



newlands
Site context plan

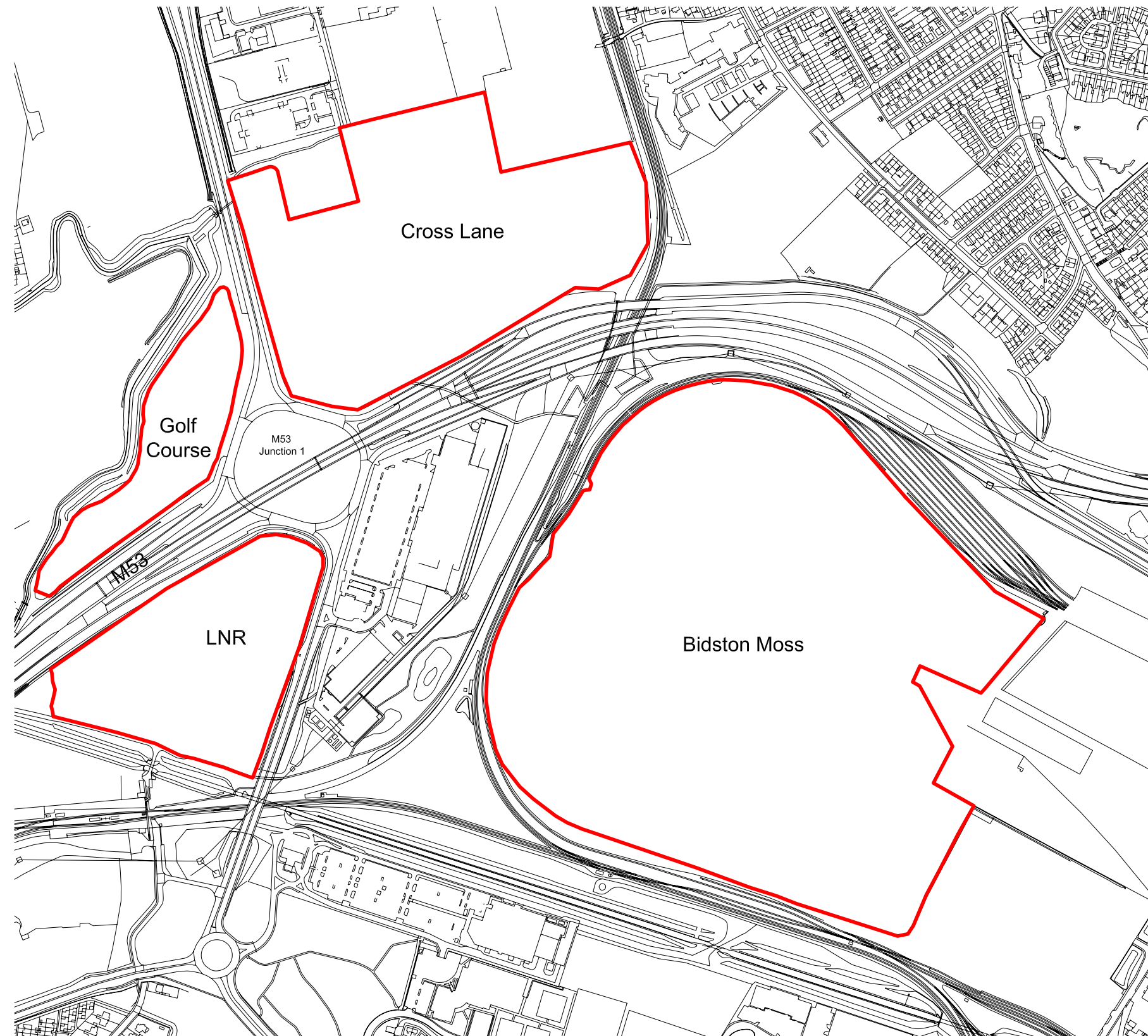
Bidston Moss
Bidston, North Wirral, Merseyside

Regeneration benefits

The objectives and outcomes of the Bidston Moss Project are to:

- Transform 68 hectares of previously developed brownfield land to community woodland
- Provide image improvements for the City Region of Liverpool through woodland creation around Junction 1, M53 and along a main rail route to the city, supporting strategic investments for Capital of Culture 2008
- Delivers a beacon site within the Mersey Waterfront Regional Park
- Create a zone of influence around the project area that will make it a more competitive choice for indigenous and inward business investment
- Improves 3 Super Output Areas (SOA) in Inner Wirral that are within the top 5% of the national Index of Multiple Deprivation (IMD)
- Contribute to Merseyside's Biodiversity Action Plan targets
- Improve and create safe access routes to local businesses, schools and residential areas
- Create a sub-regional cycling facility that contributes to the National Cycle Route Network

Project location



Forestry Commission
**BIDSTON MOSS
AND EXTENSIONS**
Location Plan

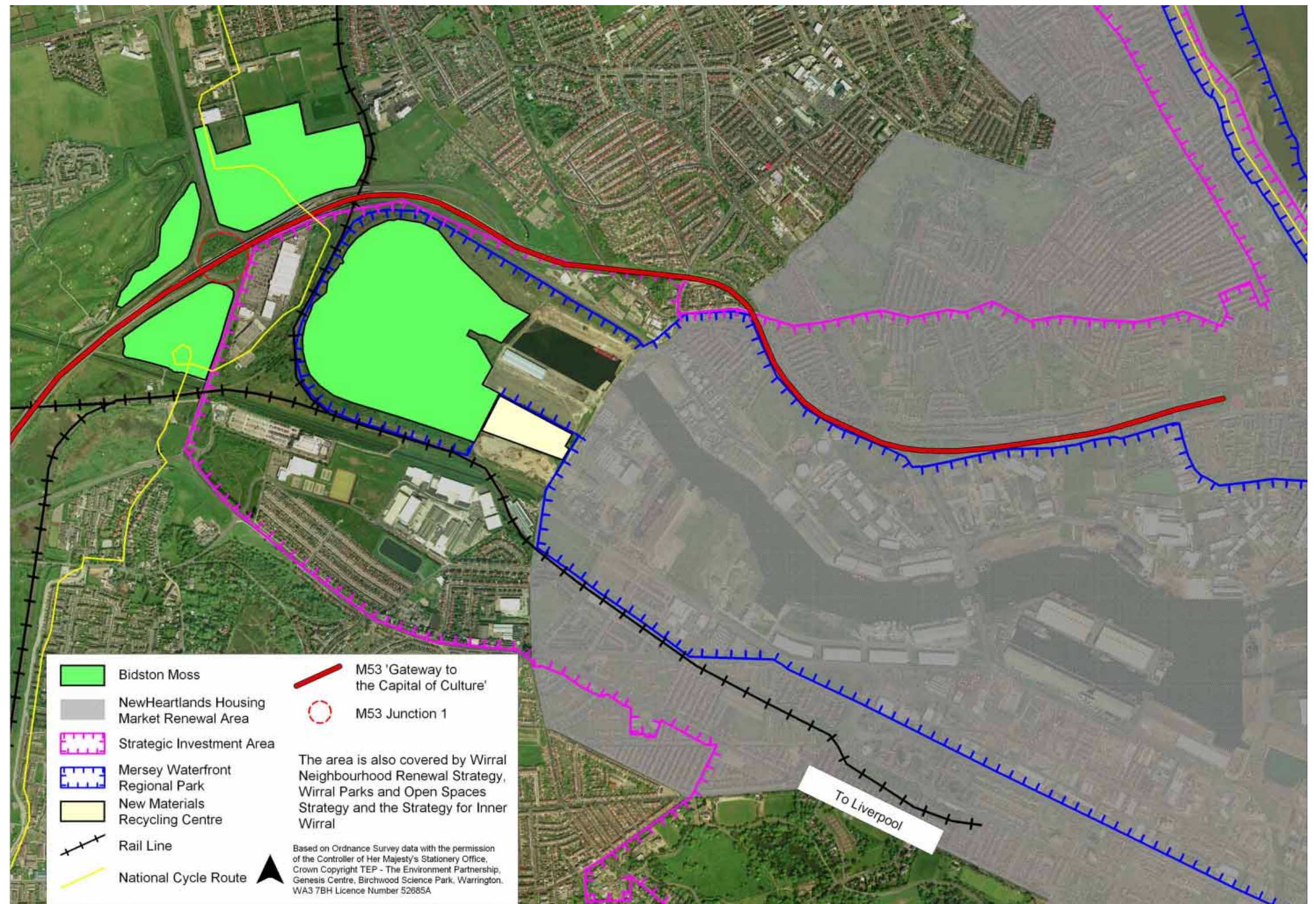
Scale: 1:5,000 Sept 2005
Dwg FLA/350/my/01/214. KP

newlands
new economic environments
through woodlands

EUROPEAN UNION

northwest
development agency

Strategic investment



Site biography

Site: Bidston Moss **Where:** Bidston, North Wirral

Size: 68 hectares

The Bidston Moss Project is located in Birkenhead, overlooking junction 1 of the M53 and close to the entrance of the Mersey Tunnel. The site is made up of four blocks, three owned by Wirral Metropolitan Borough Council (WMBC) and one by Merseyside Waste Disposal Authority (MWDA). The three WMBC sites have rough grassland and shrubs growing across them, the MWDA land is planted up and already has some woodland infrastructure.

The four blocks are known as:
The former Bidston Moss landfill site (MWDA)

The area is a large (40 ha) distinctly domed area in the centre of Birkenhead that is clearly visible across the River Mersey from Liverpool. The landfill was closed by MWDA in the 1990s.

The former Cross Lane Tip (WMBC)

The former Cross Lane Tip was a domestic refuse tip for WMBC between 1963-1978. The site landform is also domed but not to the scale of Bidston Moss, however soil cover is unsuitable for tree establishment. The site has not been managed in recent years and is dominated by invasive plant species.

Land adjacent to Bidston Golf Course (WMBC)

The land adjacent to Golf Course leased land is a flat-topped mound with steep slopes to the Birket Old Courses and M53, and a more gentle slope to the M53 roundabout and North Wallasey Approach Road (A554). It is covered in rough grassland with tall herbs, and has sparse scattered scrub and bramble thickets. This area has been constructed in part from waste materials arising from the construction of the Mersey Tunnel.

Local Nature Reserve (WMBC)

Land located in between the River Birket, the M53 and the A554, was previously used as a borrow pit during the construction the M53. When the motorway was completed the land was left to naturally regenerate. The pioneer habitats that exist on site led to its designation as a Local Nature Reserve in 1994 and declared a Site of Biological Interest in 1980. Access to the site is limited to pedestrians, however access routes are overgrown and only a narrow path is usable.

The Bidston Moss Project scored highly under PBRs, being previously developed brownfield land within a residential and business setting close to a school and important routeways. The development of Bidston Moss to community woodland will bring disused sites in to active management and enhance the wider environment. The Forestry Commission aims to continue

to work in partnership with Groundwork Wirral who has been a key delivery partner in the restoration of the former landfill to date. The Forestry Commission and Groundwork will continue to engage with the community groups established over the course of the project so far.

Partners:
Wirral Metropolitan Borough Council, Mersey Waste Disposal Authority and Groundwork Wirral.

