

South Leeds Green Infrastructure Corridor

Helping to build a liveable city

Project Brief

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South Leeds Green Infrastructure Corridor

Introduction

This project brief describes the planned enhancement of Green Infrastructure (GI) in south Leeds, following an existing green corridor, from Lingwell Nook, northwards through East Ardsely Fall, Thorpe and south Middleton, to link with Rothwell Country Park and the Lower Aire Valley plus Leeds City Centre.

This GI enhancement will focus upon linking and connecting existing P&C land holdings, such as woodland, natural grassland and wetland and improving quality and biodiversity. Enhancement and promotion of alternative transport opportunities through the GI corridor (e.g. Public Rights of Way; Leeds Core Cycle Network Routes; new and established permissive ways) will facilitate and encourage car free journeys in which people can walk or cycle to and from school/work or simply for pleasure.

There are a number of individually important areas of natural environment within this GI corridor, such as Ancient Semi-natural Woodland (ASNW) and extensive young plantations, as well as areas of meadow, wetland and water courses, each requiring a specific style of management. However, rather than treating each area in isolation, the intention is to take a broader 'landscape scale' approach which maximises the multiple benefits of a large, well connected and diverse natural landscape.

Looked at holistically, not only can this facilitate the free movement of wildlife and people, benefiting biodiversity and encouraging improved health and wellbeing, it can also help to create a strong 'sense of place', by improving the aesthetic quality of the landscape. This, in turn, can provide stronger economic benefits, such as increasing property values and attracting businesses.

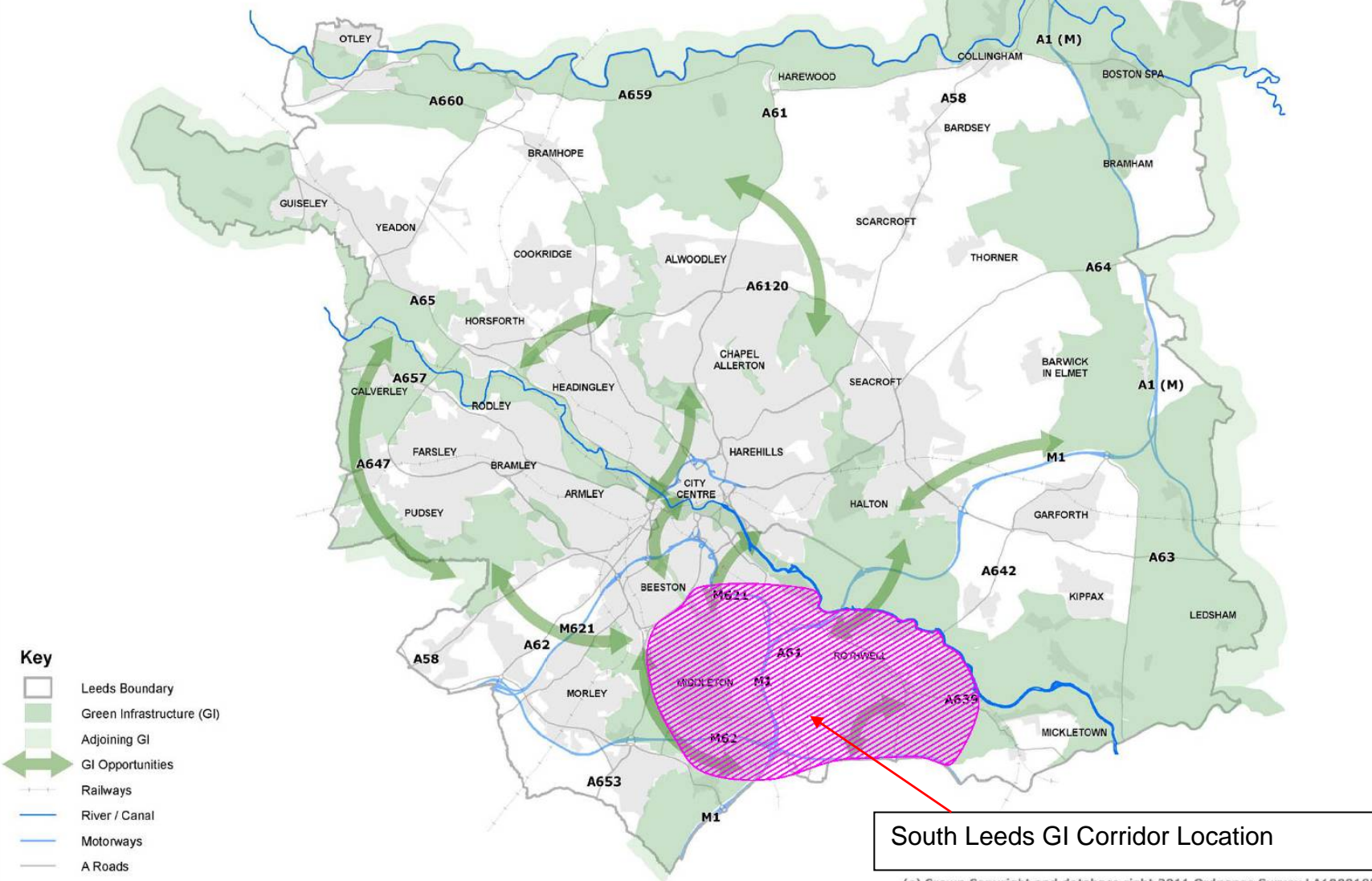
Well designed and well managed GI also provides substantial benefits in terms of helping the City to adapt to the effects of Climate Change. By contributing to stormwater management, air pollution (trees act as efficient filters) and local temperature control (evidence shows that increasing the area of GI can help to significantly lower urban summer temperatures as well as provide shelter from cold, winter winds. Last, but not least, large areas of quality, easily accessed green space offer an escape from the constant background noises of the modern built environment, providing opportunities for peaceful, quiet reflection.

All Leeds City Council owned woodlands are certified under the United Kingdom Woodland Assurance Standard (UKWAS), confirming that management is compliant with national and international guidelines. Existing woodland within the corridor will be managed to facilitate connectivity, improve public access, enhance woodland habitats and to secure opportunities to provide sustainable supplies of carbon lean woodfuel. Forestry Commission support will be sought at all stages of work with a view to drawing down funding through the English Woodland Grant Scheme (eWGS).

It is envisaged that the full implementation of the project will be phased over several years. Each phase is described on pages 12 to 20. The first two phases will result in the creation of the Ardsley and Robin Hood Nature Park and this is described in detail on page 22.

Funding for phase 1 is currently being sought and letters of support from stakeholders are invited.

Fig.1. Strategic Green Infrastructure (core Strategy
Published Draft February 2012)



South Leeds Green Infrastructure Corridor

Vision

The Vision for the South Leeds Green Infrastructure Corridor is to facilitate the development and promotion of an integrated and interlinked network of multifunctional greenspaces, which will benefit both people and wildlife, and will also support the Strategic Green Infrastructure targets of the Leeds Core Strategy. The involvement of local communities, who have such an important role to play in this scheme, will be actively encouraged throughout.

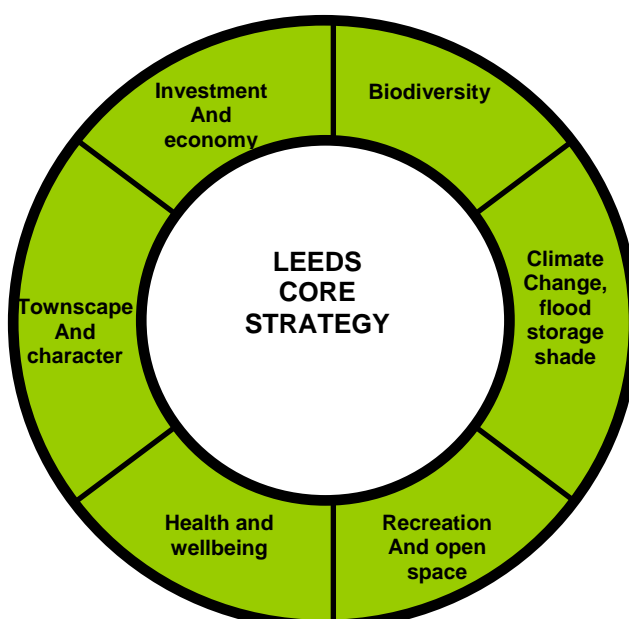
The (Strategic Green) Infrastructure performs many important functions and provides opportunities for recreation. Within these areas the Council will maintain and, in partnership with others, enhance the following key corridors :

- (i) The Aire Valle, along the river and canal corridors and including West Leeds Country Park and Kirkstall Valley Park to the north and; Fairburn Ings; St. Aidans and Aire Valley Leeds to the south incorporating the Urban eco- settlement (which has particular aims to strengthen green links to Leeds City Centre, the Lower Aire Valley, Temple Newsam and Rothwell Country Park)*
- (ii) South Leeds (including the Morley-Middleton-Holbeck corridor)*
- (iii) The Limestone Ridge*
- (iv) The Wharfe Valle*
- (v) Wykebeck Valley*
- (vi) Woodhouse Ridge*
- (vii) Meanwood Valley*
- (viii) Tong Cockersdale*
- (ix) Gledhow Valley*

Spatial Policy 13.
Core Strategy - Leeds Local Development Framework Publication Draft (2012)

This South Leeds Green Infrastructure Corridor project will actively contribute to achieving many of the functions identified in the Core Strategy (see Diagram 1 below). Additionally, as the map showing the Strategic Green Infrastructure in Figure 1 shows, it will also supports two of the key corridors identified in the Core Strategy, namely the southern section of the Aire Valley, and South Leeds incorporating the Morley-Middleton-Holbeck corridor.

