Road Industrial Area
2. ICA, Tesco and Ravenside Retail Park
3. Coca Cola
4. Deephams Sewage Treatment Works
iv) Delivering Sustainable Regeneration

Development in Central Leeside is expected to deliver a significant number of new homes and jobs over the next 15-20 years. This presents opportunities to provide a place which promotes sustainable lifestyles through well designed buildings and spaces, and that help to enhance local biodiversity, use energy efficiently, manage the impact of waste, mitigate against the impacts of climate change and promote walking, cycling and the use of public transport.

The Core Strategy seeks to achieve a wider economic and environmental sustainability simultaneously and recognises the important interrelated health benefits of well designed neighbourhoods, high quality housing, access to employment opportunities, access to open space and access to shops and services.

The next section of the report sets out how these principles can apply to the future vision of development in Central Leeside.

Promoting a Low Carbon Future

The Council’s Local Economic Assessment highlights the fundamental restructuring of the global economy in recent decades and the profound impacts this has brought about in the borough in terms of decline of many traditional forms of employment.

Although the economic challenges facing the borough are significant, they are insurmountable provided by coordinated and sustained action undertaken by stakeholders building on the area’s existing strengths in industrial activity and capitalising on emerging opportunities.

In light of the recent Coalition Government’s approach to Planning and Economic Development, it is recognised that there is no intention that the government are backing away from the 2016 zero carbon commitments set by the previous administration.

The London Plan seeks to achieve an overall reduction in London’s carbon dioxide emissions (CO2) of 60% by 2025 (based on 1990 levels). The Mayor of London expects boroughs to contribute to meeting this target through their plan making and development management responsibilities.

Enfield’s Core Strategy and draft Development Management Document establishes the policy context seeking to achieve zero carbon by 2025 and sets out the following targets to reduce carbon emissions within development and are therefore not repeated in the AAP.

Development within the Central Leeside area must seek to support these guiding principles of sustainable development and provide measures to ensure that development reduces carbon emissions through the provision of efficient building design and renewable technologies.

The area’s densely developed industrial nature presents a number of issues, not least in terms of high carbon emissions, but also a lack of biodiversity and poor air quality. Although this is the case, the area’s density also presents significant opportunities. For example, existing industrial users create high heat density throughout most of the area and are therefore suitable for the establishment of a decentralised energy network, which in turn can provide low carbon heat to buildings as shown on figure 28: Energy Demand and Energy Users in Central Leeside.
Employment Training and Support

The area is a significant employment location across a range of businesses, offices and retail premises to suit different budgets and sectors. The number of people who work in the area has grown over the last ten years.

Among the area’s population, there is a high dependence on benefits and a high incidence of worklessness. Despite attempts to tackle disadvantage, there has been little change in employment.

A key aspect of Central Leeside’s objective of social and economic regeneration is to enable a large number of existing local residents to obtain jobs or better jobs in the area.

This could be during the construction stage of development or in businesses or services that locate in the area.

The potential therefore exists to create an extremely vibrant local economy with opportunities for more local residents to enter work.

The area has notable clusters of industries in manufacturing and the green and low carbon sectors which are growing strongly and have a reputation for innovation. These clusters and the smaller businesses are the cornerstone to building successful economies.

Approach to Employment and Training

The Council working with its partners could develop affordable workspace on industrial estates for example in redundant garage space, as well as other vacant land or buildings, to support and encourage entrepreneurship and local start-up business. Development of this type of workspace would require market testing to ensure its viability.

Temporary spaces, subsidised rents and Council initiatives could be considered which could support the establishment of new businesses within the area.

The Council are developing a business support and sector base programmes to provide routes into employment for local residents. This could be supported by, or be in partnership with major employers in the area.

The Council will work with local businesses in the area to support, develop and promote local businesses and help build and improve the image and identity of the area.

TELL US WHAT YOU WANT...

Q35: Are there any sites or buildings you are aware of which are redundant which could be used to support and encourage entrepreneurship and local start-up businesses?

Q36: Have all the main issues and opportunities relating to employment training and support been identified?

Q37: Do you agree with the proposed approach set out above?
Community Facilities

Community facilities are located in close proximity, but as part of redevelopment proposals additional floorspace to cater for the new population living within Central Leeside will be provided. An area centrally located in Meridian Water has been identified in the Core Strategy as an opportunity to deliver a new Community Hub as shown in Figure 26.

The Community Hub is in close proximity to the neighbouring boroughs of Haringey and Waltham Forest. Enhanced public realm, proposed north-south and east-west connections and improvements to Angel Road station will ensure that the Community Hub can be shared with adjoining residents as shown in Figure 27.

The likely floorspace requirements for community uses will be set out in the final version of the AAP. As part of the growth scenarios identified in the Meridian Water masterplan, a range of community facilities, which meets the needs of the new and existing population will be provided – these include:

- An arts and community centre linked with a job centre and technology hub with a café;
- A separate community building to provide a variety of different spaces to accommodate a range of community requirements from meeting rooms to yoga studios;
- A modern health centre to cater for the needs of both the new and existing community; and
- A local police shop.

Approach to Community Facilities

The new residential community at Meridian Water will be served by a new community hub located in the heart of the development area. The community hub must be provided within the first 2 phases of development and must be easily accessible to the new and existing residents and workers in and adjoining the area, fronting onto the street with high footfall and designed as a modern building with a strong visual presence. The spaces provided must be affordable and available to all. This could be achieved by providing community support and local information for new and existing residents relating to the progress of development in Central Leeside.

The community hub should not only provide a valuable resource for the local community and community groups, but should also help new and existing residents, workers and visitors in and adjoining Central Leeside to integrate into the social fabric.

As part of the Meridian Water masterplan it is anticipated that development will deliver a police shop, located within a retail frontage/community hub. It should operate a small base from which the new community would be able to have day-to-day contact with police services.

TELL US WHAT YOU WANT...

Q33: Have all the main issues and opportunities relating to existing social and community facilities been identified?

Q34: Do you agree with the proposed approach set out above?
**Approach to new retail and town centre uses**

The proposed local centre in Meridian Water is in close proximity to other town centres, such as Angel Edmonton, Edmonton Green and Tottenham (in Haringey), which provide local residents with retail comparison goods such as clothes and household goods. It is important to recognise that the local centre in Meridian Water complements these town centres, and offer a different shopping experience by providing a range of shops and unit sizes, to access day-to-day convenience goods, that serve the local catchment area and is accessible by walking and cycling. It will also differentiate itself through the provision of a range of employment spaces, particularly enabling small businesses to develop and pool resources in the local area, where appropriate.

Activity will be centred along key routes towards the station, which will create a network of interconnected routes and spaces of activity.

A new residential community at Meridian Water will be served by a new neighbourhood centre located in the heart of the development area. The local centre will include no more than 2,000 sq m gross new floorspace for A1 to A5 uses. This will include a mix of local shops and services to meet day to day needs.

Setting out the extent of the core of the hub will help to achieve a coordinated approach to development and ensure that activity is focussed to achieve a joined up approach. Based on studies carried out as part of the masterplanning process, the AAP recommends that the area in between Tesco and Ikea could be considered as the core hub area of Meridian Water – shown in Figure 26.

Some parts of Meridian Water will include a small concentration of bars and cafes, helping to create vibrancy in the evenings but sometimes these uses can cause conflicts with the local residential population. A policy to avoid conflicts between housing and licensed premises wherever possible could be considered.

It is important that the local centre complements (rather than competes with) the existing town centres adjoining the area, such as Angel Edmonton and Edmonton Green.

The local centre should integrate well with its surroundings and enhances routes to, from and within the neighbourhood centre to the wider Central Leeside area and its adjoining area.

**Overarching principles for the local centre are set out in the masterplan.**

**FIGURE 26 A small area that could be considered as the core hub area of Meridian Water**

---

**Q30**: Have all the main issues and opportunities relating to new retail and other town centre uses been identified?

**Q31**: Do you agree with the proposed boundary for the core hub of the local centre?

**Q32**: Do you agree with the proposed approach set out above?
Approach

New residential development will be required to provide a mix of communal amenity space and private amenity space for new residents in accordance with the Core Strategy and the standards set out in the draft Development Management Document.