Project design Option 1

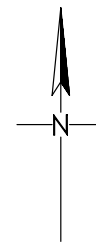
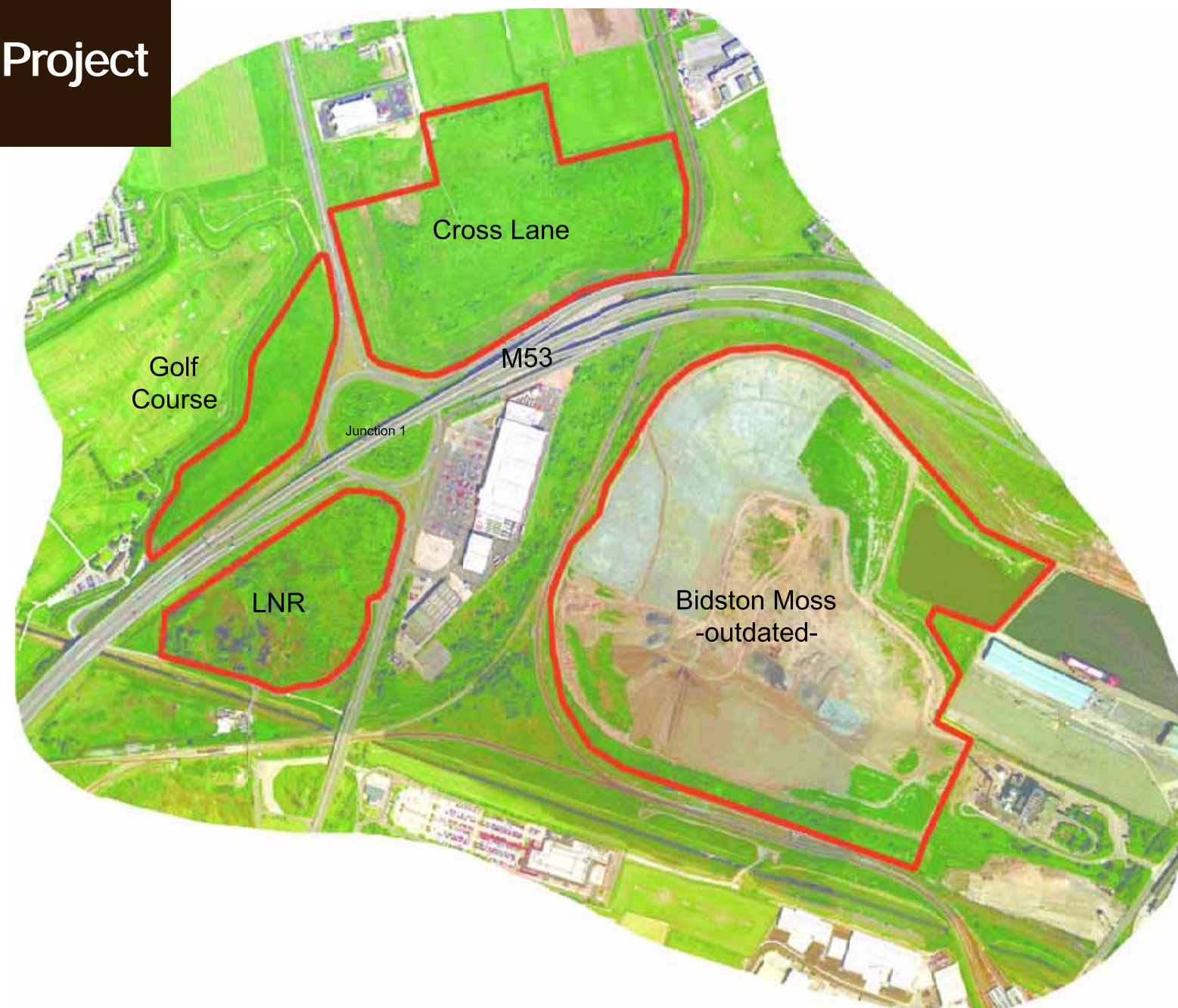
Proposal overview



Forestry Commission newlands
BIDSTON MOSS AND EXTENSIONS
 Landscape Proposals
 Option 1
 Scale: 1:5,000 July 2005
 Dwg FLA/350/my/01/215. KP

Project design Option 1

The Bidston Moss Project





View of Stargazer Sculpture



View from Stargazer Sculpture

Notes:
Photograph outdated.
Bidston Moss now much
more vegetated.







**BIDSTON MOSS
AND EXTENSIONS**

 Aerial Photograph

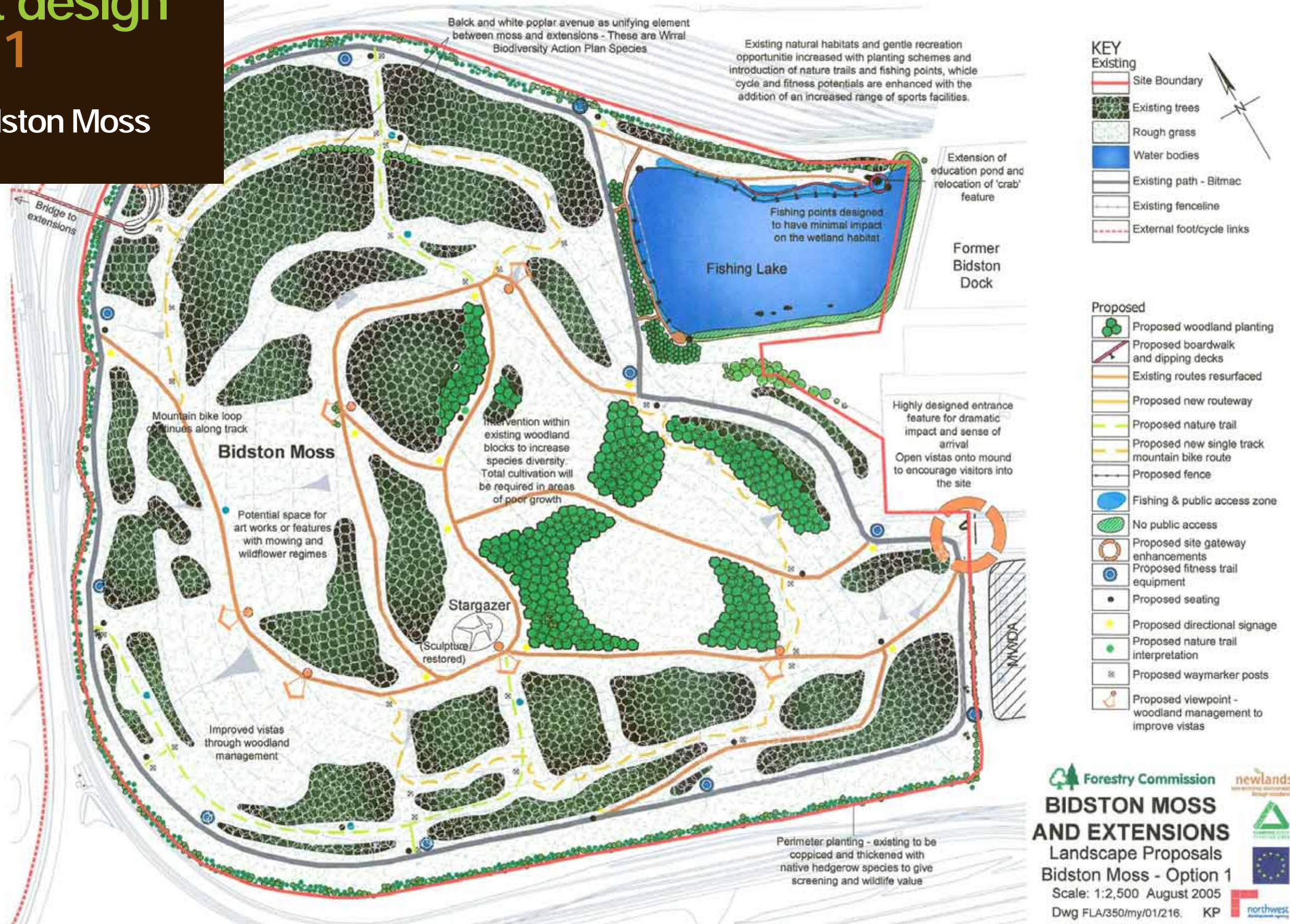
 Scale: NTS August 2005

 Dwg FLA/350/my/01/201. KP

Project design Option 1

Former Bidston Moss landfill



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BIDSTON MOSS AND EXTENSIONS
 Landscape Proposals
 Bidston Moss - Option 1
 Scale: 1:2,500 August 2005
 Dwg FLA/350/my/01/216: KP

Project design Option 1

Former Cross Lane Tip



KEY

Existing

- Site Boundary
- Existing trees
- Rough grass
- Water bodies
- Wetlands
- Existing path - Bitmac
- Existing fenceline
- External foot/cycle links