Diagram1 Functions of Green Infrastructure (Core Strategy Leeds Local Development Framework).



South Leeds Green Infrastructure Corridor

Strategic Context

Background

The Leeds Core Strategy (Published Draft February 2012) identifies the South of Leeds as a regeneration priority area. It contains a concentration of neighbourhoods that perform below city and national averages across a range of indicators (health, affluence etc). There are, however, opportunities for investment that will have a lasting and positive impact on those neighbourhoods and the city as a whole.

The Leeds Landscape Assessment (1994) recognises that much of the south Leeds urban fringe landscape has been progressively broken down over many years, leading to loss of woodlands, hedgerows and other “rural” features. The present landscape suffers from a variety of conflicting land use pressures including fly-tipping and anti-social activities (such as off-road motorbike riding and vandalism), pressure from development, and relatively poor connectivity due to existing transport infrastructure and housing.

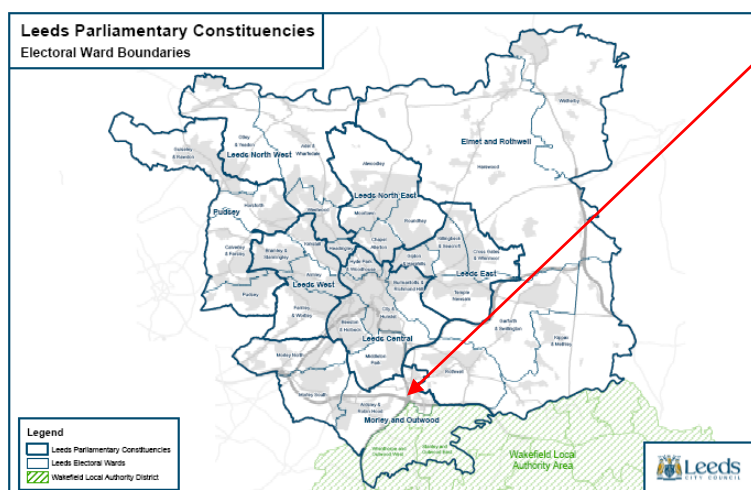
Integral to the overall spatial approach of the Core Strategy is the desire to maintain and enhance an integrated network of Strategic Green Infrastructure; a network of multi-functional greenspaces, both urban and rural, which includes protected sites, woodlands, nature reserves, river corridors, public parks and amenity areas, together with green links. It extends from urban centres through green corridors to open countryside and supports the natural, recreational and ecological processes which are integral to the health and quality of life of sustainable communities. A key function of GI is to help maintain and enhance the character and distinctiveness of local communities and the wider setting of places (Core Strategy Published Draft February 2012). The South Leeds Green Corridor (see Fig 1. opposite), is a vital part of the network of Strategic GI which encompasses and permeates the urban core.

Spatial Policy 13 within the Core Strategy identifies the South Leeds Corridor as one of nine, inter-connected key corridors for the Leeds district. The Policy recognises the important functions that this strategic GI provides and commits the Council to maintaining and, in partnership with others, enhancing the key corridors.

Paragraph 4.10.1 of the Core Strategy includes the following statement: *‘In complementing the whole network of Green Infrastructure, it is important to improve the quantity, quality and accessibility of green spaces serving the people living and working in the district. The provision of green space is vital for the continued health and well being of residents and visitors of Leeds.’*

Paragraph 5.5.2 notes that there are opportunities to enhance GI within and around the key strategic corridors. In support of this approach, Policy G1 provides a framework to manage long term provision, in particular, Policy G1 (ii) provides support for the enhancement of the South Leeds GI Corridor by stating that *‘Where appropriate, the opportunity is taken to extend Green Infrastructure by linking green spaces or by filling in gaps in Green Infrastructure corridors, including (where relevant) extending these into the City Centre...’*

Location



Situated approximately 8km out from the City Centre, the South Leeds Green Infrastructure Corridor passes through 3 Electoral Ward Boundaries and connects with several others. It also connects well with the Aire Valley and, therefore the rest of the GI network and has the potential to connect directly to the proposed City Centre Park.

Electoral Wards

Ardsley and Robin Hood (Ward number 3)

East Ardsley Fall lies to the South of the M62 and close to the Wakefield Local Authority Wards of Wrenthorpe and Outwood West, and Stanley and Outwood East. It is the southern-most site in this scheme and encompasses Phases 1 and 2. This includes current and planned grant aided (Forestry Commission) woodland management to improve public access, enhance woodland habitats and to secure opportunities to provide sustainable supplies of carbon lean woodfuel.

On-going improvements to a permissive bridleway extending from Lingwell Nook in the south, northwards to Moor Knoll Lane will complete a circuitous route for horse riders, cyclists and walkers, connecting with Dolphin Beck Marsh on the opposite side of the Leeds- Wakefield railway line. Phase 2 of development will see Dolphin Beck Marsh and Thorpe Wood linked, providing an accessible area of semi natural greenspace and completing the creation of the **Ardsley and Robin Hood Nature Park**.

Middleton (Ward number 23)

From Thorpe Wood, the corridor forks to the east and west of Middleton Park. To the east of Middleton Park it links with woodlands and wetlands of Sharp Lane, travelling parallel to the M1/M621 towards Hunslet cemetery (City and Hunslet ward). Here the existing green corridor ends directly South of the city centre, but there are opportunities to link into the South Bank Regeneration Strategy and continue towards the proposed City centre Park. West of Middleton Park, the corridor includes both Sisson's Wood and West Wood, providing a link to Morley, Churwell and the West Leeds Country Park.

Implementation of the Middleton Regeneration Strategy will include the re-development of large areas of social housing to the south-west and south of Middleton Park. There is very real potential for the GI corridor to add value to this re-development and to become fully incorporated into the very fabric of the new housing estates.

Rothwell (Ward 29)

From the young plantations of Sharp Lane stretching East, the corridor follows an underpass beneath the M 621 and on via Rothwell Pastures to link with the River Aire at Rothwell Country Park. This section of the corridor is key to linking with the Aire Valley and its links to the rest of the Strategic GI Network, including direct links to Springhead Park and Water Haigh Woodland Park, directly adjoining the new RSPB St. Aiden's reserve.

The map on page 7 (Fig. 2) illustrates the whole of the South Leeds Green Infrastructure Corridor, highlighting all the key existing P&C controlled green spaces and the non-vehicular access routes (Public Rights of Way and Leeds Core Cycle Network Routes) that connect the sites and facilitate and encourage people to visit and pass through this corridor.

The key sites (e.g. Middleton Park, Thorpe Wood, Rothwell Country Park etc) are named on the map and are briefly described below:

1. **Middleton Park** is a major City Park and contains one of the largest area of Ancient Semi-natural Woodland (ASNW) in West Yorkshire. It is almost completely surrounded by development, but the GI corridor provides links via West Wood and there are opportunities to strengthen links during planned re-development. Currently, the park is part way through a Heritage Lottery Fund (HLF) improvement scheme working to improve the park's infrastructure, biodiversity and enhance its functionality.
2. **West Wood and Sisson's Wood** (part ASNW) allow the Corridor to skirt the south-east boundary of Middleton Park and Link with Dewsbury Road and Morley fringe towards Churwell. From here there is potential to link with Beeston Royd (man-made woodland and agricultural landscape on former land fill) and on towards the West Leeds Country Park.
3. **Thorpe Wood** (ASNW) with a healthy propensity for natural regeneration), connected to East Ardsley Fall and Dolphin Marsh via the Dolphin Beck and a Public Footpath that passes beneath the M621. Thorpe Wood is the pivotal link to Sharp Lane and the eastern side of Middleton Park and Sisson's Wood/West Wood and the western side of Middleton Park.
4. **East Ardsley Fall** is composed of young plantations (P.1976) and associated man-made, non-woodland habitats running parallel to the Leeds-Wakefield railway.