Given opportunities to achieve greater coordination, the Council could require proposals for any new type of community or leisure facility to serve a cross section of the community for a variety of purposes.

A small slither of land to the south of Harbet Road Industrial Estate has been identified as part of the Meridian Water masterplan to support leisure uses, but we could identify sites currently used to provide community services which may become redundant in the future.

Green routes are identified, along these routes, new development could create high quality pedestrian environment and contribute to public realm improvements.

Where public realm works are undertaken, development could incorporate space for nature. This could be achieved through quite small interventions, or more ambitious means, such as creating rainwater ponds with amenity space.

The Council could identify open spaces owned by the Council that might be suitable for use as community allotments.

Retail and Other Town Centre Uses

The potential to accommodate 5,000 new homes is established in policy and through the Meridian Water masterplan. The demand will create not only additional community facilities, the same will also be true for shopping and other facilities, including for example cafes, restaurants, post office and laundrettes. The policy context for new retail and other town centre uses is established in Core Policy 17: Town Centres stating: a new Local Centre is proposed in Meridian Water within Central Leeside to cater for the day to day needs for the new local community that is to be established here with no more than 2,000 sq m gross for A1 to A5 uses.

The consultation responses from the issues and options and strategic growth areas reports highlight the importance of providing for day to day needs with the provision of shops in a new local centre in Meridian Water, which should not have a detrimental impact on the quality and provision of existing town centres in the immediate and wider areas.

The masterplan indicates the broad location of these uses in principle and also considers the need to support Edmonton Green as a district centre. Local retail provision is distributed along the Causeway (i.e. the east-west axis) and the River Lee Navigation, promoting an intensity of activity on the ground floor of these axes.

There are opportunities for the existing retail provision to be re-configured in order to make more efficient use of land, provide active frontages and more commercially appropriate layouts.

There is the opportunity for Tesco to modernise and reconfigure their store to provide a positive frontage to the high street.

There is the possibility for Ikea to modernise and reconfigure, again to provide a more positive frontage onto the high street.

The existing Ravenside Retail Park could take advantage of the opportunity to modernise and intensify use of the site.

The prospect of development along the canal edge could be considered, providing a positive and active frontage to the River Lee. This could include leisure, food and drink and residential uses.

Leisure uses that are compatible with neighbouring centres could be introduced to help create a destination and promote the development of an evening economy. This in turn could help to support the introduction of food and drink uses. This could also include opportunities for activity to spill out onto pavements through street cafes and shop displays.

Alongside retail, start-up businesses and market stalls could be accommodated in order to help promote entrepreneurship and generate new enterprises. The Council could look to provide incentives to encourage the development of these businesses, such as locally grown food helping to support a more distinct character.

**TELL US WHAT YOU WANT...**

**Q27:** Have all the main issues and opportunities relating to existing social and community facilities been identified?

**Q28:** Are there any sites you are aware of, which are redundant which could be used for community facilities?

**Q29:** Do you agree with the proposed approach set out above?
There are also the opportunities emerging as part of the London 2012 Olympic Games and its Legacy Transformation.

However, in terms of the existing facilities in the area, not all of them are well used. Many are isolated from residents, which may be a factor in terms of poor levels of usage. Understandably, a lack of usage can pose a threat to the viability of community facilities.

A number of changes are planned for Pickett’s Lock to address the existing imbalances and improve services. These improvements are discussed in chapter 5 of this report which could address some deficiencies that currently exist, but it will be important for public sector partners to work together to ensure that the right facilities are provided in the right places.

Planned improvements will also need to ensure that other facilities remain in viable use. For example, the area currently has some good outdoor sports facilities, but their use may decline following improved or expanded provision elsewhere.

Residents in the area are in close proximity to the Lee Valley Regional Park and the smaller pocket parks, but access to the parks are poor. It is not possible to create a large new green space in Central Leeside, but there are opportunities to improve existing or create new smaller spaces, and to improve links to neighbouring open space. As the population of the area increases, the amount of open space per head will decrease. Improving the quality of existing open space is therefore important, as is providing open space within new housing development.

There is significant potential for achieving better coordination between community services to increase usage including the creation of strengthened routes between communities, green spaces, and facilities, broadly shown in the following diagrams and described below:

- At Meridian Water by enhancing existing connections to the Park and across to Banbury Reservoir along Leeside Road, maximising access for residents to the west of the Lee Valley railway line as well as the new development opportunities here;
- At Edmonton Green by linking back to the new development opportunities at Meridian Water through improvements to existing routes along the former railway corridor and also alongside Salmon’s Brook, linking with Montagu Recreation Ground and the industrial premises in Eleys Estate;
- At Pickett’s Lock by providing improved links between this facility and residential communities to the west of the Lee Valley railway line; and
- Improved linkages to Ponders End will also be supported and are being taken forward as part of the North East Enfield Area Action Plan.

In terms of new leisure and recreation uses, the Meridian Water masterplan presents the opportunity for leisure uses at Banbury Reservoir. This could include sailing, canoeing, fishing and swimming. This will help to create lively spaces and generate a more diverse employment economy.

A small slither of land to the south of Harbet Road Industrial Estate (as shown in figure 25) could be safeguarded for leisure uses.
Health Care Provision

All homes within Central Leeside should have access to a primary health care facility, located in an accessible location with good access via public transport.

Enfield Primary Care Trust (PCT) has indicated that they are unlikely to support the provision of new facilities for less than 10,000 patients unless the facility is specifically provided for as part of new development.

Given the scale of development anticipated at Meridian Water, there will be a need for additional health related infrastructure and facilities in Central Leeside, to which all development will be expected to contribute. The introduction of 5,000 new homes over a period of up to 15-20 years would equate to the need for a practice to house around 7-8 additional GPs and their associated health teams (based on a ratio of 1 GP to 1,800 patients).

The focus of activity should be located in Meridian Water as part of the new community hub, whilst considering any new practice will be serving this part of the borough it would have a knock-on-effect on the capacity required across all health provision adjoining the borough.

The Council will continue to work with partners and landowners to provide a suitable location, as part of the comprehensive redevelopment at Meridian Water for a new primary care facility within the heart of Meridian Water.

The Meridian Water masterplan has introduced a broad area for health care facilities. However, the Council could identify sites within the wider Central Leeside area we would require community facilities within future redevelopment proposals. This could include sites currently used to provide community services but which may become redundant in the future.

Other community facilities – Leisure, Recreation and Entertainment

Residents in the area are well placed to take advantage of the major leisure, recreation and sports facilities. These include the Lee Valley Regional Park, the Athletics Stadium, and a multi-screen cinema complex at Pickett’s Lock. Smaller pocket parks in the area include: Montagu Recreation Ground, Kenninghall Open Space, and Ladysmith Open Space. The Frederick Knight Sports Ground, Tottenham Marshes and Marsh Lane allotments within Haringey in close proximity, but just outside the Central Leeside AAP boundary as shown on Figure 24:

<table>
<thead>
<tr>
<th>DESTINATION</th>
<th>PUBLIC REALM IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lee Valley Athletics Centre</td>
<td>A B C Enhance existing footpaths to increase access to Jubilee Park, the River Lee and Pickett’s Lock</td>
</tr>
<tr>
<td>2 Indoor Bowls Club</td>
<td>D Introduction of a pathway through the Lee Valley Golf Course at Pickett’s Lock</td>
</tr>
<tr>
<td>3 Lee Valley Leisure Golf Club</td>
<td>E Introduction of new bridges and route through A406 Industrial Park to Thames Water site</td>
</tr>
<tr>
<td>4 Lee Valley Leisure Complex</td>
<td></td>
</tr>
<tr>
<td>Campground and Caravan Park</td>
<td></td>
</tr>
<tr>
<td>5 Pickett’s Lock</td>
<td></td>
</tr>
<tr>
<td>6 Montagu Sports Ground</td>
<td></td>
</tr>
<tr>
<td>7 Lee Valley Regional Park</td>
<td></td>
</tr>
<tr>
<td>8 Craig Park</td>
<td></td>
</tr>
<tr>
<td>9 Raynham Primary School Field</td>
<td></td>
</tr>
<tr>
<td>10 Cinema</td>
<td></td>
</tr>
<tr>
<td>11 Kenninghall Open Space</td>
<td></td>
</tr>
<tr>
<td>12 Ladysmith Road Open Space</td>
<td></td>
</tr>
<tr>
<td>13 Houndsdell Allotments</td>
<td></td>
</tr>
<tr>
<td>14 Gallard Primary School</td>
<td></td>
</tr>
</tbody>
</table>
Education

Schools are key to establishing communities. Residential development in Central Leeside will substantially increase the number of school age children requiring local primary and secondary education. All development must contribute to the cost of increasing the capacity of local primary and secondary education.