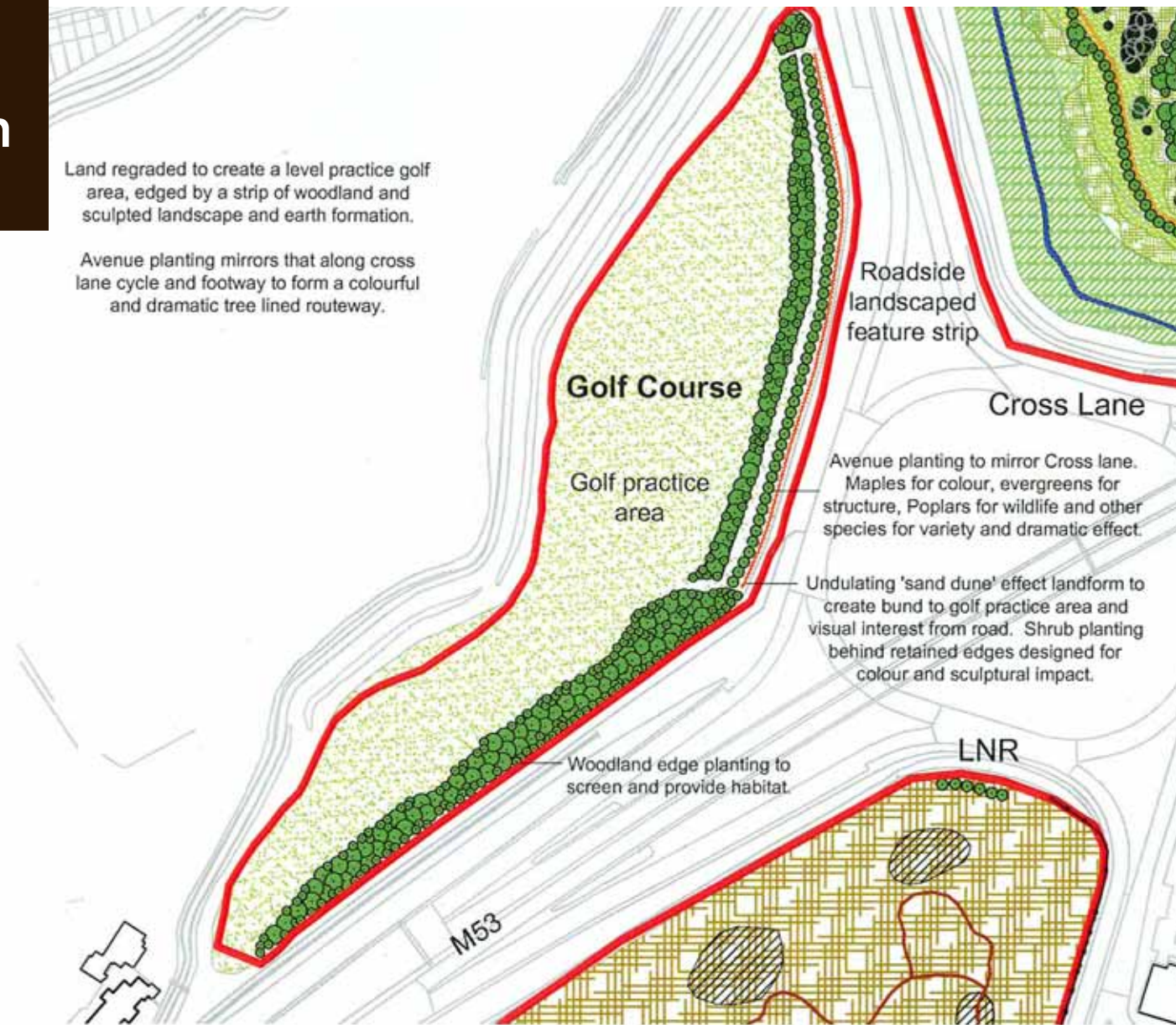
Proposed

- Proposed woodland planting
- Proposed shrub planting
- Proposed scrub management
- Proposed meadow grass seeding
- Proposed all-terrain path
- Proposed new foot/cycle path
- Proposed temporary foot/cycle path
- Proposed car parking
- Proposed fence
- Proposed site gateway enhancements
- Proposed seating
- Proposed sculptural mounding
- Proposed fitness trail equipment
- Proposed waymarker posts

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BIDSTON MOSS AND EXTENSIONS
 Landscape Proposals
 Cross Lane
 Scale: 1:2,500 August 2005
 Dwg FLA/350/my/01/208. KP

Project design Option 1

Land adjacent to Bidston Moss Golf Course



Land regraded to create a level practice golf area, edged by a strip of woodland and sculpted landscape and earth formation.

Avenue planting mirrors that along cross lane cycle and footway to form a colourful and dramatic tree lined roadway.

Roadside landscaped feature strip

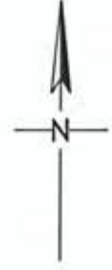
Cross Lane

Avenue planting to mirror Cross lane. Maples for colour, evergreens for structure, Poplars for wildlife and other species for variety and dramatic effect.

Undulating 'sand dune' effect landform to create bund to golf practice area and visual interest from road. Shrub planting behind retained edges designed for colour and sculptural impact.

Woodland edge planting to screen and provide habitat.

- KEY**
Existing
- Site Boundary
 - Existing trees
 - Rough grass
 - Water bodies
 - Wetlands
 - Areas of Japanese knotweed



- Proposed**
- Proposed woodland planting
 - Proposed shrub planting
 - Proposed scrub management
 - Proposed meadow grass seeding
 - Proposed surfacing of existing path
 - Proposed new foot/cycle path
 - Proposed fence
 - Proposed seating
 - Proposed sculptural mounding

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BIDSTON MOSS AND EXTENSIONS

Landscape Proposals
Golf Course

Scale: 1:2,500 August 2005
Dwg FLA/350/my/01/209. KP

northwest development agency

Project design Option 1

Bidston Local Nature Reserve



- KEY**
- Existing**
- Site Boundary
 - Existing trees
 - Rough grass
 - Water bodies
 - Wetlands
 - Areas of Japanese knotweed
- Proposed**
- Proposed woodland planting
 - Proposed scrub management
 - Proposed surfacing of existing path
 - Proposed causeway
 - Proposed fence
 - Proposed site gateway enhancements
 - External foot/cycle links

Existing attractive site to undergo management to enhance existing qualities. No major planting required, as reserve is currently very diverse and rich in habitat, however a small poplar avenue is proposed to tie the site into scheme as a whole.

Small line of black and white poplars to mirror and help to untie character of proposals on adjacent sites, whilst remaining sensitive to the habitats within LNR.

Existing path surfaced and opened up for ease of access.

Areas of Japanese Knotweed to be removed

Scrub area contained and managed

Meadows reinstated

Scrub to be cleared from grasslands and regime of turf clearance begun to regenerate meadows.

Pathway raised with creation of causeway to cross wet area

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 newlands
BIDSTON MOSS AND EXTENSIONS
 Landscape Proposals
 LNR
 Scale: 1:2,500 August 2005
 Dwg FLA/350/my/01/210. KP

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Cost estimates

Reclamation and establishment Option 1

| A | Fishing Lake Developments | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|------------------|--|------|----------------|------------|----------------|----------------|----------------|
| 1 | Prelims | 1 | item | £1,500.00 | £1,500 | | £1,500 |
| 2 | removal of ex. Post & rail fence & gate | 190 | lin m | £3.50 | £665 | | £665 |
| 3 | bankside engineering works | 1 | item | £16,000.00 | £16,000 | | £16,000 |
| 4 | new footpaths | 314 | m ² | £15.00 | £4,710 | | £4,710 |
| 5 | fishing pegs (x 15) | 15 | no | £750.00 | £11,250 | | £11,250 |
| 6 | woodland planting | 2300 | m ² | £0.50 | £1,150 | | £1,150 |
| 7 | marginal planting | 490 | m ² | £8.00 | £3,920 | | £3,920 |
| 8 | boardwalks | 240 | m ² | £40.00 | £9,600 | | £9,600 |
| 9 | extension / improvement of education pond | 1 | item | £3,500.00 | £3,500 | | £3,500 |
| 10 | Community Projects Supporting Capital Investment | | | | | £15,389 | £15,389 |
| Sub Total | | | | | £52,295 | £15,389 | £67,684 |

| B | Mountain Terrain Bike Tracks and other track improvements: | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|------------------|--|------|----------------|-----------|----------------|----------------|----------------|
| 1 | Prelims | 1 | item | £500 | £500 | | £500 |
| 2 | Upgrading and repair work to existing tracks - herbicide spray, MOT to fill depressions, 25mm gritstone wearing course; binder to tar & chip areas | 6882 | m ² | £2.88 | £19,820 | | £19,820 |
| 3 | perimeter race track starting zone | 1 | item | £3,500 | £3,500 | | £3,500 |
| 4 | new sections of single track MTB tracks | 1491 | lin m | £15 | £22,365 | | £22,365 |
| 5 | Community Projects Supporting Capital Investment | | | | | £15,389 | £15,389 |
| Sub Total | | | | | £46,185 | £15,389 | £61,574 |

| C | Entrance area developments | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|------------------|----------------------------|------|----------------|-----------|----------------|------------|----------------|
| 1 | Prelims | £1 | item | £2,000 | £2,000 | | £2,000 |
| 2 | rendered block walling | £35 | lin m | £500 | £17,500 | | £17,500 |
| 3 | gabion walling | £35 | lin m | £100 | £3,500 | | £3,500 |
| 4 | access control system | £1 | item | £4,000 | £4,000 | | £4,000 |
| 5 | softworks | £100 | item | £55 | £5,500 | | £5,500 |
| 6 | hard works to footways | £260 | m ² | £32 | £8,320 | | £8,320 |
| Sub Total | | | | | £40,820 | | £40,820 |

| D | Health trail | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|------------------|--|------|---------|-----------|---------------|----------------|----------------|
| 1 | Prelims | 1 | item | £500 | £500 | | £500 |
| 2 | installation of fitness / activity equipment at 200 lin m centres around perimeter track | 10 | no | £850 | £8,500 | | £8,500 |
| 3 | Community Projects Supporting Capital Investment | | | | | £15,389 | £15,389 |
| Sub Total | | | | | £9,000 | £15,389 | £24,389 |

| E | Site furnishing | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|---|---------------------------------------|------|---------|-----------|--------|------------|--------|
| 1 | Prelims | 1 | item | £2,000 | £2,000 | | £2,000 |
| 2 | removal of existing old seats | 6 | no | £50 | £300 | | £300 |
| 3 | removal of existing windbreak fencing | 437 | lin m | £5 | £2,185 | | £2,185 |

| | | | | | | | |
|---|--------------------------------|----|------|--------|-----------------|-----------|-----------------|
| 4 | removal of existing waymarkers | 1 | item | £500 | £500 | | £500 |
| 5 | Seats | 25 | no | £600 | £15,000 | | £15,000 |
| 6 | Directional signs | 12 | no | £600 | £7,200 | | £7,200 |
| 7 | Information Display boards | 6 | no | £600 | £3,600 | | £3,600 |
| 8 | Entrances - main info boards | 2 | no | £2,000 | £4,000 | | £4,000 |
| 9 | Route markers | 25 | no | £320 | £8,000 | | £8,000 |
| Sub Total | | | | | £42,785 | £0 | £42,785 |
| Contract Management of elements A to E | | | | | £28,123 | | £28,123 |
| Total Reclamation Phase | | | | | £191,085 | | £237,252 |

| F | Phase IV Establishment Costs | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|----------------------------------|--|-------|---------|-----------|-----------------|----------------|-----------------|
| 1 | Total cultivation | 3 | Ha | £42,083 | £126,249 | | £126,249 |
| 2 | Woodland planting mix | 3 | Ha | £715 | | £2,145 | £2,145 |
| 3 | Heavy standards | 25 | item | £300 | | £7,500 | £7,500 |
| 4 | Wildflower mix | 30000 | Ha | £1.5 | | £45,000 | £45,000 |
| 5 | Community Projects Supporting Capital Investment | | | | | £15,389 | £15,389 |
| Total Establishment Phase | | | | | £126,249 | £70,034 | £196,283 |