5. **Dolphin Marsh** one of Leeds' few remaining reedbeds. An existing Public Bridleway runs parallel to the site, linking with the permissive bridleway running along East Ardsley Fall to provide a continuous and popular circuit. The latter is currently being upgraded with the help of funding from the Forestry Commission.
6. **Sharp Lane/Throstle Carr Beck** provides high quality, recently created woodland/ plus associated habitats (meadow, wetland and hedgerow) together with a circular pedestrian/cycle/bridleway access link. This site forms an integral part of the new Leeds New Forest Village development (1200 new homes) and forms an early example of the potential of planned strategic GI
7. **Sharp Lane Plantations** - older plantations continuing link north to Holbeck and beneath M621 to Rothwell and Lower Aire Valley. Opportunities for enhancing both woodland and associated open habitats, plus improved public access and interpretation.
8. **Ouzlewell Green.** A community woodland (P.1995) and orchard adjacent to Dolphin/ Oulton beck. Currently lacking defined public access (but with a public footpath along it's Northern edge) this site adds much needed refuge habitat to the river, and to neighbouring Bushy Cliffe Wood (Privately owned ASNW). The orchard provides an opportunity for local people to be introduced to the pleasures of eating fruit grown close to home and will be promoted through the P&C led 'Feed Leeds' initiative.
9. **Rothwell Pastures and disused railway.** Historically important as the site of Rothwell castle (founded by Ilbert de Lacy and once owned by John of Gaunt). The site includes a small reed bed habitat on the River Dolphin. and is managed as part of a new partnership project with Leeds City Council and the Yorkshire Wildlife Trust.
10. **Springhead Park.** A traditional public park with formal gardens and open, close mown grass slopes. This site includes a river corridor (Dolphin/Oulton Beck), young native woodland planting and associated open habitats.
11. **Water Haigh Park.** A new 98ha park created in 2008 on the site of the former water Haigh Colliery. following several phases of restoration there are now a series of interconnected woodlands, meadows, wetlands and hedgerows, plus riverside and canal side habitats, together with well managed public access and interpretation. Located in the heart of the Lower Aire Valley, the site lies directly adjacent to the new RSPB St. Aiden's reserve. This site is also the home of two junior football clubs (West Yorkshire Football Academy and Rothwell Juniors) This site is also part of the new partnership project with Leeds City Council and the Yorkshire Wildlife Trust.
12. **Rothwell Country Park.** 52.3 hectares of woodland, scrub, meadow, marsh, ponds and scrapes on reclaimed land of a former colliery (and historically royal hunting grounds associated with Rothwell Castle). This site is also part of the new partnership project with Leeds City Council and the Yorkshire Wildlife Trust.

A number of Public Open Spaces and Recreation grounds fall within this corridor. In each case there are opportunities to both enhance biodiversity and, at the same time reduce management costs associated with traditional maintenance regimes. For example areas of short mown, amenity grassland could be converted to wild flower meadows or community food growing plots as part of the 'Feed Leeds' initiative.

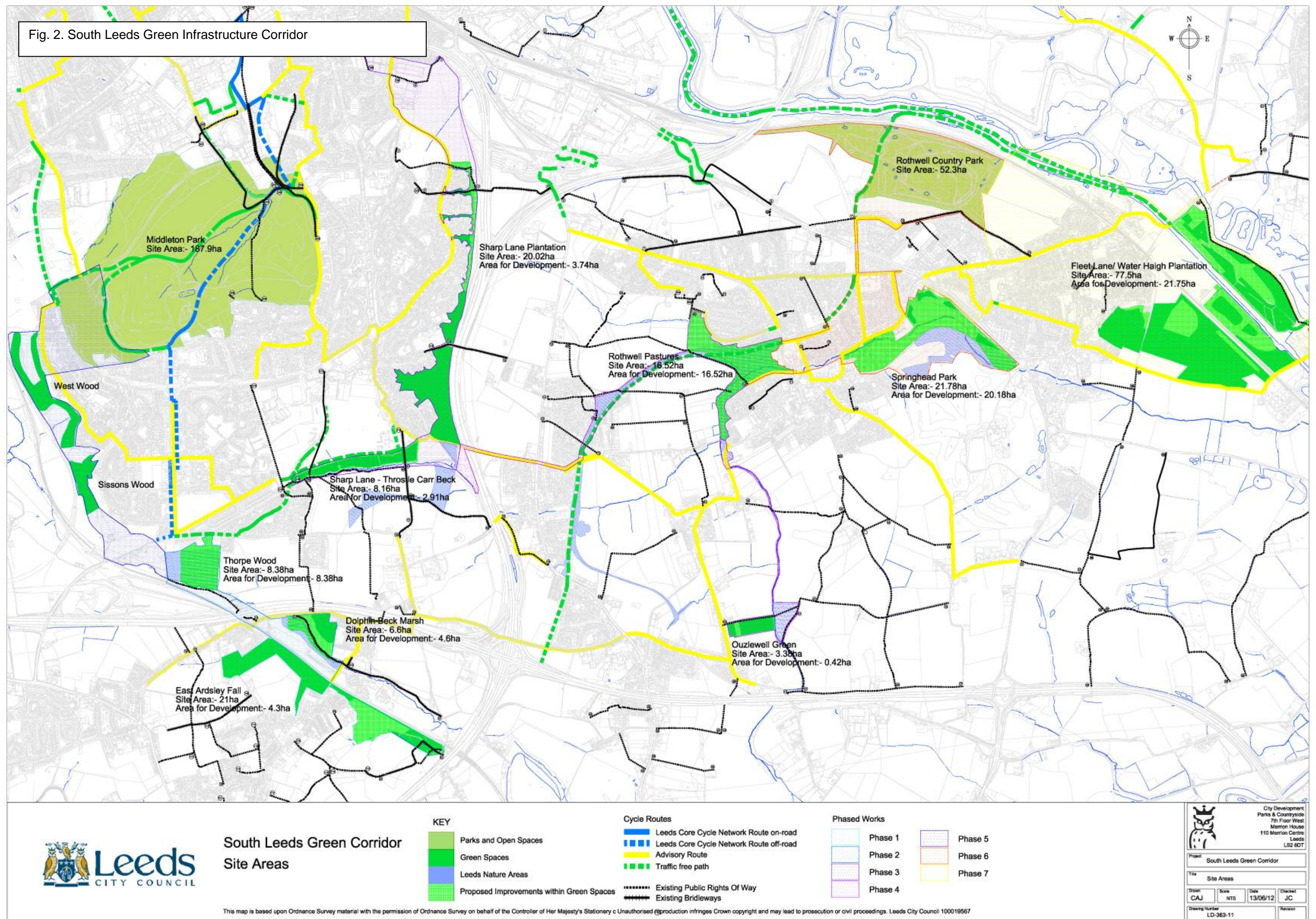
Promoting areas of meadow/ wildflower, hedgerows and marginal scrub habitat within these spaces will improve their biodiversity, increase BAP priority habitat in this scheme, and will add important ecosystem services – pollination, education, wellbeing, inspiration, aesthetic beauty and biodiversity resilience. According to a study undertaken by the woodland trust (Trees or Turf?, Woodland trust, May 2011), converting high maintenance amenity grassland to more 'natural' rough or meadow grassland surfaces will greatly reduce the annual maintenance costs associated with maintaining short swards. Figures suggest average annual maintenance costs for amenity grass as £1620 per hectare per year (100% gang mown), as opposed to just £580 for rough grassland.

Adding value to these 'stepping stone' sites by enhancing biodiversity and connectivity, and contribute to Access to Natural Greenspace Standards (ANGSt) – see **Appendix 1** (page 23).

An additional, valuable link to the Lower Aire Valley exists along Dolphin/ Oulton beck. The beck has its source to the southern boundary of Thorpe Wood, it then connects to Dolphin Beck Marsh, where it takes on Environment Agency Main River status. The beck flows through a number of council owned sites – Ouzlewell Green, Rothwell Pastures, Springhead Park, before connecting with the Aire at Water Haigh Woodland Park.