Provision is made within Core Policies 8: Education and 38: Meridian Water of the Core Strategy for two new 2-form entry primary schools, including two 60-part time nursery places, and one new 6-form entry secondary school in Meridian Water.

The Council’s most recent pupil projections together with the implications of these projections from 2012/13 have been revised. The revised primary ten year strategy presents options for providing additional school places during this period through measures that aim to provide quality teaching spaces which will support a flexible and innovative modern curriculum whilst keeping costs to a minimum.

In terms of primary school provision within Central Leeside, the projections associated with Meridian Water indicate that the proposed plan for medium to high density housing will produce demand for an additional 4 forms of entry of primary school provision. The provision set out in the Core Strategy for two new 2-form entry primary schools is therefore adequate. However, one of the schools may be provided as part of an all-through Academy with provision from ages 3 through to 18 representing an 8-form entry secondary phase.

The masterplan indicates the broad location of these schools with one on a vacant site on Dyson’s Road, currently owned by the London Diocesan Fund, for the location of a temporary school to provide primary places in an area close to Meridian Water, with a view to relocating or re-providing once the housing development is underway. The Diocese are keen to work in partnership with the Local Authority by providing the use of their land to accommodate a temporary partner school in order to address the serious shortfall of places in the Edmonton/ Angel areas.

It is proposed that a minimum of 2 classrooms are provided for September 2012. The arrangements for these one-off classes are currently being finalised.

Since the adoption of the Core Strategy, the current projections based on a medium to high density housing at Meridian Water indicate that the development will produce an additional 4 forms of entry in relation to ages 11-16. However, 4-form entry secondary schools are generally considered unsustainable. As part of the Council’s 10-year strategy it has been recommended that the secondary school at Meridian Water will accommodate 8 forms of entry, which will also provide additional places to meet demand in the south east of the borough.

Although the projection and the timescales for development at Meridian Water are provisional, comprehensive redevelopment at Meridian Water provides an opportunity to deliver two new primary schools and a new secondary school. Ultimately, the final mix of homes in Meridian Water will influence the precise requirement for primary school places.

The Council will continue to work with land owners in Meridian Water to safeguard sites for the provision of two new 2-form entry primary schools, including 2 60-part time nursery places and a new 8-form entry secondary school to include provision for years 12-13 (i.e. 6th form).

Government policy now specifies that all new schools will be either academies or free schools, and the new schools proposed for Meridian Water will be of these types. In the context of the wider area covered by Central Leeside beyond Meridian Water, there is also the potential for applications to be submitted by external parties to the Secretary of State to establish such schools in future years. We will need to consider our strategy for school place provision in the light of any such applications receiving government approval.

Figure 23 Key
Broadband and Connectivity

Access to broadband and good connectivity is increasingly important for businesses. Over 18% of people work from home in Enfield and many others need to work remotely. The reliability and capacity of broadband network is key to ensuring effective communication.

With a high concentration of manufacturing, logistics and wholesale businesses, Central Leeside has a good overall reliability and capacity of broadband and connectivity.

The distance of business premises from the nearest exchange is a key factor affecting capacity. With businesses such as wholesale and logistics firms sharing a software platform to manage stock, place orders and track delivery reliability of systems is essential for the majority of existing businesses.

BT is carrying out an infrastructure upgrade across London. Enfield was one of the north London boroughs to benefit from the first phase of this investment in 2010.

This improved infrastructure has implications for the area’s inward investment plans, as it can feature in Central Leeside’s offer both for commercial developments and new housing. It will also support innovation within existing businesses. Good video conferencing capacity would enable London-wide knowledge and innovation networks to engage with businesses on a regular basis.

The next version of the AAP will provide more detail on how this may be enhanced and improved.

Why are we doing this?

The Core Strategy commits Central Leeside as a growth area with Meridian Water delivering around 5,000 new homes. It also recognises that our industrial land portfolio should be retained and improved to strengthen Enfield’s economy.

Retaining and strengthening our industrial portfolio has been recognised in numerous documents and technical studies supporting our Core Strategy and the Upper Lee Valley Opportunity Area Planning Framework.

The industrial portfolio is an important ingredient to facilitate economic growth in Enfield but the nature and character of these estates sometimes impinge the development objectives of Central Leeside and prevents the area from maximising the benefits from its proximity to surrounding growth areas in the wider Upper Lee Valley and north London.

The sense of place is therefore important. We need to create the right conditions to attract investors to locate in this part of Enfield. Improvements to the strategic infrastructure in terms of public transport and decentralised energy provision, improvements to the public realm will reinforce the area as an attractive investment and employment location significantly contributing towards achieving the vision for Central Leeside as a place to live, work, visit and invest.

Relevant evidence base:

- Core Strategy;
- Local Economic Assessment (2011);
- Employment Land Review (2012);
- Viability into a Decentralised Energy Network for the Upper Lee Valley – Pre-Feasibility Study (2011) and emerging Feasibility Study; and
- Technical studies informing Meridian Water masterplan.

iii) Building a Sustainable Urban Neighbourhood

The provision for a range of social infrastructure is essential to maintaining a sense of community across the Central Leeside area and to support social and economic regeneration. The creation of a substantial number of new homes and jobs in Central Leeside will require a significant increase in facilities and local community services. New development will be expected to provide or contribute towards the provision of education, health, recreation, local services, skills and training and open spaces, to support the future residential and working population. There is also a major opportunity to recognise the strategic role of the Lee Valley Regional Park and the area as North London’s waterside and its accessibility to a wider audience by expanding the range of leisure and entertainment facilities.

Existing social and educational facilities are shown on figure 23.
Claverings Industrial Estate

Unlike most of Enfield’s local employment land portfolio, this is not a former Victorian industrial area or a former manufacturing area now being used for warehousing. Most of the area is purpose built for light industrial and office uses; although the units are now quite old, it provides low rental space for local users. The estate is owned by Enfield Council.

The 2006 Employment Land Study recommended that a partial change of use could be considered in this area on the proviso that any financial return is used to assist with the retention of employment land on the remainder of the site. The 2009 Update broadly endorsed this recommendation. The 2012 ELR agreed with this approach, but recognised that there is little evidence of vacant space. It acknowledged that the site should be retained in its LSIS designation, but if a new mix of uses is introduced, careful management of industrial uses is needed. It recommended that new residential uses may not be appropriate.

A do nothing and keep things as they are approach could be considered. However, there is an opportunity to encourage a better mix of uses and the creation of more jobs by taking a more pro-active approach to the future of this site. The Council could work with landowners and occupiers to improve its appearance and the range of uses and jobs it offers; the commercial role of the estate could be strengthened for more intensive employment uses; other mixed uses could be identified, so long as these do not result in an overall decrease in commercial floorspace such as live/work units to support and encourage entrepreneurship, but more work will need to be undertaken to establish whether they work, where they are best located, and how they are designed.

Managing a balanced approach to the release of Industrial land for other uses

The 2012 ELR recognised that the Core Strategy policies and protected sites remain relevant, even with the recession. Vacancy rates remain low and there is development interest to provide new employment space. There is therefore considerable importance in terms of managing a balanced approach by 2-folds: one is to protect and enhance the existing industrial estates, and at the same time to carefully create interest and diversity whilst avoiding conflicts and supporting the delivery of new development at Meridian Water to make Central Leeside become an attractive place to live, work and visit.

The above sections explain how existing land use policies could be altered to achieve a better balance of uses across Central Leeside through the consolidation of SIL and LSIS, through the promotion of higher quality employment land and the promotion of new employment areas in Meridian Water.