The Bidston Moss Project Extension areas. 1. Former Cross Lane Tip

| Ref | Description | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|--------------------------------|--|--------|---------|-----------|--------|-----------------|-----------------|
| A Hard Landscaping | | | | | | | |
| 1 | Supply and install perimeter fencing - 1.8m | 490 | m | £55.55 | | £27,220 | £27,220 |
| 2 | Supply and install gate to match fencing | 1 | item | £2,200 | | £2,200 | £2,200 |
| 3 | Supply and install motorcycle access controls | 2 | item | £440 | | £880 | £880 |
| 4 | Supply materials and construct new all terrain cycle track | 1,745 | m | £16.5 | | £28,793 | £28,793 |
| 5 | Excavate, supply materials and construct granular footpath with re-cycled topping - 1.5m | 604 | m | £27.5 | | £16,610 | £16,610 |
| 6 | Supply and construct culvert in across wetland | 1 | nr | £2,200 | | £2,200 | £2,200 |
| 7 | Supply and install entrance signs | 2 | nr | £660 | | £1,320 | £1,320 |
| 8 | Supply and install seating | 2 | nr | £660 | | £1,320 | £1,320 |
| Sub Total | | | | | | £80,542 | £80,542 |
| B Soft Landscaping | | | | | | | |
| 1 | Importation of soil for capping of contamination. | 44,386 | tonnes | £10 | | £443,860 | £443,860 |
| Sub Total | | | | | | £443,860 | £443,860 |
| Total Reclamation Phase | | | | | | £524,402 | £524,402 |

| C | Phase IV Establishment Costs | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|----------------------------------|------------------------------|-------|----------------|-----------|--------|----------------|----------------|
| 1 | Meadow grasses | 1.01 | ha | £15,000 | | £15,150 | £15,150 |
| 2 | Standard Trees | 42 | item | £300 | | £12,600 | £12,600 |
| 3 | Woodland planting mixes | 1.4 | ha | £715 | | £1,001 | £1,001 |
| 4 | Wetland planting | 1,500 | m | £0.55 | | £825 | £825 |
| 5 | Shrub planting mixes | 9000 | m ² | £2.3 | | £20,700 | £20,700 |
| Total Establishment Phase | | | | | | £50,276 | £50,276 |

continued overleaf

Cost estimates

Reclamation and establishment Option 1 continued

2. Land Adjacent to Bidston Golf Course

| Ref | Description | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|--------------------------------|--|-------------|----------------|------------------|---------------|-----------------------|----------------|
| A Hard Landscaping | | | | | | | |
| 1 | Supply and install perimeter fencing - 1.8m | 30.6 | m | £55.55 | | £1,700 | £1,700 |
| 2 | Supply and install gate to match fencing | 1 | item | £2,200.00 | | £2,200 | £2,200 |
| 3 | Excavate, supply materials and construct granular footpath with re-cycled topping - 1.5m | 37 | m | £27.50 | | £1,018 | £1,018 |
| Sub Total | | | | | | £4,917 | £4,917 |
| B Soft Landscaping | | | | | | | |
| | | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
| 1 | Strip topsoil and stockpile | 1,291 | m ² | £0.50 | | £646 | £646 |
| 2 | Create landform on edge of rough golf area | 26,819 | m ² | £0.60 | | £16,091 | £16,091 |
| 3 | Retaining structures to landform | 160 | m ² | £82.50 | | £13,200 | £13,200 |
| 4 | Cultivate, seed and prepare areas for meadow grass and rough golf grass establishment | 29,717 | m ² | £1.50 | | £44,576 | £44,576 |
| Sub Total | | | | | | £74,512 | £74,512 |
| Total Reclamation Phase | | | | | | £79,430 | £79,430 |

| Ref | Description | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|---------------------------------------|-------------------------|------|----------------|-----------|--------|----------------|----------------|
| C Phase IV Establishment Costs | | | | | | | |
| 1 | Standard Trees | 48 | nr | £300.00 | | £14,400 | £14,400 |
| 2 | Woodland planting mixes | 0.63 | ha | £715.00 | | £450 | £450 |
| 3 | Shrub planting mix | 720 | m ² | £2.31 | | £1,663 | £1,663 |
| Total Establishment Phase | | | | | | £16,514 | £16,514 |

3. Local Nature Reserve

| Ref | Description | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
|---|---|-------------|----------------|------------------|---------------|-----------------------|----------------|
| A Reclamation Hard Landscaping | | | | | | | |
| 1 | Repair perimeter fencing | 40 | m | £11.00 | | £440 | £440 |
| 2 | Supply and install gate to match fencing | 2 | item | £1,100.00 | | £2,200 | £2,200 |
| 3 | Supply and install motorcycle access controls | 2 | item | £440.00 | | £880 | £880 |
| 4 | Excavate, supply materials and construct granular footpath with re-cycled topping - 1.5m | 423 | m | £22.00 | | £9,306 | £9,306 |
| 5 | Excavate, supply materials and construct granular footpath causeway with re-cycled topping - 1.5m | 60 | m | £44.00 | | £2,640 | £2,640 |
| 6 | Supply and install signs and interpretation boards | 5 | item | £1,650.00 | | £8,250 | £8,250 |
| Total Reclamation Phase | | | | | | £23,716 | £23,716 |
| B Establishment Soft Landscaping | | | | | | | |
| | | Qty. | Measure | Unit Cost | Year 3 | Year 4 & 5 | Total |
| 1 | Path edge clearance | 1,852 | m ² | Day rate | | £2,000 | £2,000 |
| 2 | Woody vegetation clearance | 1,852 | m ² | Day rate | | £3,000 | £3,000 |
| 3 | Meadow restoration | 2,000 | m ² | Day rate | | £3,000 | £3,000 |
| 4 | Japanese knotweed removal - initial visit | 1 | item | £1,080.00 | | £1,080 | £1,080 |
| 5 | Japanese knotweed removal - follow up visits | 2 | item | £770.00 | | £1,540 | £1,540 |
| 6 | Japanese knotweed removal - on-going visits | 6 | item | £595.00 | | £3,570 | £3,570 |
| Total Establishment Phase | | | | | | £14,190 | £14,190 |

| Total Reclamation and Establishment Capital costs for Bidston Main Landfill | | | | | | |
|--|--|--|-----------------|-----------------|-------------------|-------------------|
| Tip, Cross Lane Tip, Golf Course & LNR | | | | | | |
| Reclamation | | | Year 2 | Year 3 | Year 4 & 5 | Total |
| Sunk Reclamation Phase III Costs All areas | | | | | | |
| | | | #REF! | | | #REF! |
| Former Bidston Moss Landfill Site | | | | £191,085 | £46,167 | £237,252 |
| Former Cross Lane Tip | | | | £0 | £524,402 | £524,402 |
| Land Adjacent to Bidston Golf Course | | | | £0 | £79,430 | £79,430 |
| Local Nature Reserve | | | | £- | £23,716 | £23,716 |
| Contract Management costs for Partners | | | | £28,123 | £- | £28,123 |
| Forestry Commission Staff Time Reclamation | | | | £8,167 | £32,669 | £40,836 |
| Sub Total Yr 3, 4 & 5 Reclamation Costs | | | £227,375 | £706,384 | £933,759 | |
| Sub Total All Reclamation Costs | | | | | | #REF! |
| Establishment | | | Year 2 | Year 3 | Year 4 & 5 | Total |
| Former Bidston Moss Landfill Site | | | | £126,249 | £70,034 | £196,283 |
| Former Cross Lane Tip | | | | £0 | £50,276 | £50,276 |
| Land Adjacent to Bidston Golf Course | | | | £0 | £16,514 | £16,514 |
| Local Nature Reserve | | | | £0 | £14,190 | £14,190 |
| Forestry Commission Staff Time Establishment | | | | £3,600 | £32,400 | £36,000 |
| Sub Total All Future Establishment Costs | | | £129,849 | £183,414 | £313,263 | |
| Total | | | | | | £1,247,022 |
| Contingency @ 2.5% future Reclamation and Establishment only | | | | £8,931 | £22,245 | £31,176 |
| Total All Future Capital Implementation Costs - Reclamation and Establishment | | | £366,155 | £912,042 | £1,278,197 | |

Cost estimates

Bidston Moss Project

Bidston Moss Former Landfill Site Expenditure Profile Option 1

| Site Name | Phase | Activity | Newlands Business Plan 2002 Est Total | Newlands Business Plan Average Cost Per Ha | ** Sunk Expenditure | Proposed Year 3 | Proposed Year 4 & 5 | Total Proposed Expenditure & LTM Option 1 | Lifetime Expenditure | Average Actual Cost per Ha | | |
|---|--------------|------------------------|---------------------------------------|--|---------------------|-----------------|---------------------|---|----------------------|----------------------------|---------|------|
| Bidston Moss Former Landfill Site 40 Ha | I | Stage 1 Survey | £60,000 | £1,500 | £14,898 | £0 | £0 | £0 | £14,898 | £372 | | |
| | | Stage 2 Survey | | | £47,350 | £1,069 | £0 | £1,069 | £48,419 | £1,210 | | |
| | | Design Planning | | | £32,000 | £800 | £15,298 | £2,644 | £0 | £2,644 | £17,941 | £449 |
| | | Community Consultation | | | £36,000 | £900 | £12,734 | £6,553 | £0 | £6,553 | £19,287 | £482 |
| | II | Acquisition & Legal | £50,440 | £1,261 | £11,305 | £8,823 | £0 | £8,823 | £20,128 | £503 | | |
| | III | Reclamation | £840,000 | £21,000 | £157,640 | £227,375 | £65,385 | £292,760 | £450,400 | £11,260 | | |
| | IV | Establishment | £256,000 | £6,400 | | £129,849 | £89,094 | £218,943 | £218,943 | £5,474 | | |
| | V | Long Term Management | £662,680 | £16,567 | | £0 | £0 | £662,680 | £662,680 | £16,567 | | |
| | | *Contingency 2.5% | | | | £8,931 | £3,862 | £12,793 | £12,793 | £320 | | |
| | Total | £1,937,120 | £48,428 | £259,225 | £385,244 | £158,340 | £1,206,264 | £1,465,489 | £36,837 | | | |

*Contingency applies only to Reclamation and Establishment phase and not to sunk costs or Annual Management Payments

** Sunk Expenditure as of 30th September 2005

Bidston Moss Extensions* Expenditure Profile Option 1

| Site Name | Phase | Activity | Newlands Business Plan 2002 Est Total | Newlands Business Plan Average Cost Per Ha | *** Sunk Expenditure | Proposed Year 3 | Proposed Year 4 & 5 | Total Proposed Expenditure & LTM Option 1 | Lifetime Expenditure | Average Actual Cost per Ha | | |
|-------------------------------|--------------|------------------------|---------------------------------------|--|----------------------|-----------------|---------------------|---|----------------------|----------------------------|---------|------|
| Bidston Moss Extensions 28 Ha | I | Stage 1 Survey | £42,000 | £1,500 | £10,429 | £0 | £0 | £0 | £10,429 | £372 | | |
| | | Stage 2 Survey | | | £33,143 | £0 | £749 | £749 | £33,893 | £1,210 | | |
| | | Design Planning | | | £22,400 | £800 | £10,708 | £0 | £1,850 | £1,850 | £12,559 | £449 |
| | | Community Consultation | | | £25,200 | £900 | £8,914 | £0 | £4,587 | £4,587 | £13,501 | £482 |
| | II | Acquisition & Legal | £35,308 | £1,261 | £7,913 | £1,235 | £4,941 | £6,176 | £14,090 | £503 | | |
| | III | Reclamation | £588,000 | £21,000 | £0 | £0 | £640,999 | £640,999 | £640,999 | £22,893 | | |
| | IV | Establishment | £179,200 | £6,400 | £0 | £0 | £94,320 | £94,320 | £94,320 | £3,369 | | |
| | V | Long Term Management | £463,876 | £16,567 | £0 | £0 | £0 | £463,876 | £463,876 | £16,567 | | |
| | | **Contingency 2.5% | | | | £0 | £18,383 | £18,383 | £18,383 | £657 | | |
| | Total | £1,355,984 | £48,428 | £71,109 | £1,235 | £765,829 | £1,230,940 | £1,302,049 | £46,502 | | | |

* Extension areas are to be brought forward only when legal agreements are secured