The River Dolphin is a key asset It provides a shared landscape character component across a diversity of sites, as well as habitat connectivity. A Survey undertaken by Leeds and Wakefield City Council Species Conservation Officers to ascertain the quality of habitat for water voles along this watercourse, identified a lack of continuity (see South Leeds Water vole Project 2010). Short stretches of good quality habitat were found to be interspersed with poor and sometimes very poor conditions. The report highlights the degradation and isolation facing the river and its biodiversity as a whole in its current condition, and provides evidence for immediate intervention.

Fig. 2. South Leeds Green Infrastructure Corridor



South Leeds Green Infrastructure Corridor

Aims and Objectives

In order to realise the Vision of the South Leeds Green Infrastructure Corridor, we will aim to:

1. Maximise the ecological and recreational value of connected greenspace in the south of Leeds.

This will be achieved by creating, wherever appropriate, new areas of greenspace, whilst also enhancing the quality, accessibility and connectivity of existing greenspace. The value associated with each of these sites is considerable, both in terms of biodiversity and the opportunities they provide for public use. However, by improving connectivity and ensuring that this is sustainable, we will maximise the collective potential of these sites.

2. Engage with local communities in order to promote partnership working at all levels of the scheme.

It is essential, from the outset, to encourage and develop the input of local communities. This will foster a sense of ownership and pride, which will ultimately ensure the longevity of the scheme. Subsequently, this scheme must be able to answer the immediate needs of the people it serves, thus ensuring that the area is cherished and cared for long into the future, and will therefore continue to add value to the lives of future generations.

3. Respond to and embrace existing and future strategies which support the principle of Strategic Green Infrastructure in the south Leeds area.

The adoption of the principles of Green Infrastructure is essential to ensure a sustainable future for the greenspaces and communities of south Leeds. The natural environment provides everything we need to survive and as such, is recognised as a key vehicle to realising targets and functions set out in the Leeds Core Strategy.

Objectives

The following objectives will be put in place to achieve the aims outlined, ensuring that interventions are suitable and respond to environmental, social and economic needs.

Objective		Actions
1	Establish a baseline assessment of the current status of the sites in terms of recreation, biodiversity, habitats etc.	Ecological surveys and research; liaison with relevant LCC departments, other authorities and interest groups.
2	Encourage community involvement in the various elements of the scheme – creation of volunteer opportunities, linking to the wider community and landscape. bringing pride, ownership and social functions to communities.	Develop community interest and involvement - friends groups etc. Promotion of the site in local press etc to raise the profile and increase local interest and support.
3	Embrace opportunities to improve the Health and Wellbeing of the people of Leeds. Improving both physical and mental health, making the most of greenspace assets to improve the quality of life.	Increase the functionality of sites with improved access, furniture and features. Encourage people to investigate, interact, and contribute to the care of their surroundings,. Make places where people want to go with interventions they want to happen.
4	Add value to sites by conserving and enhancing natural habitats , particularly Biodiversity Action Plan (BAP) priority habitats and associated biodiversity; have regard for legal status and obligations, particularly protected species and designated sites. Strengthen site resilience to pressures associated public use and surrounding developments.	Develop management plans and associated action plans for each of the sites to guide long-term management. Increase habitat areas where appropriate, enhance habitat quality, manage vegetation to promote diversity, create buffer zones to protect habitats, manage/remove atypical species. Use ecologically sound management principles and environmentally friendly products. Ensure sustainable methods are used for ongoing management. Work with statutory bodies to ensure appropriate interventions.
5	Ensure there is provision for quiet recreation , by considering the recreational needs of local people, and making appropriate provision which is in keeping with the natural status of the sites. Ensure that all sites are protected from inappropriate/ disruptive use.	Improve site infrastructure - paths, furniture, interpretation panels etc. Maintain site boundaries and protect access points from unauthorised access. Maintain presence of Parks Patrol to deter anti-social use.
6	Develop sites as educational resources for local schools and community groups - to further the understanding of nature and encourage a sense of ownership and care for the area.	Liaise with communities. Construct site features such as pond dipping platforms and bird hides. Create interpretive materials for wider distribution as well as on-site signage. Link interpretation to relevant themes for the area.
7	Identify and successfully draw down sources of funding for the various phased projects within the scheme.	Identify funding opportunities for capital and management costs and liaise with funding organisations to maximise potential for successful bids. Provide information and management plans for review by interested parties to evidence long-term aspirations.
8	Maintain and enhance the protection of sites through appropriate legal/policy framework, increase in nature conservation site designations.	Work in partnership with adjacent landowners and developers, and ensure good lines of communication. Consult with external statutory authorities to agree all plans before commencing works. Seek to upgrade statutory designations to further protect sites and raise the profile of the scheme. Identify access, ownership, maintenance responsibilities etc.
9	Create a landscape scale nature park for South Leeds which incorporates a collection of welcoming sites, maintained to a high standard.	Identify and link sites which will offer places for quiet recreation and benefit local biodiversity. Ensure sensitive selection of materials and methods and use phased management tasks to limit impact. Consider the aesthetic and landscape value and impacts of projects.
10	Create a sensible, achievable maintenance regime for ongoing management based on agreed management plans, which gives opportunities for local communities.	Keep management plans, action plans, risk assessments and method statements up to date. Provide clear guidelines and support to voluntary groups and local people so that they can take ownership and responsibility for their own surroundings and provide training and assistance where there is a need. Ensure sufficient funding is available for works to continue. Put communication and reporting procedures in place.
11	Raise the profile of GI in Leeds and compliment national and pan-regional GI strategies.	Develop sustainable links to existing GI, building on PROW, cycle routes and transport networks to connect people with places. Work with Planning department where developments occur to maximise GI potential
12	Monitor initial impacts and progression throughout implementation and ongoing site management and review management plans accordingly.	Species recording, reporting and monitoring. Checks for invasive species. Identify trends in species diversity and populations. Record and monitor management tasks. Review management plans every 5 years, with interim reviews if necessary.

South Leeds Green Infrastructure Corridor Consultation

The planning and implementation of the initial phases of the South Leeds Green Infrastructure Corridor scheme will naturally include consultation with all the relevant departments of Leeds City Council, as well as other external agencies and organisations, stakeholders and local community and user groups.

Parks and Countryside's Natural Environment team, who initiated the scheme, will continue to provide project co-ordination and this will involve all the component elements of the team, including Public Rights of Way, Natural Habitats and Forestry.

Parks and Countryside's East and West Area Management teams, who have also been involved from the outset, have been requested to provide initial operational information and also to confirm responsibility for future maintenance, and this has now been fully endorsed.

Inter-Directorate liaison, particularly with City Development (Core Strategy) and our colleagues within Environment and Neighbourhoods (Social Landlord) will ensure that the multiple benefits of Green Infrastructure are understood and fully entrenched, and that we will be informed about new developments within the project area.

Statutory organisations, particularly Natural England, the Environment Agency and the Forestry Commission will be consulted to ensure projects receive the appropriate approval and consent. In addition, the Yorkshire Wildlife Trust and Aire Action Leeds are essential working partners for this scheme and all have been invited to provide letters of support.

A number of community groups have been approached to consider the project and provide feedback to inform decisions and to have a real input into the development of the scheme.

Thorpe In Bloom will take a supporting role in the first phase – Ardsley and Thorpe Nature Park. As a local group they are a valuable addition to the required working partnerships, and it is anticipated that they will assist in the development and implementation of the scheme.

Other groups who will be approached to be involved in the project include Rothwell in Bloom, The Friends of the New Forest Village (currently establishing a group), and the Oulton Society.

All appropriate local schools and community groups will be informed and invited to participate in the consultation process during the various stages of the scheme.

Publicity and interpretation will be used to maximise the exposure of the project and to inform the general public, effectively providing opportunities for input and feedback.

South Leeds Green Infrastructure Corridor

The Corridor

In order for the corridor to develop successfully, it will be essential that each site sits within a linked, accessible local infrastructure that promotes the inclusion and involvement of local communities. With the support of these communities, the development of a site into a useable and cherished place will become a reality and will support, and strengthen intervention in neighbouring sites. With this in mind, the sites will be considered as 'stepping stones' in the overall plan, having individual management plans, but grouped into phases for development according to their potential for connecting communities, their importance with regard to priority habitats and species, and their value in terms of contribution to the GI and Core Strategies.