Approach for maintaining a balanced approach to the release of industrial land for other uses

The Council seeks to manage the limited release of existing industrial sites for mixed use development across the whole of Central Leeside within and outside SIL and LSIS through the statutory development management process. The spatial approach set out above in relation to Harbet Road and Montagu Industrial Area i.e. the area covered by Kenninghall will be complemented with clear criteria set out in the final version of the AAP that will be used to assess proposals for redevelopment.
There is the opportunity here to release this location from its LSIS designation to create a sustainable neighbourhood through the provision of a new all-through school. More details relating to the school on this site can be found within the Meridian Water masterplan document.

**Approach to the southern portion of the Montagu Industrial Estate**

The Council seeks to consolidate the area covered by the southern portion of Montagu Industrial Area (the former rail sidings at Rays Road and Kenninghall Estate) by supporting a release of LSIS to support the creation of a new sustainable urban neighbourhood at Meridian Water through the provision of a new all-through school for pupils between the ages of 3 and 18 years old. The development would provide or contribute to the social and community facilities required to support a new sustainable urban neighbourhood at Meridian Water.

The Council will actively support businesses required to relocate as part of the development.

**TELL US WHAT YOU WANT...**

**Q20:** Do you agree with the approach to releasing LSIS here?

**Q21:** Do you support the focus on a new school here?
The policy context for these industrial areas is well established. As protected SIL there is little question that they should be considered for any other uses other than major industry which needs separation from potential conflicting uses.

The 2012 ELR acknowledged some vacancies in these estates, however, this is limited. The most noticeable vacant space is at the southern end of Eleys Estate this being Angel Road Retail Park. The opportunities for redevelopment of this area are discussed in chapter 5 of this report. However, in terms of these units on the edge of Eleys Estate, these are outside of the SIL designation and the ELR (2012) recommended extending industry into this area is unlikely to be viable given the differences in land and property values for retail versus industrial.

However, these estates remain popular and vacant space is part of normal market churn. Maintaining a quantum of land for industrial purposes here is particularly important as Meridian Water progresses. Occupiers who wish to remain local will be looking at any property that becomes available in this area.

The Council will need to take a more pro-active approach to the industrial portfolio. Protecting our industrial estates for industrial uses is important, but the Council will wish to create a modern approach to heavy industrial uses by attracting cleaner and modern industries to the area, which in turn could help to raise the profile of the area and the level of employment provided on site to achieve the vision for Central Leeside. A change in the sense of place in these areas is crucial to attract businesses to locate here.

Industrial uses here could be intensified and promoted for development of environmental industries especially relating to energy generation to support a potential decentralised energy network in the area. Additionally, they could be supported for new development for industrial uses falling within high tech manufacturing, waste management, freight, storage and logistics.

The Council could work with the industrial users to improve the appearance, access and environmental quality of these industrial estates as locations of choice for cleaner and modern industries.

The Council will work with partners and the GLA to develop an Estate Renewal Strategy to encourage the redevelopment and enhance the offer ad a competitive location attractive to modern industry.

**Enfield’s Locally Significant Industrial Sites**

**Montagu Industrial Estate – Southern Portion**

The area covering the southern portion of Montagu Industrial Estate comprising of the former rail sidings at Rays Road and Kenninghall Estate as shown in figure 22 and is home to “Metals and Waste”.

Through the preparation of the Meridian Water masterplan, Metals and Waste are keen to work with the Council by providing the use of their land to accommodate a new school. A relocation strategy for Metals and Waste affected by the release of LSIS will be provided.

**Tell Us What You Want...**

**Q17**: Have all the main issues and opportunities been identified for these estates?

**Q18**: Where and how can we create a modern approach to heavy industrial uses?

**Q19**: How can we attract a higher employment base?
Approach to Harbet Road Industrial Estate

The Council seeks to consolidate Harbet Road Industrial Estate by supporting a partial release of SIL at the southern portion of the estate and through a strip of land adjacent to the River Lee. SIL is re-provided within Meridian Water – as shown in Figure 21.

The remaining industrial uses at Harbet Road Industrial Estate could be intensified and promoted for development of environmental industries especially relating to energy generation to support a decentralised energy network in the area.

Additionally, they could be supported for new development for industrial uses falling within high tech manufacturing, waste management, freight, storage and logistics – moving towards a new industrial business park status.

Industrial uses and flexible space for small businesses in the new SIL areas will promoted to provide a suitable transition between the more intensively used industrial areas and the emerging neighbourhood at Meridian Water as shown in the masterplan.

The Council will need to ensure that the remaining uses on Harbet Road Industrial Estate and the new SIL are compatible with the emerging neighbourhood. The new SIL could be restricted to B1 uses. Such uses could help to achieve a more attractive physical environment with less need for on-street parking and waste storage.

The approach seeks to maintain or increase industrial capacity i.e. more jobs would be created, when compared with the existing uses.

The provision of small scale “walk to” amenities such as crèches, cafes, and small local shops that serve the needs of people working in the industrial area and the occupiers of the new employment areas could supported in line with the draft policies in the Development Management Document.

The Council will continue to work with partners and the GLA to develop a regeneration and investment strategy for the area (and wider parts of the borough) to encourage redevelopment and enhance its offer as a competitive location that is attractive to modern industry.

A relocation strategy for existing businesses affected by the release of SIL will be provided.

**TELL US WHAT YOU WANT…**

At this stage scenario development for Meridian Water masterplan shows a reconfigured SIL boundary for Harbet Road Industrial Estate and new SIL areas located in the core area.

Q11: Figure 21 shows the proposed SIL boundary for Harbet Road Industrial Estate. Do you agree with this proposed boundary?

Q12: Do you agree with the approach to consolidating SIL at Harbet Road Industrial Estate?

Q13: Figure 21 shows the new employment areas in Meridian Water. These new areas are called: Gateway Business Hub and Pymmes Business Hub. Do you agree with these new proposed boundaries?

Q14: Do you agree with the proposed introduction of new SIL in Meridian Water?

Q15: Have all the main issues and opportunities been identified for Harbet Road Industrial Estate?

Q16: Are there any other uses that could be considered on remaining SIL of Harbet Road Industrial Estate, so long as these do not result in an overall net loss in industrial floorspace?

Design

As part of the evolution of the Meridian Water masterplan detailed work has been undertaken to encourage development and give clear guidance to developers. It is acknowledged that there are sometimes conflicts between industrial and residential uses, but in many cases more intensive development, when well-designed and built in the right location, can enhance the character and quality of the area. In principle, good design and layout of new development can lead to a more efficient use of land without compromising the quality of the local environment and can help mitigate some of the potential conflicts often found between industrial and residential uses. The masterplan is not intended to be prescriptive, it will be flexible to respond to, and accommodate a range of options for detailed design.
Whilst the 2012 ELR acknowledged difficulties in making any detailed assessment, it did however, recognise a large amount of vacant employment space within the SIL adjacent to River Lee.

Recognising the opportunities coming forward as the masterplan emerges the Council also has an opportunity here to provide new, cost efficient space for smaller occupiers. Our Local Economic Assessment (2012) indicates low rates of new business start ups and although the 2012 ELR acknowledged that large warehouses remain in demand in Enfield. It also recognised very little new small unit development in the borough. Most occupiers seeking small units are accommodated on the shrinking local industrial portfolio in less than ideal units.

A large comprehensive development scheme, such as Meridian Water is one of the few opportunities to provide this type of space.

To support the Council’s vision to achieve at least 1,500 new jobs in Central Leeside, a robust assessment of job densities, demonstrating that the numbers can be achieved, is accompanied with the Meridian Water masterplan.

To achieve the anticipated numbers on the reduced amount of employment land, the Council will need to ensure that there is careful control over the proposed uses to ensure the expected employment densities.
Retention and Enhancement of Industrial Areas in Central Leeside

Harbet Road Industrial Estate (SIL) and the Creation of New Employment Areas

Recent scenario development for the Meridian Water masterplan has highlighted a partial de-designation of SIL at Harbet Road Industrial Estate (southern portion) to support a comprehensive approach to the regeneration of Meridian Water. The release of SIL in this location optimises the opportunity to connect residents at Meridian Water to the waterfront and the Lee Valley Regional Park – enhancing their quality of life that mixed use regeneration brings.