**Contingency applies only to Reclamation and Establishment phase and not to sunk costs or Annual Management Payments

*** Sunk Expenditure as of 30th September 2005

Cost estimates

Bidston Moss Project Options Analysis

The Bidston Moss Project Expenditure Profile Option 1

| Site Name | Phase | Activity | Newlands Business Plan 2002 Est Total | Newlands Business Plan Average Cost Per Ha | ** Sunk Expenditure | Proposed Year 3 | Proposed Year 4 & 5 | Proposed Expenditure & LTM Option 1 | Lifetime Expenditure | Average Actual Cost per Ha |
|--------------------------------|-------|------------------------|---------------------------------------|--|---------------------|-----------------|---------------------|-------------------------------------|----------------------|----------------------------|
| The Bidston Moss Project 68 Ha | I | Stage 1 Survey | £102,000 | £1,500 | £25,327 | | | | £25,327 | £372 |
| | | Stage 2 Survey | | | £80,495 | £1,069 | £749 | £1,818 | £82,313 | £1,210 |
| | | Design Planning | £54,400 | £800 | £26,006 | £2,644 | £1,850 | £4,494 | £30,500 | £449 |
| | | Community Consultation | £61,200 | £900 | £21,648 | £6,553 | £4,587 | £11,140 | £32,788 | £482 |
| | II | Acquisition & Legal | £85,748 | £1,261 | £19,218 | £10,059 | £4,941 | £14,999 | £34,218 | £503 |
| | III | Reclamation | £1,428,000 | £21,000 | £157,640 | £227,375 | £706,384 | £933,759 | £1,091,399 | £16,050 |
| | IV | Establishment | £435,200 | £6,400 | | £129,849 | £183,414 | £313,263 | £313,263 | £4,607 |
| | V | Long Term Management | £1,126,556 | £16,567 | | | | £1,126,556 | £1,126,556 | £16,567 |
| | | *Contingency 2.5% | | | | £8,931 | £22,245 | £31,176 | £31,176 | £458 |
| | Total | £3,293,104 | £48,428 | £330,334 | £386,479 | £924,169 | £2,437,204 | £2,767,538 | £40,699 | |

*Contingency applies only to Reclamation and Establishment phase and not to sunk costs or Annual Management Payments

** Sunk Expenditure as of 30th September 2005

The Bidston Moss Project Options Analysis

| Site Name | Phase | Activity | *Lifetime Expenditure Option 1 | *Lifetime Expenditure Option 2 | **Lifetime Expenditure Option 3 | ***Lifetime Expenditure Option 4 | ****Lifetime Expenditure Option 5 |
|--------------------|-------|------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|-----------------------------------|
| Bidston Moss 68 Ha | I | Stage 1 Survey | £25,327 | £25,327 | £25,327 | £25,327 | £14,898 |
| | | Stage 2 Survey | £82,313 | £82,311 | £80,495 | £82,313 | £48,419 |
| | | Design Planning | £30,500 | £30,500 | £26,006 | £30,500 | £17,941 |
| | | Community Consultation | £32,788 | £32,788 | £21,648 | £32,788 | £19,287 |
| | II | Acquisition & Legal | £34,218 | £34,218 | £19,218 | £34,218 | £20,128 |
| | III | Reclamation | £1,091,399 | £1,312,954 | £157,640 | £1,091,398 | £447,036 |
| | IV | Establishment | £313,263 | £313,263 | | £313,263 | £217,459 |
| | V | Long Term Management | £1,126,556 | £1,126,556 | | £1,126,556 | £662,680 |
| | | *Contingency 2.5% | £31,176 | £36,714 | | £31,175 | £18,338 |
| | Total | £2,767,538 | £2,994,631 | £330,334 | £2,767,538 | £1,466,187 | |

NB * Lifetime expenditure totals for Options 1 & 2 are based on intelligence and cost estimates from the Bidston Moss Design Team (Groundwork & Forestry Commission)

NB **Option 3 reflects sunk expenditure only and no further cost to the NWDA

NB ***Option 4 reflects costings if the project is delivered by the private sector but this option has not been promoted by that sector

NB ****Option 5 reflects the regeneration of the former Bidston Moss Landfill site only

Artists impressions

Entrance to former Bidston Moss
Landfill at materials recycling facility

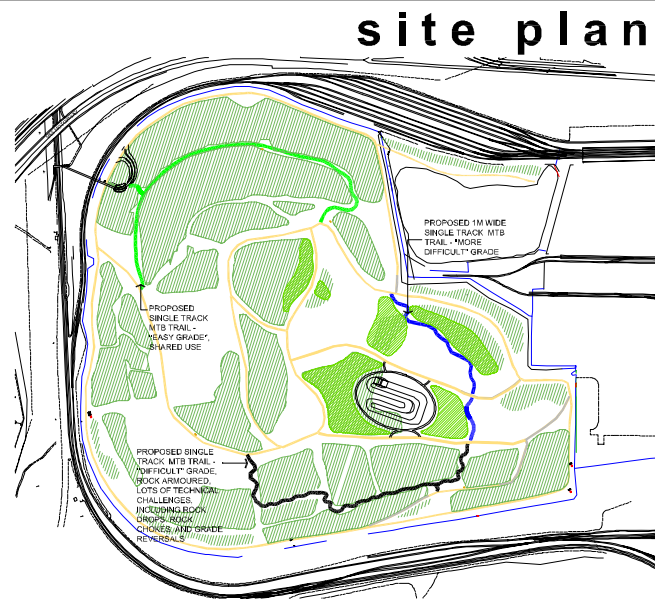


Fishing lake developments



Design aspiration

BIDSTON MOSS MTB TRACKS



Bidston Moss Regional Centre for Cycling : Mountain Bike Tracks

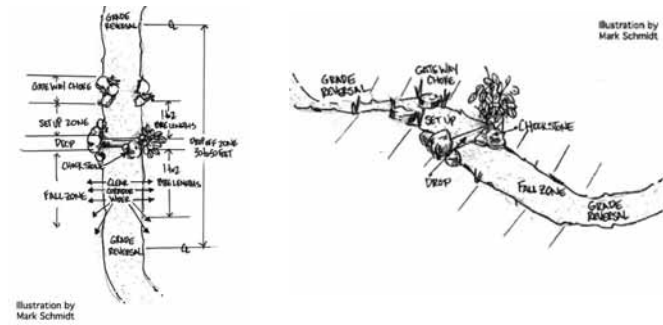
The concept of Bidston Moss becoming a Regional Centre for Cycling for the Northwest relies on being able to provide for all popular forms of cycling on the site to some extent. The existing network of tracks, which are all 3m wide and surfaced with stone, do not offer sufficient technical challenges for mountain biking. They also have a lack of connectivity, forcing riders down to the perimeter track or to go off route through undesignated areas, risking environmental damage. It is not intended that the site becomes a major destination for experienced mountain bikers, but that it has sufficient opportunities to enable skills training and practice for all levels, and particularly to support the development of sports programmes within local communities.

The proposals are for three sections of mountain bike track, each designed for different levels of rider ability, from 'Easy' to 'Difficult'. They will improve the connectivity of the existing network of tracks, and reduce the likelihood of cyclists going off-route through areas of woodland. They will also reduce the need for mountain bike riders to go around the perimeter track. The tracks will be constructed with rock armouring and raised tread construction techniques where appropriate. Flatter sections may be a fine stone ('inch to dust') surface. All tracks will be restricted to 1m wide, and be designed to have minimal impact upon the landscape and ecology of the site. Track construction will be with the involvement of expert track builders, local mountain bike enthusiasts and local volunteers. The tracks will be constructed in accordance with industry standards and codes of practice, and use recycled materials for base courses and wearing courses where possible.

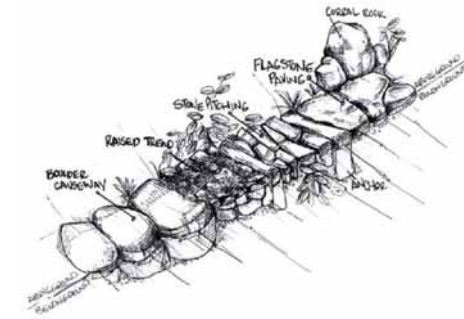
Local club Wirral Tracs have been involved in detailed consultation to take designs to this stage. They will be a key user and beneficiary of the works and will be involved in future design development and implementation.

mountain bike track design - technical details

technical challenges



rock armouring techniques



raised tread construction



grade reversals



constant ups and downs



twists and turns



rock choke



rock drop



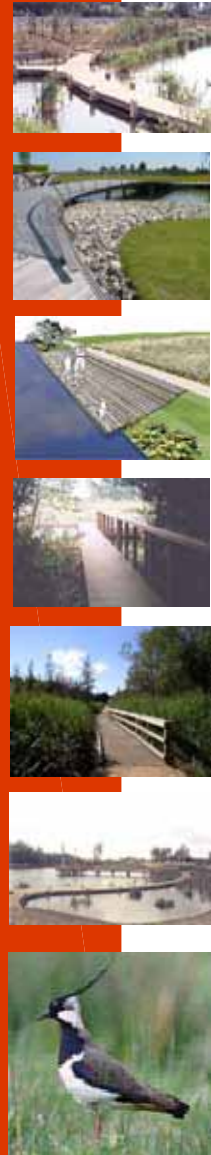
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BM35_02 - May 2005