Phase 1 Initial Intervention

East Ardsley Fall and Lingwell Nook: Plantation woodland and meadow. Including a newly constructed bridleway from Moor Knoll Lane joining with the existing bridleway Rothwell 21 at Lingwell Nook. This site, known as "The Fall" since at least the early 1700s, lies on the north facing side of a shallow valley, immediately north-east of the village of East Ardsley. The present woodland was developed on the sites of three former heavy industries (coal mining, steel works and railway sidings) in the mid 1970s. Footpath and bridleway access from Moor Knoll Lane and Lingwell Nook. Footpath access is from Falls Lane. A network of tracks and trails occur throughout, allowing access to all parts of the woodland. The adjacent Leeds - Wakefield railway line gives the site additional value for green corridor connectivity. The woodland is currently managed under a woodland grant scheme for biodiversity. A series of planned improvement works will be undertaken on this site (tree management, access controls, footpath construction etc) alongside the improvements outlined in this phase of development, providing added value to the interventions and potential for match funding through a Forestry Commission Woodland Improvement Grant.



LCC owned Site Area : 21ha

Site area considered for GI development : 4.3ha

Biodiversity objectives

- **Open mosaic habitat on previously developed land** – 3.9ha creation on post industrial site
- **Reedbed creation** and management. Providing varied habitat for mammals, birds, invertebrates and amphibians
- **Lowland meadow creation** – wildflower seeding in open areas
- **Traditional Orchard** – 0.41ha community Orchard planting.
- **Hedgerow creation** to increase the amount of this priority habitat available in South Leeds

Existing planting not already under EWGS - management, ground flora – bluebells

Green Infrastructure and Ecosystem Services objectives

- **Cultural heritage** – known as the fall since at least early 1700s. More or less forgotten locally. Interpretation to promote the site
- **Aesthetic landscape value** – maintain open space, views, green horizons. Added spring and summer colour with wildflowers.
- **Recreation** – walking, horse riding, cycling, play, picnics. Improve path network/ surfaces. Install seating/ tables
- **Education** – biodiversity, pond life, seral progression, birds. Construct pond dipping platforms, bird hides, interpretation
- **Pollination** – wildflowers
- **Spiritual inspiration** – space, natural beauty, peaceful reflection. Environmental art/ sculpture? Improved functionality to allow for exploration and contemplation
- **Biodiversity resilience** – connections to other sites and migration corridors (railway and motorway embankments). Increase in habitat structures within the site.
- **Social value** – establish volunteer involvement and friends group. Space for social interactions
- **Carbon sequestration** – new planting to increase canopy cover

Proposed Intervention

- **Create and manage** 3.9ha wildflower meadow (RE10 marginal land mix – British Seed Houses, or equivalent mix)
- **Plant** 0.41ha community orchard (local provenance varieties) to include a 450m hedgerow with pollinator species
- **Construct** a network of footpaths through the meadow and orchard areas
- **Install** interpretation boards, picnic benches and seating
- **Construct and manage** a reedbed system on existing leachate ponds for habitat, education and to improve water quality
- **Install** new access controls at site entrance
- **Plant** a 450 m Elm avenue along an existing bridleway as part of the Great British Elm experiment

Phase 2 Ardsley and Robin Hood Nature Park

Dolphin Beck Marsh (LNA 035) is a 3.3ha Leeds Nature Area which runs South East through a 6.6ha site owned and managed by Leeds City Council Parks and Countryside. Historically, this area of Leeds was heavily involved in industries such as coal mining, iron works, railway engineering and repair, mill working and intensive agriculture.

The marsh occupies a valley bottom traversed from north west to south east by Dolphin Beck. It's origin seems due to the spreading of the beck over low-lying land, creating a network of subsidiary channels and generally waterlogged conditions throughout much of the site. Situated at the upper limit of Dolphin Beck (An Environment Agency main river) the site supports one of the few remaining stands of native reed (*Phragmites communis*) in Leeds. A number of surveys of the reedbed have also identified the presence of water voles (UK BAP priority species). **See individual management plan for Dolphin Beck Marsh for specific site details.**



LCC owned Site Area : 6.6ha

Site area considered for GI development : 4.6 ha

Biodiversity objectives

- **Reedbed improvement** – increase the area/ quality
- **River headwater improvement** - removal of tyres and waste from the river bed and surroundings
- **Hedgerow creation** to west – buffer to development and new habitat
- **Meadow creation** on Thorpe rec. to increase habitat area and act as a buffer for the LNA
- **Lowland mixed deciduous woodland.** Degraded slopes to be planted with mixed deciduous species.

Green Infrastructure and Ecosystem Services objectives

- **Water regulation** – purification and flood prevention resulting from improved and increased reedbed
- **Wellbeing** – maintain a safe, clean, natural environment for physical and mental benefits. Improved accessibility to allow for exploration
- **Erosion prevention** – valley sides. Unconsolidated post industrial substrates planted to increase stability
- **Aesthetic landscape value** – improving views, disguising eyesores, added scenic value to local housing projects
- **Recreation** – walking, horse riding, cycling, play, picnics, watching wildlife. Improved path surfaces. Install boardwalks, bird hides, tables and seating
- **Education** – biodiversity, water life, seral progression, birds, water /nutrient cycles. Build pond dipping platforms. Interpretation boards and other features.
- **Pollination** – wildflowers Thorpe rec.
- **Spiritual inspiration** – unique character, natural beauty, peaceful. Moving water. Improving access to allow a more intimate experience while protecting the habitat.
- **Biodiversity resilience** – connections to other sites. Increasing habitat area and quality. Buffering against local developments. Improved access controls to encourage proper use of the site
- **Social value** – establish volunteer involvement and friends group. Making a place for social interaction
- **Carbon sequestration** – new planting to increase canopy cover and the benefits to air quality and local climate.

Proposed Intervention

- **Construct** 500m surfaced footpath (1.2m wide)
- **Surface** 500m bridleway along existing route
- **Construct** 300m boardwalk (recycled plastics)
- **Plant** 500m hedgerow (Hawthorn, blackthorn, Dogwood, Guelder Rose, Hazel, Field Maple)
- **Install** 1000m rabbit proof fencing
- **Create and manage** 0.4ha wildflower meadow (community plug planting exercise)
- **Plant** 450 native deciduous trees (Alder, Birch, Sessile Oak, English Oak for slope stabilisation)
- **Improve** 1ha of existing reedbed (selective management, creating 25% open water)
- **Relocate** 0.25ha reed to increase habitat area to 1.25ha
- **Install** 3 footbridges
- **Install** 2 field gates
- **Install** 4 all-ability kissing gates
- **Install** 3 interpretation boards
- **Install** 4 simple benches
- **Install** 3 picnic benches
- **Carry out** 2 days of litter picking annually
- **Remove** of tyres from the beck
- **Manage** scrub and invasive species along the beck

Thorpe Wood (LNA 105): A Local Nature Area containing approximately 7ha of Ancient Semi-Natural Woodland. Dominated by oak and birch, the tree stock is generally stunted, twisted and multi-stemmed, presumably as a result of past coppicing. Approximately ¼ of the site is open ground, much of it dominated by bracken, although natural regeneration of both oak and birch is locally very good. A water course (Dolphin Beck) and marshy area form the southern boundary of the wood. Full public access. A public footpath runs close to the southern boundary. There is potential for match funding here through a Forestry Commission Woodland Improvement Grant in providing improved access and management work, interpretation and facilities to compliment and bolster the interventions outlined below.



See individual management plan for Thorpe Wood for specific site details.

LCC owned Site Area : 8.38ha

Site area considered for GI development :8.38ha

South Leeds Water vole Project identifies this stretch as very poor quality habitat

Biodiversity objectives

- **River headwaters improvement** to the South – restructure the river channel, establish buffers and marginal habitats. Protection from offsite pressures.
- **Hedgerow creation** and management to the East – provide cover and shelter, prevent illegal access and encroachment of adjacent agricultural land and practices
- **Lowland mixed deciduous woodland** management – ensure healthy regeneration, varied woodland structure and ground flora etc.
- Bracken control – manage stands to promote natural regeneration and reduce area of bracken monoculture
- **Lowland heath** establishment to the North and East where sporadic growth currently occurs but is limited by bracken stands

Green Infrastructure and Ecosystem Services objectives

- **Recreation** – path surfacing, bridges, seating. Connect with Dolphin Beck Marsh under the M62 via PROW to South of Dolphin beck
- **Wellbeing** – maintain safe, clean, natural environment for physical and mental benefits. Interpretation and signage to encourage site use
- **Cultural heritage** – ASNW. Recognised locally but not widely celebrated. Promotion and interpretation to develop a sense of local pride
- **Spiritual inspiration** – unique character, natural beauty. Unusual tree forms. Improved access and facilities to better enjoy the whole site
- **Biodiversity resilience** – connections to other sites – similar habitats – Dolphin Beck. Improved access controls - to encourage proper use of the site
- **Hedgerows** - as site buffers/ protection. Providing opportunities for community food production/ foraging – berry picking wild herbs etc.