The 2012 Employment Land Review recognises that the area is almost entirely industrial. Most of the existing SIL will be redeveloped or at a minimum be refurbished. New residential uses will be introduced. New jobs will be provided across the area, both within the reconfigured employment areas shown in figure 21: Retention and Enhancement of Industrial Areas in Central Leeside.

In order to deliver the objectives and the vision for Central Leeside and Meridian Water, a strip of SIL adjacent to the River Lee Navigation is identified for release to facilitate residential development to maximise the opportunities associated with this waterfront setting. Residential opportunities here will help transform the environment of this stretch of the River Lee.

Following a qualitative assessment carried out by BNP Paribas to support the Meridian Water masterplan, the quantum of SIL released at Harbet Road Industrial Estate is reallocated to two areas. These areas are:

- Gateway business hub – i.e. the teardrop site. The analysis undertaken suggested that due its relative isolation between the railway line and busy road and its close proximity to Angel Road station and future transport hub, its visibility from Meridian Way and access to the North Circular (A406) make it ideally suitable for SIL use; and

- Pymmes Business Park – The analysis suggested that because of its relative isolation, its proximity to the service yards of existing SIL and retail uses and its good access makes it an ideal collocation with existing SIL uses.

The overall quantum of SIL within Meridian Water remains the same.
FIGURE 20

Existing SIL and LSIS in Central Leeside

Key
- Central Leeside Area Action Plan
- Rail
- A Roads
- Water
- Strategic Industrial Location
- Locally significant industrial site

Legend:
1. Montage Industrial Estate
2. Days Estate
3. Ashwell Industrial Park
4. Edmonton Eco Park
5. Market Road Industrial Area
6. Glentorpe Industrial Estate (including Duxford Business Park and Horian Business Centre)
7. Montage Industrial Estate (including the former rail track sidings and Kenningshill Estate)
As parts of Central Leeside begin to change, there will be opportunities to create a new mix of uses that respond to and deliver the key objectives of the Core Strategy. The AAP will seek to create a framework that will allow a more flexible approach to land use by releasing some areas currently protected as SIL, allowing new homes to come forward and to create the right conditions to allow smaller businesses that contribute to the local economy to remain or locate in Central Leeside.

As the AAP progresses into a more formal document, it will aim to maximise the economic potential of Central Leeside through employment-led mixed use regeneration in appropriate locations that enhance the area’s employment role in both a strategic and local context, promoting diversity in businesses and promoting a range of employment sectors and size of business.

The economic potential of Central Leeside will be balanced with the opportunities for housing growth, focused mainly in Meridian Water.

**Strategic Industrial Locations**

The majority of industrial estates in Central Leeside are well used and have limited vacancies. They are either protected as SIL or LSIS which has helped to maintain space for large and small scale industrial uses and prevented non-industrial uses coming forward.

In line with the recent publication of the London Plan, our Employment Land Review published in 2012, Core Policies 14 and ‘15, the focal points for strategic industrial retention and intensification within Central Leeside are shown on figure 20: Existing SIL and LSIS in Central Leeside.
North London Waste Authority (NLWA), one of four waste management authorities in London has a contract with London Waste, and owns and operates the Edmonton Incinerator, which generates energy from waste. One of the main challenges is to reduce the amount of material being incinerated and grow the amount processed and recycled. The Eco Park is identified as the preferred location for the management of north London’s municipal waste. It is promoted through the Core Strategy, Opportunity Area Planning Framework for the Upper Lee Valley and the North London Waste Plan as a green industries hub and principle supplier for heat and energy for new and existing residential and commercial developments in the Upper Lee Valley boosting the area’s employment potential and a playing a key role in delivering exemplar sustainable housing and commercial development.

Biffa’s operation in the Eco Park (formerly Greenstar), is Enfield’s newest green business and has a contract with NLWA to process 10% of North London’s waste. This Mixed Recycling Facility (MRF) opened in Enfield in 2010 and has a growing workforce of 210 employees.

High grade recyclates produced by Biffa’s MRF plant will help attract businesses to the borough and support the growth of supply chains. A new plastic recycling plant on the Eleys Estate will produce recycled plastic bottles and film to supply food and drink manufacturers. It will employ around 47 people and open in 2012.

Whilst the Eco Park would be focus for green industries, other sites in Central Leeside will still be considered. The Low Carbon chapter sets out how this could be achieved.

Although waste management roles are generally low skilled, there is a growing number of higher skilled jobs. Half of the new jobs in this sector are forecasted to require a degree and 35% of all jobs will require up to GNVQ Level 2.

Given the forecasted growth of waste re-processing and recycling industries and the success of existing sectors, there are a number of transformational economic opportunities for Central Leeside to become a greener place and for more employment and jobs to be provided in the area:

Work on the feasibility of a decentralised energy network in the Upper Lee Valley will help attract other businesses. Biffa has plans for a Recycling Education Centre to improve the sector’s public image. Our local Further Education and Higher Education sectors are keen to develop training to meet the Green and Carbon Reduction sector needs.
Central Leeside is also home to a flourishing green and low carbon sector, which includes businesses providing services and products reducing the carbon footprint of households and businesses and diverting waste from landfill. Legislation relating to carbon reduction targets that came into affect in 2010 is driving the growth in this sector.

Enfield has 27 businesses in this sector engaged in producing energy, managing and processing waste from domestic and commercial sources, installing energy saving features in properties and have a workforce of 370 people with a total sector workforce of 1,600. Most of these businesses are located in the Upper Lee Valley. Metal and Waste Recycling Limited based in Montagu Road Industrial Area provide total waste management solutions for factories and employs around 300 people.

The GLA commissioned a Low Carbon baseline study to profile this sector in each London borough. The study captured the number of jobs, businesses and turnover from diverse businesses with part or all of their operation focussing on carbon reduction activities, including: energy production, waste management, manufacturers of components and products, professional and technical services and construction and business support functions.

The study was informed by data from 2009 and stated that Enfield had 2,902 employees in this sector, across 262 businesses and a combined turnover of £267 million. The size of this sector ranked Enfield as having the 13th largest sector workforce in London.

The study showed that Enfield had the:
- 2nd largest workforce in London for recovery and recycling; and
- 4th largest workforce for renewables in the wind sub-sector.

These businesses typically employ up to 377 people and have a combined workforce of 1,600. These businesses are located on the eastern side of the borough, mostly in Central Leeside as shown in Figure 19: Location of Enfield’s Green and Carbon Reduction sector businesses and have markets in London, nearby counties, South East, UK and abroad.
Figure 18

Location of Enfield’s main local food and drink manufacturing and wholesale businesses.
Enfield’s manufacturing sector in 2009 ranked 9th largest in London and its workforce is the 12th largest in London. The manufacturing sector has been in long term decline in the UK. Some of Enfield’s manufacturing businesses migrated into wholesale to remain competitive, while others out-sourced production abroad and focused on finishing, packaging and distribution in Enfield. Despite a significant reduction in overall manufacturing employment there has been an increase in employment in food and drink manufacturing over the past 20 years cushioning the sector’s overall declining workforce. Estimates in 2009 suggest that manufacturing in Enfield employed 5,328 people (5.8 of local employment), across 535 VAT/PAYE registered businesses (5.2% of local businesses)\(^3\).

There are around 36 food and drink manufacturing businesses in Enfield with around half located in Central Leeside. This sub-sector has the largest workforce in the manufacturing sector, making up one in three jobs, with businesses typically employing 20-130 people. These businesses have London, UK and international markets and include national brands.

The location of food and drink manufacturing businesses links to their market and is shown in figures 17 and 18: Location of Enfield’s main local food and drink manufacturing and wholesale businesses.

---

\(^3\) Enfield’s Local Economic Assessment February 2012
Why are we doing this?

Significant changes to enable movement and improvements to public transport connections are required to support the anticipated growth in this area. There is an overwhelming support for improved transport provision in the area. Many stakeholders have acknowledged that there needs to be a step change in the level of provision to ensure people and businesses can easily access the area. Furthermore, it is acknowledged that public transport, walking and cycling provision needs to be enhanced and promoted to provide an alternative to private car travel.