Design aspiration

BIDSTON MOSS FISHING LAKE



Fishing Lake Proposals

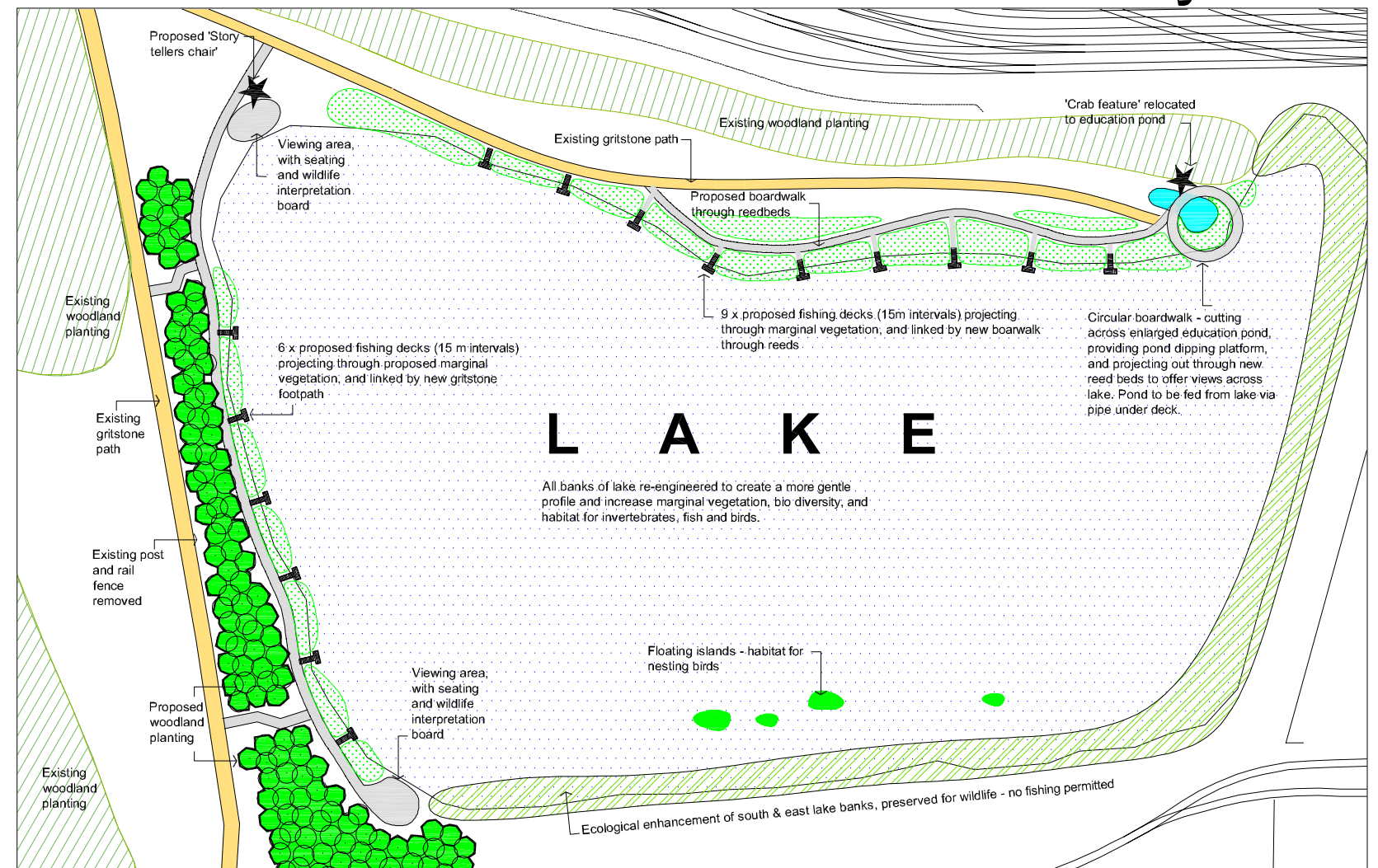
These proposals are designed to improve the potential for fishing of the lake, in balance with ecological and aesthetic improvements to the lake margins.

Located at the eastern edge of Bidston Moss adjacent to the in filled Bidston Dock, the 3 hectare lake was itself part of the docks infrastructure. Consequently, the lake retains the characteristics of its past as a deep, steep sided rectangular body of water. Informal use of the lake for fishing indicates some have already recognised its potential, and there are already a number of species of fish. Following the consultation with MWDA, AWAC, MBW Rangers, and FC, unlocking the potential of fishing at Bidston is seen here as a key development opportunity which could significantly increase the recreational benefits of the site to the local community in Bidston, and also draw people to the site from further afield.

The proposals identified here comprise:

- re-engineering of lake banks to create more gentle, shelving profiles, encouraging more marginal vegetation, improved habitat and softer, more attractive lake edges
- segregation of southern and eastern sides for wildlife, and restriction of public access and fishing to these areas
- creation of formalised fishing pegs on northern and western sides, using decks constructed in recycled plastic and located within reed beds
- provision of improved access to northern and western lakesides
- improvements to education pond, relocation here of 'crab' art feature (formerly at site entrance), and construction of circular feature boardwalk providing improved pond dipping access

layout



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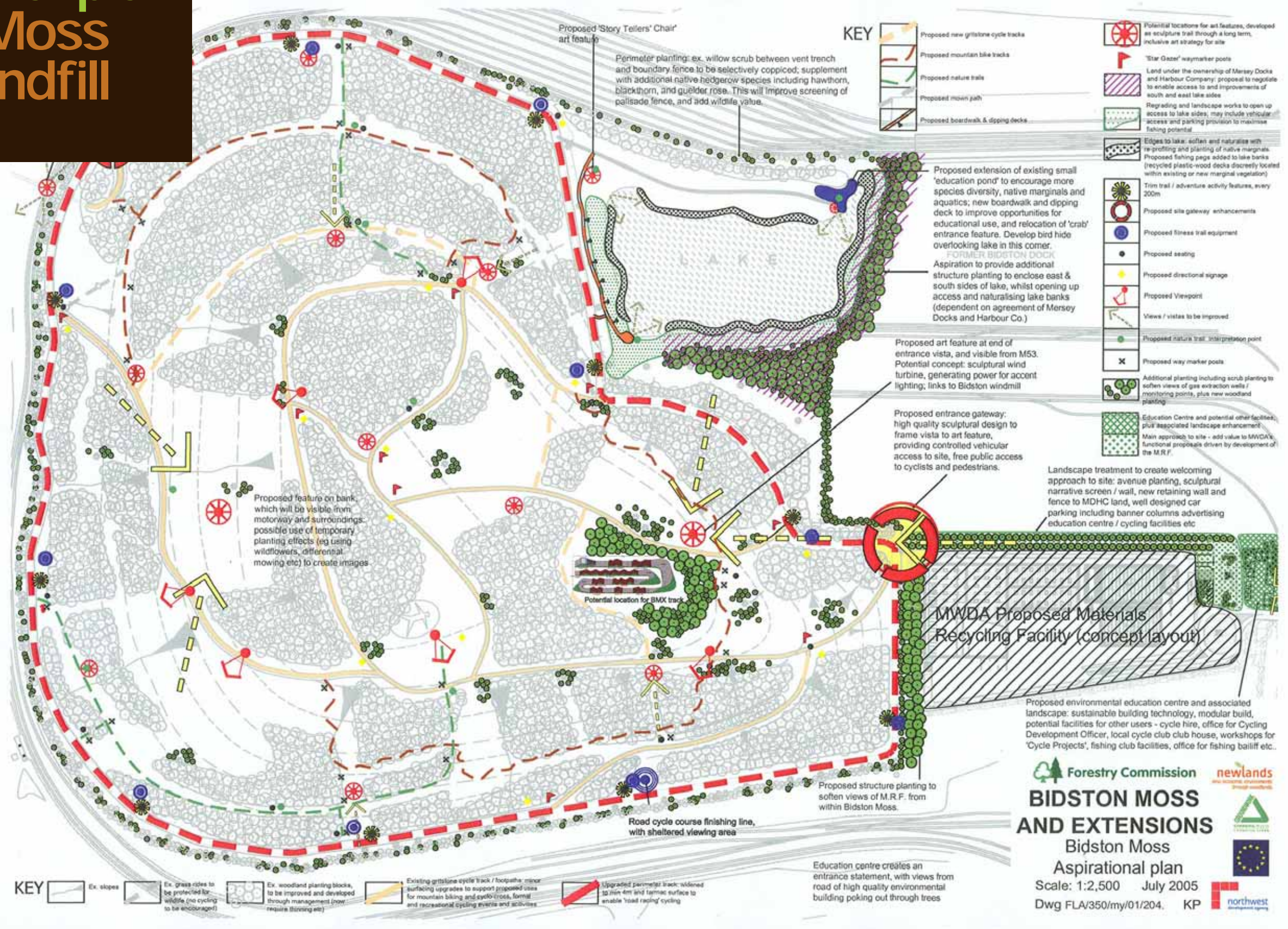
Artists impression View of the Bidston Moss Project from Bidston Village

The project will create a dramatic arrival and departure for Liverpool and Bidston as well as providing community facilities, links to the rich history of the area and numerous new and restored habitats.

1. M53 taking people to Bidston Moss
2. Distinctive tree avenues on Cross Lane Tip and Golf Course
3. Managed nature reserve (LNR)
4. Pedestrian bridge link to Bidston Moss from under flyover
5. Eye catching illustration on bare hillside of Moss (indicative)
6. Liverpool skyline visible from top of Bidston Moss



Aspirational plan Bidston Moss former landfill



Forestry Commission newlands
BIDSTON MOSS AND EXTENSIONS
 Bidston Moss
 Aspirational plan
 Scale: 1:2,500 July 2005
 Dwg FLA/350/my/01/204. KP

Aspirational plan

Cross Lane, Golf Course and Local Nature Reserve



Additional Value Assessment (AVA)