Proposed Intervention

- **Construct** 1200m surfaced footpath (1.2m wide)
- **Plant** 450m hedgerow (Hawthorn, blackthorn, Dogwood, Guelder Rose, Hazel, Field Maple)
- **Install** 900m rabbit proof fencing
- **Construct** 2700m² car park to the North
- **Reconstruct** banks along 300m of river channel
- **Install** 2 footbridges
- **Install** 1 motorbike access control
- **Install** 1 field gates
- **Install** 2 interpretation boards
- **Install** 2 simple benches
- **Carry out** 2 days of litter picking annually
- **Remove** tyres from site
- **Manage** 2ha of bracken stand (mechanically)

Phase 3 connecting Northward alongside, and under the M1 towards Hunslet and the City Centre

Sharp Lane / Throstle Carr Beck

8.16ha site with 5.25ha of new plantation woodland providing greenspace for the New Forest Village development, and communities in Middleton and Robin Hood. Connecting across Sharp Lane with Sharp Lane Plantations to the North. Although newly planted, there is future potential to add value to this site, and to the corridor scheme with a Woodland Improvement Grant for the woodland compartments as match funding for the interventions outlined below.

LCC owned Site Area : 8.16ha

Site area considered for GI development :2.91ha

Biodiversity objectives

- **Meadow creation/ Enhanced buffer strips** in mown areas
- **Enhanced buffer along Throstle Carr beck**

Green Infrastructure and Ecosystem Services objectives

- **Health and Wellbeing** – safe, clean, natural. Green gym (circuit paths for running etc.)
- **Aesthetic landscape value** –added scenic value to local housing projects
- **Recreation** – walking, horse riding, cycling, play, picnics - furniture
- **Education** – biodiversity
- **Pollination** – wildflowers.
- **Biodiversity resilience** – extension of Sharp Lane Plantations. Throstle Carr beck – improved buffer zones for this migration corridor, linking to the woodland plantation
- **Social value** – establish volunteer involvement and friends group. Social interactions for local residents/ site user

Proposed Intervention

- **Create and manage** 1.71ha wildflower meadow around woodland compartments (RE9 farmland mix – British Seed Houses) and spring bulbs along garden fences
- **Manage** 5700m2 enhanced buffer along the beck (selective vegetation management including scrub and invasive species along the beck)
- **Install** 3 simple benches

Sharp Lane Plantation

Occupying an extensive area of open green space between the M1 and a large housing estate, the developing Sharp Lane Plantation is becoming a wonderful asset to this part of south Leeds. Planted in the mid-1980s, Sharp Lane Plantation was created to provide a full range of multi-functional woodland benefits, including a pleasing landscape feature, a recreational and educational resource, valuable wildlife habitats and a sustainable source of timber in the years to come.

Species include beech, sweet chestnut, sycamore, sessile oak and wild cherry.

Full public access with links to adjacent housing estate. A large area of playing fields (football) located centrally. Close proximity to the M1 corridor, while a source of pressure on the site (noise, air pollution etc) and a limit for site connectivity, gives the site added value in terms of green corridor connectivity to the north and south with its motorway embankments. There is potential to add value to this site and to the corridor scheme as a whole with a Woodland Improvement Grant to improve access and facilities in the plantation areas as match funding for the interventions outlined below.

LCC owned Site Area : 20.02 ha

Site area considered for GI development : 3.74ha

Biodiversity objectives

- **Meadow creation** in mown areas/ buffer strips
- **Hedgerow planting** along motorway fencing as buffer/ natural access control and habitat/refuge from urban areas and motorway verges

Green Infrastructure and Ecosystem Services objectives

- **Wellbeing** – maintain safe, clean, natural surroundings for physical and mental benefits. Green gym. Nature on the doorstep
- **Aesthetic landscape value** – open space, views, added summer colour – wildflowers. increased visual beauty for surrounding housing
- **Recreation** – walking, horse riding, cycling, play, picnics. Improve path network, access features, furniture
- **Education** – biodiversity, installing interpretation for informal education

- **Pollination** – wildflowers
- **Spiritual inspiration** – unique character, natural beauty. Long stretches of open space to stroll and contemplate
- **Biodiversity resilience** – connections to other sites and corridors (M1 embankment)
- **Social value** – establish volunteer involvement and friends group. Increased social interactions for people enjoying the space

Proposed Intervention

- **Create and manage** 3.74ha wildflower meadow (RE2 lowland meadow mix – British Seed Houses)
- **Plant** 950m hedgerow (Hawthorn, blackthorn, Dogwood, Guelder Rose, Hazel, Field Maple)
- **Install** 1900m rabbit proof fencing
- **Install** 4 simple benches

Phase 4 Linking East under the M1 through Robin Hood and Rothwell via Rothwell Pastures, following the Dolphin/Oulton Beck.

Ouzlewell Green

3ha of young woodland planted with mixed broadleaves (ash, oak, sycamore, cherry and field maple) and a woody shrub edge of hazel, hawthorn, dog rose and guelder rose. It includes areas of meadow, a water side habitat with a newly planted community orchard and a hawthorn hedgerow bordering a children's playground.

As this woodland develops it will create a significant landscape feature, complimenting the adjacent mature Bushy Cliffe Wood (privately owned) and providing a valuable area for informal recreation in a pleasant rural environment.

Of special interest is the presence of two male native black poplar trees on the banks of Dolphin Beck.

Access and facilities : No public access to young plantation at present. A Public Footpath, however, links Ouzlewell Green village with Bushy Cliffe Wood, passing close to the northern edge of the plantation. Access and interpretation for the plantation have the potential for Woodland Improvement Grant funding as match funding for the proposed interventions outlined below.

LCC owned Site Area : 3.38ha

Site area considered for GI development :3ha

Biodiversity management objectives

- **Traditional orchard management**
- **Enhanced buffer along Dolphin Beck**

Green Infrastructure and Ecosystem Services objectives

- **Community Food production**
- **Wellbeing** – local site ownership, peaceful relaxation
- **Recreation** – walking, play, picnics, install access features
- **Education** – pollination/ reproduction interpretation
- **Pollination** – blossom
- **Spiritual inspiration** – quiet, intimate space
- **Social value** – promote volunteer involvement – local community
- **Biodiversity resilience** – links to river (Oulton beck) and Bushy Cliffe wood ASNW

Proposed Intervention

- **Manage** 0.31ha existing orchard planting as a traditional community orchard
- **Manage** 1000m2 enhanced buffer along the beck (selective vegetation management including scrub and invasive species along the beck)

Rothwell Pastures and disused railway

Rothwell Pastures & Disused Railway (LNA 92) is a 26ha site that includes a variety of contrasting and complementary habitats supporting a wide range of different plant and animal species. Vegetation types include neutral and acidic grasslands; wetlands, stream and pond; hedgerow, scrub and ruderal habitats, including naturally regenerating birch woodland. Of particular interest is the presence of Water Vole *Arvicola terrestris* along the banks of Haigh Beck and the wetland.

Whilst the Rothwell Pastures part of the site supports a locally important mosaic of habitats, the disused railway links a similar variety of often small-scale habitats, providing a locally important corridor feature for both wildlife and public access. The site also includes several features of historical and archaeological importance.

Rothwell Castle was originally an 11th century timber castle or fortified manor house, founded by Ilbert de Lacy. From the 13th century, it was used as a royal hunting lodge, by the kings of England and was once owned by John of Gaunt. Standing high is a rubble core pillar from a rectangular building, with the buried foundations of a range of buildings nearby. In 1487, the ruinous castle was replaced by a timber framed house, which was sadly dismantled in 1977. By the stream is part of a fine masonry grout of the manorial corn mill, with a sluice gate slot. Castleuk.net

LCC owned Site Area : 16.52ha

Site area considered for GI development : 16.52ha

Biodiversity management objectives

- **Reedbed creation/ improvement**
- **Meadow creation in mown areas/ buffer strips**
- **Lowland mixed deciduous woodland improvement**
- **Hedgerows – creation**
- **River habitat improvement**

Green Infrastructure and Ecosystem Services objectives

- **Wellbeing** – maintain safe, clean, natural surroundings for physical and mental benefit
- **Aesthetic landscape value** – open space, long distance views – disused railway.
- **Recreation** – walking, horse riding, cycling, play, picnics, access features
- **Education** – pond dipping platform amongst reedbed
- **Pollination** – wildflowers
- **Spiritual inspiration** – unique character, natural beauty
- **Biodiversity resilience** – connections to other sites Dolphin/Oulton beck. Connecting to existing railway green corridor
- **Social value** – promote volunteer involvement – Friends of Rothwell Country park, Rothwell in bloom
Cultural heritage Rothwell castle 11th century

Proposed Intervention

- **Plant** 900m hedgerow (Hawthorn, blackthorn, Dogwood, Guelder Rose, Hazel, Field Maple)
- **Install** 1805m rabbit proof fencing
- **Install** 2 motorbike access control
- **Install** 1 field gates
- **Install** 2 interpretation boards
- **Install** 4 simple benches
- **Install** 3 picnic benches
- **Create and manage** 0.73ha wildflower meadow (RE9 farmland mix – British Seed Houses, seeding and community plug planting)
- **Create** 0.25ha of new reedbed adjacent to existing (including new planting)
- **Coppice** trees along the beck
- **Carry out** 2 days of litter picking annually
- **Manage** 0.92ha reedbed (existing and new, including selective vegetation management and control of invasive species)
- **Manage** 7830m² enhanced buffer along the beck (including selective vegetation management and control of invasive species)

Phase 5 Running North West to encompass the Middleton Park GI hub in the scheme and its associated communities. It provides opportunities for links to the West.