The issues of poor connectivity from Central Leeside to surrounding areas, and connectivity within the area have been recognised in numerous documents and technical studies including our adopted Core Strategy and the Upper Lee Valley Opportunity Area Planning Framework. These barriers to movement impinge on the development objectives of Central Leeside and prevents the area from maximising the benefits of its proximity to other growth areas in the Upper Lee Valley and north London.

The majority of the area has low PTAL which are used to assess the acceptability of development in relation to its impact on the transport system. Without public transport improvements, developments of higher densities, which is important to support the regeneration opportunities in Central Leeside, and future investment in the area may not be able to come forward.

The Council supports the package of measures to support increasing growth in the Central Leeside area, but considers that the phasing of development needs to be considered hand-in-hand with transport improvements.

Evidence base that supports this is contained in:
- Core Strategy;
- Transport Assessment to accompany the Core Strategy;
- ULV Transport Study; and
- Technical studies informing the Meridian Water masterplan.

ii) Facilitating Economic Growth

Overview

Supporting new employment growth and strengthening the local labour market are the key ingredients to support Enfield’s economy and realising the vision of Central Leeside as an area that will attract investment, and be a place to live and work.

For the purposes of this report, business and industrial uses are defined as all those land uses within B1, B2 and B8 use classes. In addition to the business and industrial uses sector, jobs will also be created in retail and leisure, which will “count” towards the 1,500 new jobs target.

Central Leeside is an area where business and industry have flourished since the 19th century. Old and modern industrial buildings and yards dominate the character of Central Leeside. Until 20 years ago, this area had a very strong manufacturing base that declined markedly following the severe economic recession of the late 1980s/early 90s. Despite the subsequent diversification of the economy and decline in manufacturing, the industrial estates still remain a vital source of employment for local residents.
Encouraging Behavioural Shift

A reduction of overall trips will bring significant transport benefits for Central Leeside and will ensure that it meets the objectives of the London Plan, the Mayor’s Transport Strategy and the Core Strategy.

Parking in Central Leeside is currently largely unrestricted. There are no controlled parking zones nor on-street pay and display parking areas. The industrial estates in the area are characterised by considerable levels of ad-hoc on-street parking, which can restrict traffic flow.

New off-street parking associated with new development will need to have regard to current London Plan standards and the emerging standards set out in the Council’s emerging Development Management Document. In order to minimise the impact of additional parking demand on surrounding streets a review of controls will be necessary and a strategy developed that includes amendments necessary to minimise the impact of the development.

In addition to infrastructure investment to mitigate the direct impacts of development on the public transport network and highways network, the OAPF Transport Study highlighted the role that can be played by restraining trips and promoting increased use of public transport, cycling and walking.

Options to encourage a behavioural shift could include:

- Effective workplace, school and residential travel plans;
- Creating a network of high quality walking and cycling routes;
- Improving public transport services and interchange;
- Provision of a car club; and
- Creating mixed use development with a wide range of services and facilities available locally.

Connections over the Waterways

The River Lee and the waterways of Central Leeside offer the opportunity to create walking and cycling routes along towpaths. The existing provision of crossings over these waterways does not sufficiently connect areas where significant residential and employment growth is expected to take place. Additional connections over the waterways are needed to support the anticipated levels of growth in Central Leeside, improve access to services and public transport and ensure the adjoining communities are properly integrated.

Water Buses and Water Taxis

Waterbuses operate on fixed routes transporting passengers along either rivers or across expanses of water. Whilst many services have been established across the UK to serve the peak commuting hours, it is often the case that they equally focus upon leisure or educational markets. Water taxis are similar in idea, only they operate on flexible routes and are generally smaller vessels.

The key elements to establishing these schemes are first to understand the type of market and closely linked, to determine the destinations that will be served.

In addition, a waterbus/taxi service could also be explored to link into the adjoining area of Tottenham Hale to provide a connection with the underground system. Services could continue further south into the Lower Lee Valley, potentially linking with the Olympics and Paralympic Games, and its legacy transformation. To the north, the service could run as far as Enfield Lock, with access to the surrounding residential areas, including Gunpowder Park and Enfield Island Village.

The provision of a waterbus or water taxi service will help promote the recreational use and development of the Lee Valley Park and the River Lee Navigation. The Council will seek to investigate the type of market and the destinations that will be served by a waterbus/taxi service introducing a link from Central Leeside to the adjoining areas of Tottenham Hale to provide a connection with the underground system. The outcomes will inform the final version of the AAP.

TELL US WHAT YOU WANT...

Q8: Do you agree with the proposed improvements?
Q9: Are there others that should be included?
Q10: Have all the main issues and opportunities been identified?
Enhancing the Greenway connecting Meridian Water and Edmonton Green

This Greenway forms part of a strategic north-south walking and cycling route linking Meridian Water to Edmonton Green. Improving access from Meridian Water onto the Greenway will encourage its use.

Options to enhance access to the Greenway include:

- Upgrade the existing cycle path west of Montagu Road to Edmonton Green (see figure 15: Existing Open Space and Proposed Network of Open Space); and
- Creation of a new pedestrian/cycle connection from Meridian Water to Montagu Road via Rays Road open space.
As the local cycling and pedestrian environment is enhanced, cycling and walking will become more attractive. New development should deliver improved onward connection for cyclists and pedestrian into the streets surrounding the area.

One of the most significant improvements required to accommodate cycle trips is better east-west connection. All new streets within the Central Leeside area should be attractive to cyclists and pedestrians. It is important that the rest of Central Leeside is properly integrated into the wider communities so that all members of the community can enjoy new facilities.

New developments and public realm must be designed with easy cycle access to all buildings and locations, incorporating cycle infrastructure, including cycle ways, dedicated cycle crossings over highly trafficked roads, cycle parking at all non-residential locations (including showers and lockers) and residential cycle parking as per standards in the Development Management Document.

Kenninghall/Rays Road Area

This site was overgrown, with fly-tipped material over much of the site, and included the remains of concrete and steel from the former railway line. The site presents a significant opportunity to link the existing cycle path i.e. the Greenway (Cemetery Walk) from Edmonton Green across Montagu Road and into Angel Road station. At present, Angel Road station has very limited service and low user numbers. It suffers from a poor layout, is difficult to access and is of poor quality. The creation of better access to the station could help to increase passenger numbers and lead to station improvements for Meridian Water.

The site provides a valuable piece of open space that is required for the creation of a new community at Meridian Water.

The Council is working closely with residents to refine the proposals for the area that provides development to complement Central Leeside and Edmonton Green.

Redevelopment for mixed use development or for an interactive open space will be sought within the Rays Road area subject the feasibility of different forms of development in the context of flood risk and contamination issues.

The role of the Rays Road area as a focus for the wider community of Meridian Water facilitating linkages to Edmonton Green could be enhanced through sensitive, integrated, coordinated and high quality development. This could include:

- A substantially improved public realm that unifies the streets and spaces around the area, with reconfigured street patterns where these would improve legibility and permeability that promotes pedestrian movement, particularly improving access to Angel Road station and prioritises pedestrian and cyclist circulation safety;
- The extension and enhancement of the railway walk to Angel Road station will also improve access from the wider Edmonton area to the proposed new school on the Kenninghall Road site;
- An attractive and functional new public space that is accessible at-grade from the surrounding area;
- An integrated sustainable drainage system, incorporating rainwater retention, to green the area for amenity and biodiversity value; and
- Enhanced green open space, play space, semi-private or shared amenity space, and the creation of a new pocket park.

The route could also support the expansion of the planned decentralised energy network in the area.