PBRS AUDIT FRAMEWORK - Bidston Moss

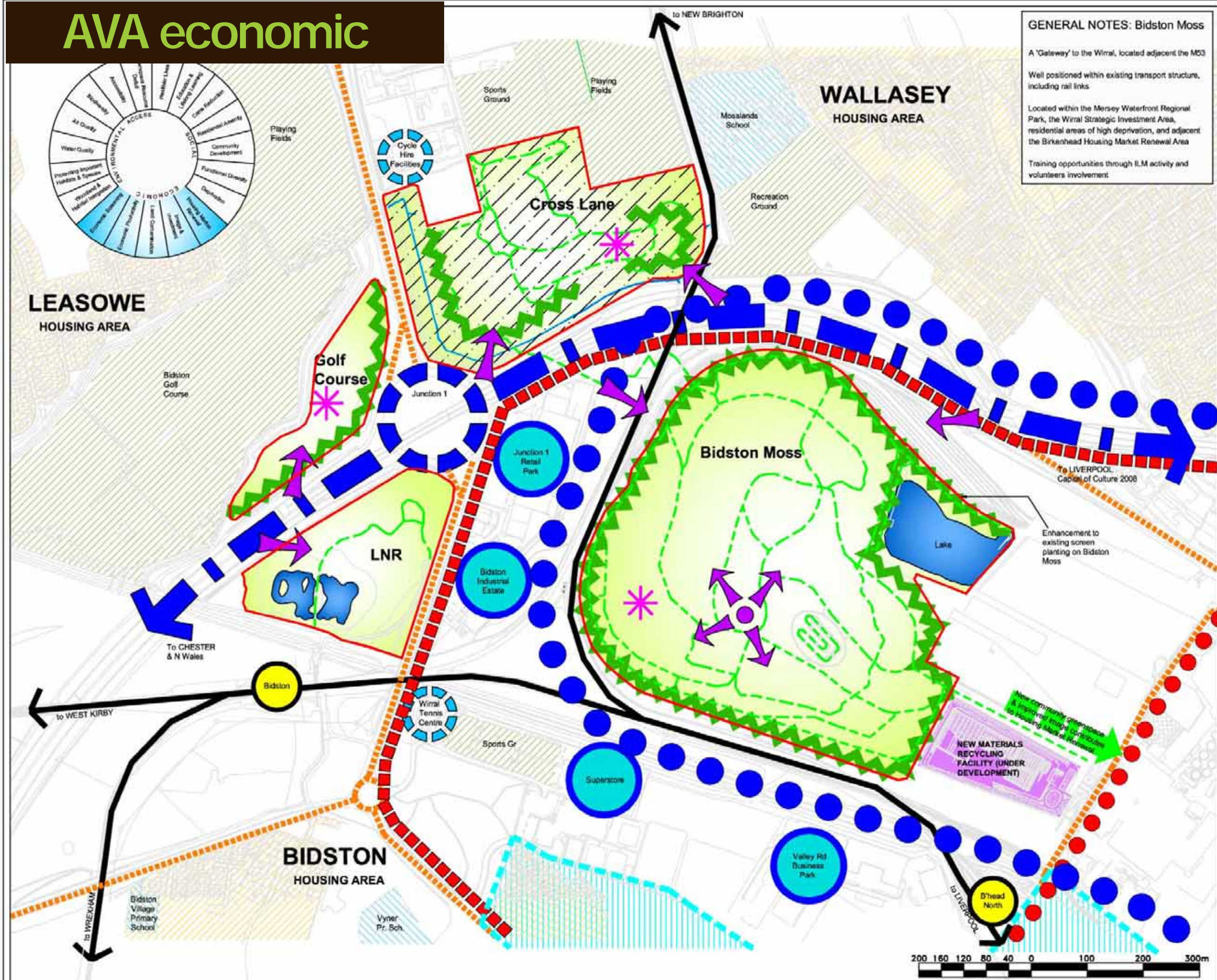


| PBRS BENEFIT CATEGORY | PRBS CRITERIA | Score Threshold | COMMENTS |
|--|--|-----------------|---|
| Social 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 Performance indicator for exemplary activity | SOC-1: Health Action Zone | 1 | BIDSTON MOSS IS CLEARLY LOCATED IN A DEPRIVED AREA OF WIRRAL WITH A COMPLEXITY OF ISSUES AND LOCAL NEEDS. IN PARTICULAR, THE RESTORATION OF THE SITE SHOULD SEEK TO IMPROVE QUALITY OF LIFE FOR LOCAL PEOPLE, WITH AN EMPHASIS ON HEALTH, EDUCATION, RESIDENTIAL AMENITY AND COMMUNITY DEVELOPMENT. BIDSTON MOSS IS A LARGE SITE AND THEREFORE HAS CAPACITY TO SUPPORT A RANGE OF SOCIAL ACTIVITIES AND PURSUITS. THERE ARE MANY SCHOOLS WITHIN A SHORT DISTANCE, SO THE CREATION OF PHYSICAL LINKS AND THE DEVELOPMENT OF POSITIVE RELATIONSHIPS MAY BE IMPORTANT FACTORS TO CONSIDER. |
| | SOC-2: Education Action Zone | 1 | |
| | SOC-3: School Catchment | 2 | |
| | SOC-4: Residential Catchment | 3 | |
| | SOC-5: Site Size | 4 | |
| | SOC-6: IMD Percentile (District) | 3 | |
| | SOC-7: IMD Percentile (Sub-region) | 4 | |
| | SOC-8: IMD Percentile (Northwest) | 4 | |
| Economic 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Performance indicator for exemplary activity | ECO-1: Housing Composition | | BIDSTON MOSS IS A PROMINENT SITE AT A STRATEGIC GATEWAY TO MERSEYSIDE. THE PROJECTION OF A STRIKING, POSITIVE IMAGE WILL HAVE SIGNIFICANT IMPACT ON PERCEPTIONS OF THE AREA. A RANGE OF EMPLOYMENT AND INDUSTRIAL SITES PRESENT IN THE AREA SO THERE MAY BE OPPORTUNITIES TO PROVIDE AMENITIES FOR LOCAL WORKERS. |
| | ECO-2: House Prices | 1 | |
| | ECO-3: Proximity to Industry | 3 | |
| | ECO-4: Proximity to Employment | 3 | |
| | ECO-5: Proximity to Proposed Employment | 3 | |
| | ECO-6: Proximity to Retail | 3 | |
| | ECO-7: Proximity of Transport Corridor | 2 | |
| Environmental 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 Performance indicator for exemplary activity | ENV-1: Proximity of Transport Corridor | 2 | DUE TO ITS SIZE, THE SITE HAS THE CAPACITY TO SUPPORT A RANGE OF HABITATS AND WILDLIFE. CONSIDERATION SHOULD BE MADE TO EXISTING ENVIRONMENTAL FEATURES SO THAT THESE MAY BE ENHANCED THROUGH THE RESTORATION OF THE SITE. |
| | ENV-2: Proximity of Woodland | 2 | |
| | ENV-3: Proximity of Ecologically Important Area | 2 | |
| | ENV-4: Proximity of Ancient Woodland | 2 | |
| | ENV-5: Proximity of Waterbody | 3 | |
| | ENV-6: Air Quality Management Area | 1 | |
| | ENV-7: Site Size | 1 | |
| Access 1 2 3 4 5 6 7 8 9 Performance indicator for exemplary activity | ACC-1: Proximity of Bus Route | 1 | DESPITE ITS PROXIMITY TO A RANGE OF LAND USES AND TRANSPORT INFRASTRUCTURE, THE SITE IS LARGELY INACCESSIBLE AND IS THEREFORE OF LITTLE DIRECT BENEFIT TO THE LOCAL COMMUNITY. ADDRESSING ACCESSIBILITY SHOULD BE INTEGRAL TO DESIGN PROPOSALS. |
| | ACC-2: Proximity of PROW | 1 | |
| | ACC-3: Proximity of Public Recreational Area | 3 | |
| | ACC-4: Proximity of A-Road | 1 | |
| | ACC-5: Proximity of Rail Station | 1 | |
| | ACC-6: Proximity of Cycle Route | 1 | |

Histogram references: 1 = Site score, 2 = Regional mean average, 3 = Sub-regional mean average (The Mersey Partnership), 4 = Newlands Phase 1 programme mean average
 Performance indicator for exemplary activity is based on the 75 percentile score of all sites in the Newlands 1 programme in relation to each benefit category.



AVA economic



GENERAL NOTES: Bidston Moss

A 'Gateway' to the Wirral, located adjacent the M53

Well positioned within existing transport structure, including rail links

Located within the Mersey Waterfront Regional Park, the Wirral Strategic Investment Area, residential areas of high deprivation, and adjacent the Birkenhead Housing Market Renewal Area

Training opportunities through I.M activity and volunteers involvement

ADDED VALUE ASSESSMENT

ECONOMIC

- Extent of site
- Local school
- Residential housing
- Leisure use
- Materials recycling facility, Employment
- Potential economic productivity through existing site development and competition
- Retail / Business use
- Landmark gateway sculpture (potential site)
- Reclamation of contaminated derelict site (increased land values)
- M53 Motorway
- Main A Roads
- Mersey Train
- Profile views into / out of site, encouraging local jobs & investment
- Cycle hire facilities & Tennis Centre
- Economic screening
- Healthy lives
- Potential social enterprise through cycling development
- Railway Station
- Wirral Strategic Investment Area boundary
- Mersey Waterfront Park
- Birkenhead Pathways Area
- Housing Market Renewal Area Boundary

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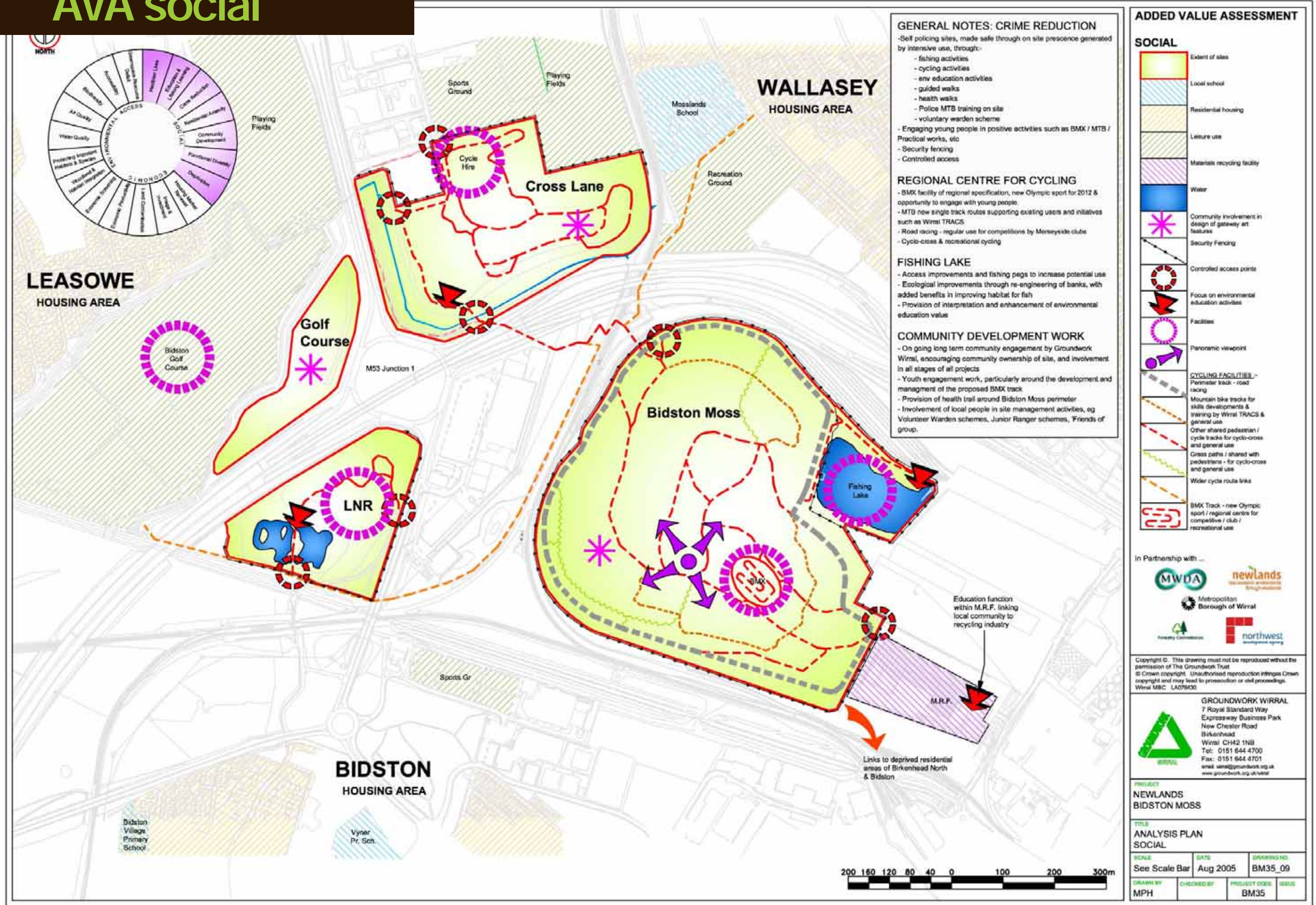
PROJECT
**NEWLANDS
 BIDSTON MOSS**

TITLE
**ANALYSIS PLAN
 ECONOMIC**

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| See Scale Bar | Aug 2005 | BM35_07 |
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| MPH | | BM35 |



AVA social



GENERAL NOTES: CRIME REDUCTION
 - Sell policing sites, made safe through on site presence generated by intensive use, through:
 - fishing activities
 - cycling activities
 - env education activities
 - guided walks
 - health walks
 - Police MTB training on site
 - voluntary warden scheme
 - Engaging young people in positive activities such as BMX / MTB / Practical works, etc
 - Security fencing
 - Controlled access

REGIONAL CENTRE FOR CYCLING
 - BMX facility of regional specification, new Olympic sport for 2012 & opportunity to engage with young people
 - MTB new single track routes supporting existing users and initiatives such as Wirral TRACS
 - Road racing - regular use for competitions by Merseyside clubs
 - Cyclo-cross & recreational cycling

FISHING LAKE
 - Access improvements and fishing pegs to increase potential use
 - Ecological improvements through re-engineering of banks, with added benefits in improving habitat for fish
 - Provision of interpretation and enhancement of environmental education value

COMMUNITY DEVELOPMENT WORK
 - On going long term community engagement by Groundwork Wirral, encouraging community ownership of site, and involvement in all stages of all projects
 - Youth engagement work, particularly around the development and management of the proposed BMX track
 - Provision of health trail around Bidston Moss perimeter
 - Involvement of local people in site management activities, eg Volunteer Warden schemes, Junior Ranger schemes, 'Friends of group.'