West wood is an 8.6 ha woodland plantation on the edge of an escarpment overlooking Dewsbury Road. Part of the site is designated as Ancient Semi-natural Woodland (dominated by oak and birch) and a Local Nature Reserve (LNA). Most of the site was planted in the mid-1970s with mixed broadleaves, including Norway maple, alder and larch on the site of a former tip. Work carried out in 1995 involved the first thinning of the plantation trees. This woodland, together with nearby Sissons Wood, provides an important, strong landscape feature within this area of urban fringe. Whilst it suffers greatly from urban fringe pressures, particularly rubbish dumping and vandalism, it remains an important area for wildlife and informal recreation. The South Leeds Heritage Trail runs through this wood and forms part of a greater trail through Leeds.

Sissons wood is a 4.2ha mature Oak and Birch woodland overlooks the Dewsbury Road, nestled in the bottom of the Mill Beck Valley, south-west of Middleton Park. Situated on part of the South Leeds Heritage Trail, the wood links directly with nearby West Wood, helping to strengthen this urban fringe landscape. The main access route is well used by walkers and the woods themselves, have long provided an area for local children to explore and play. Like West Wood, Sissons is exposed to many of the pressures found on the urban fringe, not least fly-tipping and vandalism. Nonetheless, it remains a haven for wildlife and is a delight to walk through at any time of year. An area of relatively open ground, immediately south of the main stand of trees was planted with sessile oak during 1997, with the aim of extending the present woodland boundary. Establishment management continues on this site. This woodland forms part of the South Leeds Heritage Trail.

LCC owned Site Area :

Site area considered for GI development :

A great deal of potential exists for these sites to add value to this scheme. Woodland Improvement Grants to develop and manage the woodlands, additional habitat creation outside the woodland compartments, and new links between housing areas and Dewsbury road. Housing development adjacent to the woodland (redevelopment of existing housing) would also inform, and benefit from GI improvements here. **Plans for proposed interventions are currently underway, however the following objectives will be realised:**

Biodiversity management objectives (both sites)

Meadow creation in mown areas/ buffer strips

Lowland mixed deciduous woodland improvement/ creation

Hedgerows – creation

Green Infrastructure and Ecosystem Services objectives (both sites)

Wellbeing – maintain safe, clean, natural surroundings

Aesthetic landscape value – open space, long distance views. Landscape feature seen from Dewsbury rd

Recreation – walking, horse riding, cycling, play, picnics, Improve path network, access features

Education – biodiversity, interpretation

Pollination – wildflowers

Spiritual inspiration – unique character, natural beauty

Biodiversity resilience – connections to other sites particularly Middleton Wood

Social value – establish volunteer involvement and friends group

Cultural heritage – ASNW. South Leeds Heritage Trail

LCC owned Site Area :

Site area considered for GI development :

A great deal of potential exists for these sites to add value to this scheme. Woodland Improvement Grants to develop and manage the woodlands, additional habitat creation outside the woodland compartments, and new links between housing areas and Dewsbury road. Housing development adjacent to the woodland (redevelopment of existing housing) would also inform, and benefit from GI improvements here. **Plans for proposed interventions are currently underway, however the following objectives will be realised:**

Biodiversity management objectives (both sites)

Meadow creation in mown areas/ buffer strips

Lowland mixed deciduous woodland improvement/ creation

Hedgerows – creation

LCC owned Site Area :

Site area considered for GI development :

A great deal of potential exists for these sites to add value to this scheme. Woodland Improvement Grants to develop and manage the woodlands, additional habitat creation outside the woodland compartments, and new links between housing areas and Dewsbury road. Housing development adjacent to the woodland (redevelopment of existing housing) would also inform, and benefit from GI improvements here. **Plans for proposed interventions are currently underway, however the following objectives will be realised:**

Biodiversity management objectives (both sites)

Meadow creation in mown areas/ buffer strips

Lowland mixed deciduous woodland improvement/ creation

Hedgerows – creation

Green Infrastructure and Ecosystem Services objectives (both sites)

Wellbeing – maintain safe, clean, natural surroundings

Aesthetic landscape value – open space, long distance views. Landscape feature seen from Dewsbury rd

Recreation – walking, horse riding, cycling, play, picnics, Improve path network, access features

Education – biodiversity, interpretation

Pollination – wildflowers

Spiritual inspiration – unique character, natural beauty

Biodiversity resilience – connections to other sites particularly Middleton Wood

Social value – establish volunteer involvement and friends group

Cultural heritage – ASNW. South Leeds Heritage Trail

Phase 6 Through Rothwell and Oulton, linking to the River Aire in the East and beyond to the Wyke beck corridor, Skelton Lagoon and Temple Newsam Estate.

Springhead Park is a well used, traditional public park, offering a variety of recreational activities within its 22 hectares of formal gardens and open, close-mown grassy slopes. A 10.2 ha Leeds Nature Area straddles Thorpe Road, 2.08ha of which is within Springhead Park, and 8.9 ha within Oulton Hall Estate (109ha leased to Devere Hotels).

In 1996, 1.6 hectares of new woodland were planted with the help of local school children. Species used reflected what is commonly found growing locally. The intention was to strengthen the park's existing, but rather thin shelterbelts by creating a blend of open space, with formal avenues of trees and informal woodland. This is intended to screen the busy A654 road and the surrounding buildings. These young plantations are now establishing well and are already making a strong contribution to the landscape.

Access and facilities : Full public access exists throughout, including car parking and tarmac paths. Facilities include an aviary, skateboard park, tennis courts, bowling green, ornamental lawns and a café.

There is potential here to create new habitat, manage existing woodland under a Woodland Improvement Grant and to introduce features such as a reedbed which will help alleviate some of the problems with flooding that currently exist on site (see Vision, pg 4 - Climate change, flood storage, shade).

LCC owned Site Area : 21.78ha

Site area considered for GI development : 20.18ha

Biodiversity management objectives

- **Reedbed creation/ improvement**
- **River habitat improvement.**
- **Enhanced buffer strips** - riparian
- **Meadow creation** in mown areas
- **Lowland mixed deciduous woodland** creation/ improvement/ shelterbelts
- **Hedgerows** along Leeds road A639 and Oulton Lane A654 to provide habitat and refuge for migration to neighbouring Oulton Park

Green Infrastructure and Ecosystem Services objectives

- **Wellbeing** – safe, clean, increased natural feel. Green gym
- **Recreation** – walking, play, picnics,
- **Education** – pollination, reproduction, interpretation
- **Pollination** – wildflowers
- **Spiritual inspiration** – colour, sounds of nature, running water
- **Social value** – promote volunteer involvement – local and wider communities
- **Biodiversity** resilience – Improved buffers on Oulton beck, cover and habitat along Oulton Lane (A654) linking to Oulton woods.

Proposed Intervention

- **Plant** 350m hedgerow (Hawthorn, blackthorn, Dogwood, Guelder Rose, Hazel, Field Maple)
- **Install** 700m rabbit proof fencing
- **Create and manage** 1.59ha wildflower meadow (RE2 lowland meadow mix - British Seed Houses)
- **Create** 0.4ha of new reedbed (including planting and maintenance – litter, invasive species, reed propagation)
- **Manage** 14640m² enhanced buffer along the beck (including selective vegetation management and control of invasive species)

Rothwell Country Park

A former colliery site, Rothwell Country Park was created in the mid to late 1990s on the site of the former Rothwell Colliery. As part of the landscaping works extensive wildflower meadows were created which have made a contribution towards reversing the long term reduction in wildflower meadows in both the Leeds district and West Yorkshire region. The wildflower meadows are part of a rich habitat mosaic, including ponds, scrub and woodland.