Figure 15 Key

<table>
<thead>
<tr>
<th>DESTINATION</th>
<th>PUBLIC REALM IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lee Valley Athletics Centre</td>
<td>A-B-C: Enhance existing footpaths to increase access to Jubilee Park, the River Lee and Pickett’s Lock</td>
</tr>
<tr>
<td>2 Indoor Bowls Club</td>
<td>D: Introduction of a pathway through the Lee Valley Golf Course at Pickett’s Lock</td>
</tr>
<tr>
<td>3 Lee Valley Leisure Golf Club</td>
<td>E: Introduction of new bridges and route through Aztec 406 Industrial Park to Thames Water site</td>
</tr>
<tr>
<td>4 Lee Valley Leisure Complex</td>
<td>F: Extend existing cycle path i.e. the Greenway (Cemetery Walk) from Kenninghall Estate to Edmonton Green</td>
</tr>
<tr>
<td>5 Camping and Caravan Park</td>
<td>G: Introduction of an access from Edmonton Eco Park to the Thames Water site</td>
</tr>
<tr>
<td>6 Montagu Sports Ground</td>
<td>H: Introduction of a new east-west connection, with new landmark bridges provided between Glover Drive and land to the west of the railway line, improved accessibility of Angel Road station with extended platforms and a new transport hub at Meridian Water</td>
</tr>
<tr>
<td>7 Lee Valley Regional Park</td>
<td>I: Creative of park space to the River Lee to create value into Meridian Water and to integrate park space into the Park</td>
</tr>
<tr>
<td>8 Craig Park</td>
<td></td>
</tr>
<tr>
<td>9 Raynhamp Primary School Field</td>
<td></td>
</tr>
<tr>
<td>10 Cinema</td>
<td></td>
</tr>
<tr>
<td>11 Kenninghall Open Space</td>
<td></td>
</tr>
<tr>
<td>12 Ladesmith Road Open Space</td>
<td></td>
</tr>
<tr>
<td>13 Houndsfield Allotments</td>
<td></td>
</tr>
<tr>
<td>14 Galliard Primary School</td>
<td></td>
</tr>
</tbody>
</table>
Central Leeside Area Action Plan

Fig 14: Improved Walking and Cycling Network

TOWARDS CHERISH
TOWARDS STANSTED
TOWARDS ENFIELD TOWN

Key:
- Central Leeside Area Action Plan
- Rail
- A Roads
- Water
- London Strategic Walks - Lee Valley
- National Cycle Network
- London Cycle Network

Figure 14: Improved Walking and Cycling Network.
High quality public transport will form a fundamental part of Central Leeside and will be essential in ensuring that any new community in Meridian Water is adequately connected to surrounding areas of employment and to the existing town centres.

The Transport Assessment accompanying the Core Strategy and the Upper Lee Valley Transport Study provides a detailed discussion of the impact of the proposed development in Central Leeside on public transport provision. In particular it highlights the potential demand for rail services towards Tottenham Hale and Central London. The analysis indicates that in order to facilitate the high level of residential and employment development proposed in Central Leeside a substantial increase in both the quality and capacity of public transport will be required.

Due to the significant growth in resident, working and visitor population as well as the demands of development, crowding levels in and around the Central Leeside area by 2031 are forecast to be at a similar level to today. In the longer term, schemes such as Crossrail 2 could bring about a step change in the accessibility of the Upper Lee Valley, depending on the final option selected.

The most important scheme for the area is the provision of the additional rail infrastructure to enable at least a four train per hour service between Angel Road and Stratford. The scheme would provide a major role in facilitating the development of residential and employment opportunities in Central Leeside. The proposal also has the support of the Mayor of London, Network Rail, TfL and a range of public sector organisations located along the rail line.

Although the provision of the additional track required to improve services at Angel Road is not a committed scheme, it is worth emphasising that development can still occur in the short to medium term as there are alternative options to enhance public transport provision by increasing and amending bus services in the area.

**Pedestrian and cycle enhancement opportunities**

Internal connections within Central Leeside are generally poor, with particular issues between the existing street layout and large industrial estates either side of Meridian Way. Improved internal connections within Central Leeside are needed to increase permeability, create new pedestrian and cycle routes, enhance access to public transport, shops and services and increase capacity for the intensification to traffic to support development and encourage sustainable travel.

Improved connectivity within Central Leeside could create significant opportunities to unlock the potential of the Lee Valley Regional Park.

When considering proposed improvements it is important to recognise that Central Leeside has the benefit of being served by the West Anglia Main Line and Lee Valley strategic walkways as well as a number of cycle routes. These strategic walking and cycle routes can provide a foundation on which improvements to key routes and local networks can be built.

At a more local level, the infrastructure that provides such good strategic connections constitute significant barriers to local accessibility for cycling and walking.

If development proposals are to have an acceptable impact on the surrounding road and public transport networks, cycling and walking should form a key part of travel choices made by those living, working and visiting the area. In order to encourage more people not to drive and to meet the Mayor’s and borough’s objectives in relation to walking and cycling, a change in the quality of the pedestrian environment throughout Central Leeside is required. The walking environment must be well designed, as well as feeling safe and secure. In addition, significant investment in cycling facilities, supported by strong Travel Plans, will be vital to achieving higher levels of cycling and walking, and are expected to be funded by development.

Options to enhance the pedestrian and cycle environment could include the following:

- Improved wayfinding including Legible London signage;
- Enhance existing footpaths to increase access to Jubilee Park, the River Lee and Pickett’s Lock (see figure 15: Existing Open Space and Proposed Network of Open Space – A+B+C);
- Introduction of a pathway through the Lee Valley Golf Course at Pickett’s Lock (see figure 9b: Improved Connections – D);
- Introduction of new bridges and route through Aztec 406 Industrial Park to Thames Water site (see figure 15: Existing Open Space and Proposed Network of Open Space – E);
- Extend existing cycle path i.e. the Greenway (Cemetery Walk) from Kenninghall Estate to Edmonton Green (see figure 15: Existing Open Space and Proposed Network of Open Space – F);
- Introduction of an access from Edmonton Eco Park to the Thames Water site (see figure 15: Existing Open Space and Proposed Network of Open Space – G);
- Introduction of a new east-west connection, with new landmark bridges provided between Glover Drive and land to the west of the railway line, improved accessibility of Angel Road station with extended platforms and a new transport hub at Meridian Water (see figure 15: Existing Open Space and Proposed Network of Open Space – H);
- Improvements to the existing pedestrian bridge over the North Circular (A406); and
- Creation of park space to the River Lee to create value into Meridian Water and to integrate park space into the Park (see figure 15: Existing Open Space and Proposed Network of Open Space – I).
Achieving better public transport

With low public transport accessibility levels across Central Leeside, significant improvements to public transport services and access to public transport will be required to support sustainable development in the area and improve connections between Central Leeside and surrounding places.

The transport analysis supporting the Upper Lee Valley Transport Study highlighted persistent problems with crowding on the Victoria Line, particularly between Finsbury Park and Oxford Circus. In addition, crowding re-appears as an issue on the Lee Valley Line despite a period of despite provided by train lengthening. Buses are also likely to be affected by a general worsening of highway conditions across the area.

However, the Upper Lee Valley Transport Study has identified a range of early mitigation and intervention measures to help address the transport impacts generated by the development scenarios. The package of measures relating to Enfield that have been tested includes:

- 3/4 tracking of the West Anglia Main Line, providing 4 trains per hour between Brimsdown and Stratford;
- A package of bus interventions, in 2021 this could be 1 new service and 5 service extensions and 10 further frequency increases; further frequency increases by 2031;
- Increased Victoria Line frequency to 36 trains per hour; and
- Implementing a demand management strategy to achieve a mode shift for car to walking and cycling.

The Council will ensure that the improvements of Angel Road station are integrated with the wider area through good strategic and local connections. The improvements will provide a direct connection to Meridian Water. The introduction of bus services will further add to the public transport connectivity in this area.

Whilst enhancing the station itself would make it more attractive to passengers it is unlikely that passenger numbers would increase dramatically without a significant improvement to the frequency of the rail service to Angel Road, which necessitates the provision of additional track.
Angel Road station improvements

The catalyst for delivering development in Meridian Water as a place to live, work and play will be driven by improvements to Angel Road station to create a focus on sustainable public transport with easy interchange between trains and buses. Station improvements will be complemented by a network of better routes and streets, which link sites north and south, and also east and west of the station.

Currently the station has a number of issues:

- It is surrounded by a dual carriageway north, east and south and is adjacent to a scrap metal yard to the west, which have had a negative impact to the station’s accessibility;
- The current 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;
- The station is lacking in basic facilities. As part of the Issues and Options consultation, one of the options considered the relocation of Angel Road station to the south of the North Circular Road. This option is being explored in the Meridian Water masterplan, which could have the advantage of allowing the station to serve the new communities at Meridian Water, Ikea and Tesco stores; and
- The train frequencies for Northumberland Park, Angel Road and Ponders End do not meet the Mayor’s aspiration for a minimum four train per hour suburban service in London. Angel Road in particular has a very poor level of service with no trains calling at the station between 10:00 and 15:30.

Improvements to the station will be based on the principles of creating better access, improved visibility, better interchange and achieving a better relationship between station entrances.

The Council has been working closely with its partners2 to identify deliverable station improvements. In summary these include:

- An upgrade to Angel Road station and its access improved bringing it closer to the heart of the development at Meridian Water;
- Lengthening of the platforms to the south of the North Circular (A406) to allow new entrances on both sides of the railway;
- Provision of real time information;
- Safe, secure and Disability Discrimination Act (DDA) compliant accesses integrated with the station;
- A car and taxi drop off point and cycle car club to promote accessibility;
- Vehicular access to Angel Road station from Albany Road;
- A high quality bus interchange collocated with Angel Road station connecting Meridian Water to the wider North London region;
- Re-routing of existing bus routes to connect Edmonton Green to Tottenham Hale via Meridian Water along a dedicated busway;
- Extending the platforms to the south and improving station facilities, linking the station to a new bus interchange on Meridian Way;
- A new bus interchange to the south, which could enhance access to the station and linking it to the existing bus network providing an immediate connection to Central Leeside and the wider area; and
- Angel Road station relocated to the south to enable a transport interchange to gain better accessibility. The provision of a new transport interchange coupled with a reassessment of bus routes 192 and 341, would assist in increasing the range of trips by public transport that could be made from Central Leeside.

2 Including London boroughs of Haringey and Waltham Forest, GLA, TfL, Network Rail, Arriva, West Anglia Rail Group, Abellio UK, Chingford Line Users Association and Campaign for Better Transport
Connectivity Strategy for Central Leeside

At a strategic level, a package of measures could be supported to improve connectivity between Central Leeside and its surroundings, ensuring that communities in Enfield can access opportunities created by the potential development at Meridian Water and to ensure that Central Leeside develops as a genuinely joined up part of the Upper Lee Valley.

New and enhanced connections are required to overcome these issues to travel and to create a comprehensive movement network that encourages people to use public transport, cycle and walk. The options for new or enhanced connections are arranged by broad connectivity objectives and together could form the connectivity strategy for Central Leeside.

A connectivity strategy for Central Leeside could be based on the following principles:

- Identifying strategic north-south routes;
- Identifying strategic east-west routes;
- Understanding the A1010 and its relationship to Angel Edmonton, Edmonton Green and other town centres along the corridor;
- Identifying the main internal connections;
- Setting out the priorities for new bridges, public realm or access improvements to deliver the strategic routes;
- Extending the existing cycle path i.e. the Greenway as a key strategic walking and cycling route from Meridian Water to Edmonton Green;
- Providing a regular, four train per hour service at Angel Road and enhancing access to and facilities at Angel Road station;
- Identifying opportunities for bus service improvements; and
- Enhancing the role of the waterways to provide strategic and local connections.

Strategic and local connections

The strategic and local north south and east west connections are broadly shown on figure 14: Walking and Cycling Network. In summary these connect the main centres of activity in Central Leeside and the wider area:

- The Lee Valley railway network providing north-south connections into London Stratford and Liverpool Street, and Stansted;
- Meridian Way A1055 providing a north-south connection;
- The North Circular A406 providing a major strategic east-west highway link; and
- Some good walking and cycling connections running north-south through the Lee Valley Regional Park.

Realising the strategic connections will depend on a number of local infrastructure and public realm improvements.

Improving the strategic highway network in Central Leeside

At a strategic level, Central Leeside has relatively good transport infrastructure. The strategic highway network is dominated by the North Circular (A406) to the south providing an east-west route in the area; and two radial routes between these: the A10 and Mollison Avenue and Meridian Way. In addition, the A1010 Hertford Road serves as a strategic north-south route as well as serving local traffic.

Although it provides excellent links to the west (A10 and M1) and to the east particularly the M11, access to and from the industrial estates is difficult and the route between Meridian Way and the North Circular is indirect.

The local network is also poorly connected across Central Leeside with the area dissected by major traffic routes. In addition, the layout of local access roads in parts of the area is unclear and in many places confusing.

Traffic levels across the North London sub-region are forecast to increase by some 12% (or around 100,000 km) in the AM peak hour by 2031. At a strategic level, irrespective of growth in population and employment, the effect of traffic growth across London will lead to increased pressures across the whole of Enfield’s highway network. All developments have an impact on the highway network from higher car trips as well as from increased freight, waste collection and service and delivery activity. Although a new east-west connection will be introduced in Meridian Water (mainly to improve access to new developments), the main impact of development will be to existing highway links and junctions.

The Upper Lee Valley Opportunity Area Planning Framework highlights that the following junctions within Central Leeside experience significant levels of congestion:

- Montagu Road/Conduit Lane; and
- Conduit Lane/Angel Road.

Options to improve the strategic highway network could include the following:

- Selective junction improvements to increase journey time reliability;
- Demand management measures to reduce vehicle use, including school and workplace travel plans, enhancements to walking and cycling routes, and public transport improvements; and
- Controlling the levels of on-street parking and public car park provision, particularly in relation to new residential and commercial development.
i) Enabling Movement

Enhancing connectivity between Central Leeside and its surrounding area to make it a joined up place in the Upper Lee Valley and North London context will be essential to secure sustainable development and ensure that residents, workers and visitors can enjoy not only the hidden benefits in Central Leeside, but also the benefits flowing from the adjoining areas.

The North Circular (A406) provides a major strategic east-west highway link, whilst the Lee Valley line provides north-south rail connections to Central London and Stansted. Whilst the area has some good walking and cycling connections running north-south through the Lee Valley Regional Park, connections to these routes that exist are often poor quality and do not encourage safe walking and cycling journeys. The quality of the existing connections is largely a legacy of the mainly industrial character of the area.

At a more local level, the level of transport capacity is constrained. The local east-west highway network is restricted by reservoirs and rail lines, meaning that capacity is limited to the main strategic routes. This provides issues not only for the private car access and congestion but also with routing of bus services through the area. The rail network is also severely restrained with conflicts between fast and non-stop services and slower stopping services. At present, the frequency of rail services at Angel Road station is extremely low.

Furthermore, the defining character of Angel Road station is relatively isolated from its surrounding communities due to physical barriers created by the North Circular Road and the location of the station itself.

If Central Leeside is to be a sustainable place, it will be important to ensure that Public Transport Accessibility Levels (PTAL) are increased from their current level across Central Leeside of one or two up to a level of four in order to provide public transport with sufficient quality, frequency and capacity to successfully deliver the full extent of the development proposals outlined in this report.

As Meridian Water is developed to accommodate around 5,000 new homes and at least 3,000 new jobs, east-west connections and across the River Lee Navigation will be essential to ensure that new residents can integrate with existing communities, access job opportunities and get to services such as shops, schools and health facilities.

Freight and Waste

A considerable amount of freight passes through the area. The area comprises one of the largest clusters of industrial estates in London, and this is one of Central Leeside’s major assets. There is a particular issue relating to whether there should be more protection from heavy road traffic within residential areas. This will become increasingly pertinent with large scale residential development. There is the need to ensure that freight journeys are efficient and rationalised to reduce the number of trips and to avoid critical times on the road network. The transfer of road freight to either the waterways or rail would offer the potential to reduce the impact of freight transport on the local highway network.

Additionally, proposed development will generate high levels of demand for goods and services and waste collection. Additional demand is also being driven by changes in business behaviour, such as “just in time” logistics and a growth in home deliveries. Online shopping is rising leading to higher level of highway congestion.

Options should not worsen the traffic conditions to unacceptable levels on existing streets and a review of traffic management arrangements should be undertaken to address this.

Options to reduce the number of freight journeys could include:

- The provision of transferring road freight to rail and waterways for construction materials;
- Substantial measures to minimise the impact of freight including during the construction period;
- “Off street” delivery and servicing activity for new developments that are away from bus routes/cycle paths;
- Measures to rationalise and minimise the impact of waste collection; and
- Requiring new development to provide Delivery Servicing Plans and Construction Logistics Plans.

These interventions would reduce the impact of heavy vehicles on the surrounding area and reduce the environmental impact of construction.