The grasslands provide habitat for a number of high priority ground nesting birds including species of conservation concern Meadow Pipit and UK Biodiversity Action Plan birds Skylark and Grey Partridge.

The diverse number of wildflowers in the grassland provides a great nectar source for a vast number of nectar gathering insects and habitat for many other invertebrates.

Of particular significance are the presence of breeding ringed and little ringed plover on the site. The former species is estimated to have a breeding population in the British Isles of just under 10,000 breeding pairs.

A partnership with Yorkshire Wildlife Trust currently exists at this site. and Sus-trans are currently seeking funding for a link bridge to connect over the Aire-Calder navigation

Phase 7 Ensuring solid connections with the Lower Aire Valley and beyond to the East

Water Haigh Woodland Park

Eshald Wood, Pithead Wood, Fleet Wood, Water Haigh Farm, Fleet Bridge Wood, Swillington Bridge Plantation, Swillington Bridge Millennium Wood, Water Haigh Plantation

This series of new plantations is developing to provide an intimate matrix of small, inter-connected broadleaved woodlands on the site of the former Water Haigh Colliery. Planted between the late 1970s and late 1990s, the aim is to ameliorate and enhance this former industrial landscape, to provide a quality 'natural' resource for people and wildlife. The woodlands and surrounding area are well served by the Public Rights of Way network (Leeds Country Way) and many permissive footpaths and the (Trans Pennine Trail).

Throughout, tree species used have essentially been pioneers, such as birch, alder, oak, rowan, pine and larch.

LCC owned Site Area : 77.5ha

Site area considered for GI development : 21.75ha

Biodiversity management objectives

- **Hedgerows**
- **Lowland meadow** – opportunity to plant varied seed mixes, increasing habitat variety and allowing observation of effects of changing climate
- **Enhanced buffer strips**
- **Traditional orchards**

Green Infrastructure and Ecosystem Services objectives

- **Community Food production**
- **Wellbeing** – safe, clean, increased natural feel. Green gym
- **Recreation** – walking, play, picnics, access features
- **Education** – pollination/ reproduction
- **Pollination** – blossom, wildflower
- **Spiritual inspiration** – colour, sounds of nature, running water
- **Social value** – promote volunteer involvement – local and wider communities
- **Cultural heritage** – traditional fruit species – local provenance
- **Biodiversity resilience** – connecting Oulton beck to the river Aire. Increasing habitat structure and variety. Improving and creating new migration routes

Proposed Intervention

- **Plant** 450m hedgerow (Hawthorn, blackthorn, Dogwood, Guelder Rose, Hazel, Field Maple)
- **Install** 950m rabbit proof fencing
- **Install** 1 footbridge
- **Install** 6 field gates
- **Install** 5 interpretation boards
- **Install** 4 simple benches
- **Install** 4 picnic benches
- **Install** 6 step-over stiles
- **Create and manage** 21.24ha wildflower meadow (Varied mixes to identify future viability: RE1, RE2, RE3, RE4, RE10, WFG15, and a successful mix resulting from observations – British Seed Houses)
- **Create** 0.25ha of new reedbed adjacent to existing (including new planting)
- **Create** 0.51ha traditional orchard (local provenance varieties)

South Leeds Green Infrastructure Corridor

The Ardsley and Robin Hood Nature Park

The first two phases of intervention establish a network of natural places that are currently experiencing severe pressures from developments, isolation and misuse, but are extremely valuable habitats in their own right. It is vital to conserve and enhance the habitats and biodiversity they support. Opportunities exist for improving the quality of life for local residents by creating a 'Nature Park' to serve the community as the first step in developing a green corridor. It is essential that these sites are improved with immediate effect. These improvements will inform and add value to further interventions along the corridor, but will also provide immediate benefits to local life. Connections through and along the M62 / M1 corridors open this scheme up to wider communities, address issues with habitat isolation and resilience and open up a significant tract of land for sustainable transport links in further developments – cycle routes, footpaths and bridleways that people can use as a healthier (for them and the environment) alternative to road networks. Individual management plans for these sites will inform specific interventions.

Phase 1

East Ardsley Fall. Within close proximity of Dolphin Beck has significant value due to its relative size (reducing pressures on other sites) and charming nature. Parts of the site are already under a Forestry Commission Woodland Improvement Grant aiming to increase public awareness and use – with a newly constructed bridleway linking to the route (ROTHWELL 21) that runs alongside Dolphin Beck.

Phase 2

Dolphin Beck Marsh contains one of the few remaining common reed (*Phragmites communis*) reedbeds in Leeds, and as a priority UKBAP habitat, would be a high profile intervention in the overall scheme of this GI corridor. Watervole records exist along this beck (priority UKBAP species) and add further value to biodiversity, whilst also playing an important role in exciting the interest of local people. Surrounded by housing developments (some of which are still underway) the marsh has been identified as having need of immediate intervention to halt the inevitable degradation it will ultimately experience.

Thorpe Wood has been included in this phase due to its importance as an area of ASNW within close proximity of the same developments, and with some severe issues with vandalism and general misuse. Dolphin Beck (Oulton Beck on main river maps) forms the southern boundary of the site and as such connects, in terms of habitat and species (Watervole records exist here too), to Dolphin Beck Marsh.

These sites together form a strong basis for community interest, will be a robust collection of green spaces that will stand strong against urban fringe pressures, and will add ecological and social value to any future development. They will have a joint identity in terms of signage and interpretation, and improved links will ensure they are recognised, used and managed as individual components of a single, unique public space.

The detailed planning of subsequent phases is currently underway.



East Ardsley Fall – Phase 1



Dolphin Beck Marsh – Phase 2



Thorpe Wood – Phase 2

Appendix 1

Core objectives to inform all development

Access for All

Leeds City Council believes that the opportunity to access and enjoy the city's facilities, including its parks and green spaces, should be readily available and relevant to all visitors, including people of all ages, those with physical disabilities or special needs, and members of various ethnic communities. To this end the authority is committed to making appropriate improvements to its facilities and services in order to accommodate accessibility.

Cycling

The West Yorkshire Cycling Strategy and the Leeds Cycling Plan, in harmony with the West Yorkshire Local Transport Plan, recognise and promote the benefits of cycling, not only as a sustainable means of transport, but also for exercise, recreation and enjoyment.

In order to promote the use of these facilities, signage, interpretation, waymarking and advertisement are required.

Making Space for Nature objectives;

(1) To restore species and habitats appropriate to England's physical and geographical context to levels that are sustainable in a changing climate, and enhanced in comparison with those in 2000.

(2) To restore and secure the long-term sustainability of the ecological and physical processes that underpin the way ecosystems work, thereby enhancing the capacity of our natural environment to provide ecosystem services such as clean water, climate regulation and crop pollination, as well as providing habitats for wildlife.

(3) To provide accessible natural environments rich in wildlife for people to enjoy and experience.

and delivery:

(i) Improve the quality of current sites by better habitat management, informed by management plans.

(ii) Increase the size of current wildlife sites.

(iii) Enhance connections between, or join up, sites, either through physical corridors, or through 'stepping stones'.

(iv) Create new sites.

(v) Reduce the pressures on wildlife by improving the wider environment, including through buffering wildlife sites.

Accessible Natural Greenspace Standard – Natural England

Everyone, wherever they live, should have accessible natural greenspace of at least:

- 2 hectares within 300 metres (5 minute walk) from home
- 20 hectares within 2 kilometres of home
- 100 hectares within 5 kilometres of home
- 500 hectares within 10 kilometres of home
- 1 hectare of Local Nature Reserve per 1000 population.

In developing Policy G3: Standards for open space, sport and recreation, the City Council has achieved the highest standard of Accessible Natural Greenspace Standard (ANGSt), that is possible given the inherent limitations of the district due to the large extent of the urban area. This has included a review of natural greenspace available in the district. The Council aspires to maximise recreation near to where people live, which can help to avoid adverse impact, and the more sustainable use of sensitive conservation sites for recreation. (Core Strategy, Published Draft, Feb 2012)

Due to the large urban area of Leeds, the provision of new accessible green space outside the city centre, with green and sustainable transport links, is essential to provide those who live in the centre with a suitable level of functionality outlined in the ANGSt

Woodland trust research recommends that everyone, wherever they live, should have access to at least:

- 2 hectares of woodland within 500 metres of home
- 20 hectares of woodland within 4 kilometres of home

Applying this to the Leeds district would mean an increase in 577 hectares of woodland cover (16.5% increase in current cover).

Fig. 3. Phase 1 and 2 Sites in Detail