ADDED VALUE ASSESSMENT

- SOCIAL**
- Extent of sites
 - Local school
 - Residential housing
 - Leisure use
 - Materials recycling facility
 - Water
 - Community involvement in design of gateway art features
 - Security Fencing
 - Controlled access points
 - Focus on environmental education activities
 - Facilities
 - Panoramic viewpoint
 - CYCLING FACILITIES** -
 - Perimeter track - road racing
 - Mountain bike tracks for skills developments & training by Wirral TRACS & general use
 - Other shared pedestrian / cycle tracks for cyclo-cross and general use
 - Grass paths / shared with pedestrians - for cyclo-cross and general use
 - Wider cycle route links
 - BMX Track - new Olympic sport / regional centres for competitive / club / recreational use

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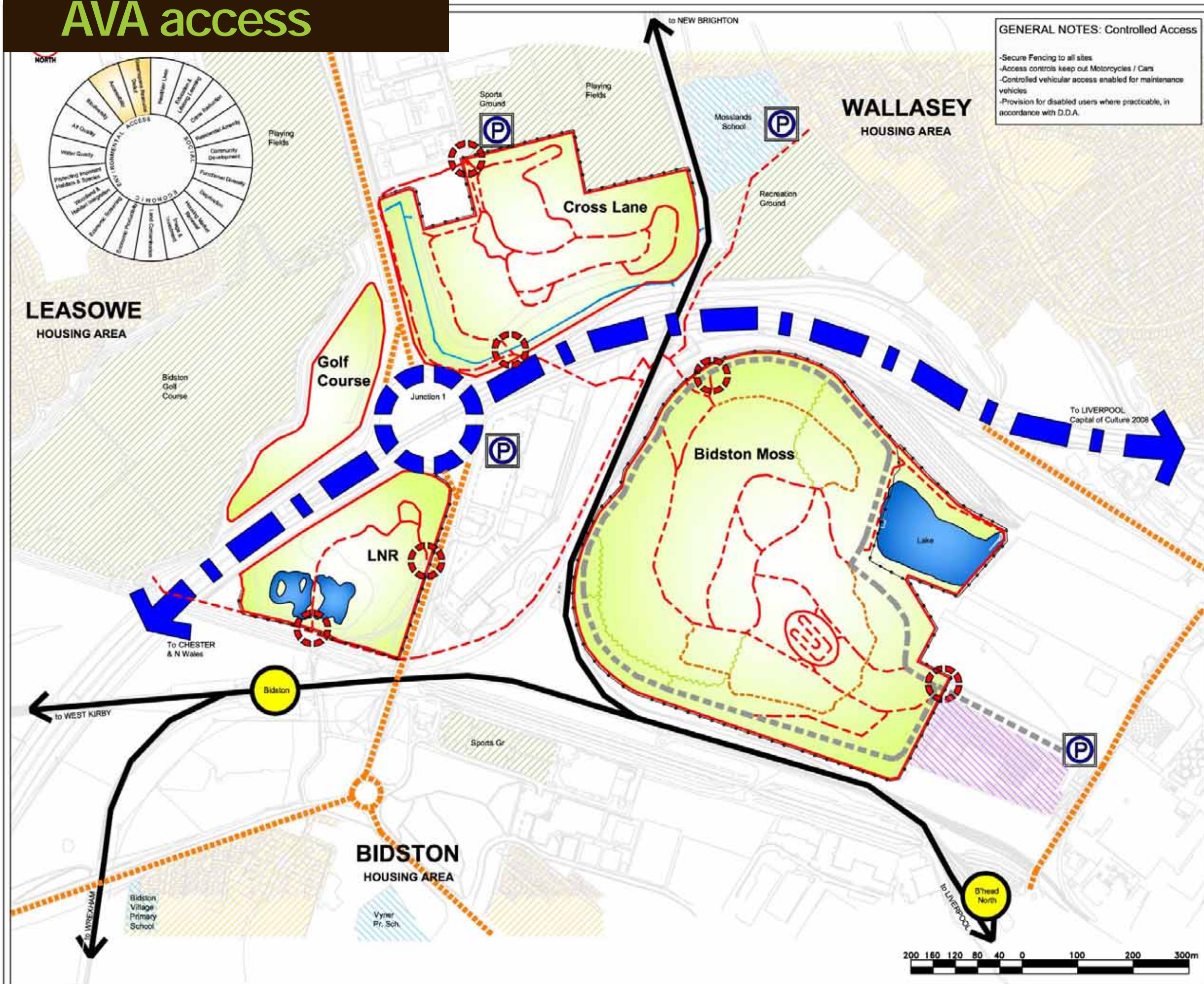
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 BIDSTON MOSS

TITLE
 ANALYSIS PLAN
 SOCIAL

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| ISSUE | | |



AVA access



GENERAL NOTES: Controlled Access

- Secure Fencing to all sites
- Access controls keep out Motorcycles / Cars
- Controlled vehicular access enabled for maintenance vehicles
- Provision for disabled users where practicable, in accordance with D.D.A.

ADDED VALUE ASSESSMENT

ACCESS

- Extent of sites
- Local school
- Residential housing
- Leisure use
- Materials recycling facility
- Water
- M63 Motorway
- Main A Roads
- Mainline Trains
- Access Points
- Tarmac track - supports road race cycling events
- Single track mountain bike routes
- Cycle routes / pedestrian access (shared use)
- BMX Track
- Nature trail (grass paths)
- Security Fencing
- Potential Parking
- Railway Stations

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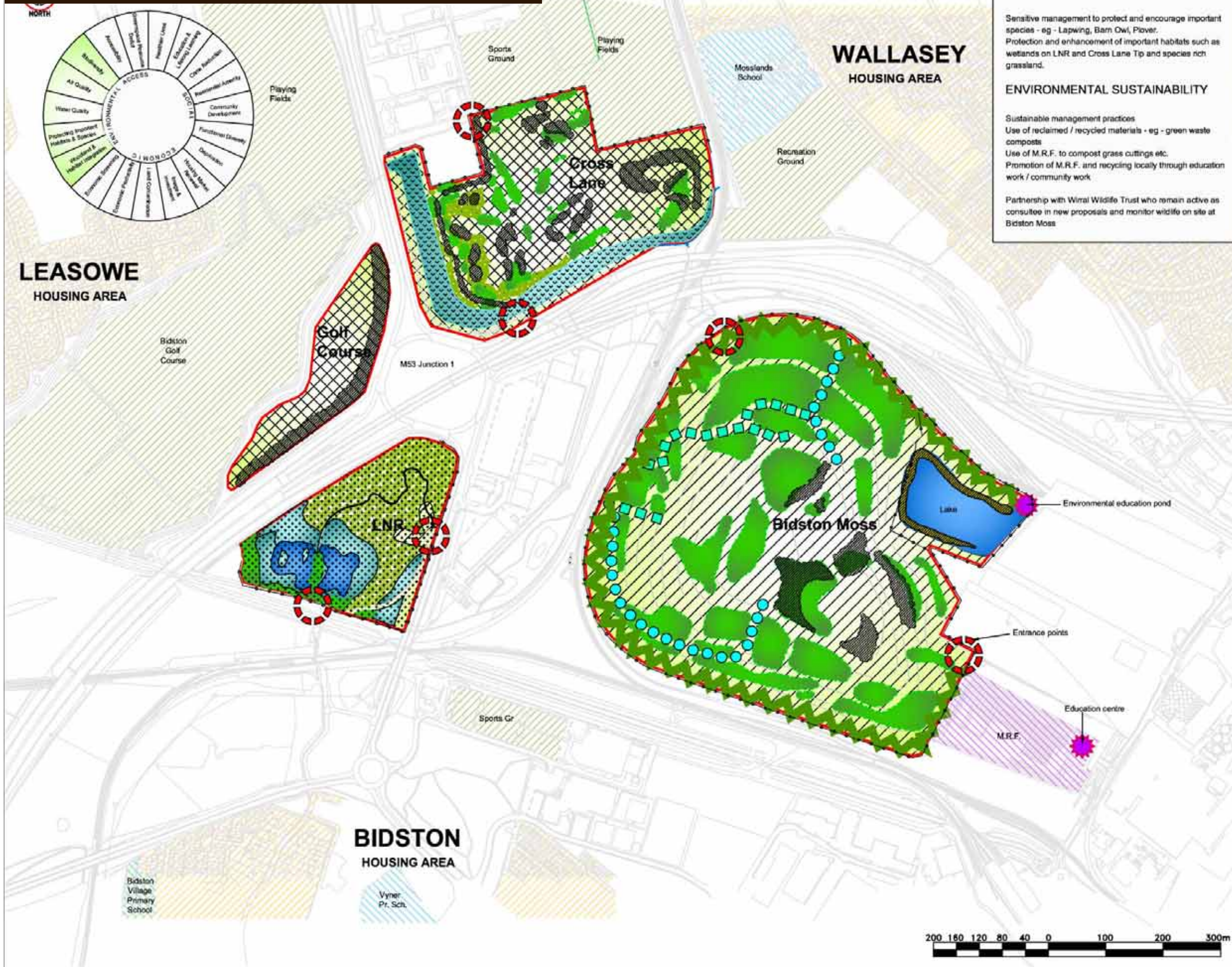
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 BIDSTON MOSS

TITLE
 ANALYSIS PLAN
 ACCESS

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AVA environmental



GENERAL NOTES: BIODIVERSITY

Sensitive management to protect and encourage important species - eg - Lapwing, Barn Owl, Plover.
Protection and enhancement of important habitats such as wetlands on LNR and Cross Lane Tip and species rich grassland.

ENVIRONMENTAL SUSTAINABILITY

Sustainable management practices
Use of reclaimed / recycled materials - eg - green waste composts
Use of M.R.F. to compost grass cuttings etc.
Promotion of M.R.F. and recycling locally through education work / community work
Partnership with Wirral Wildlife Trust who remain active as consultee in new proposals and monitor wildlife on site at Bidston Moss

ADDED VALUE ASSESSMENT

ENVIRONMENTAL

- Extent of sites
- Local school
- Residential housing - gardens / yards
- Leisure use / green pockets
- Materials recycling facility - Use to recycle green waste from sites maintenance - See notes
- Lake water - quality managed & enhanced as part of management as a fishing facility of regional significance
- Proposed wetland
- Proposed habitat creation, reprofiling lake banks to form marginal zones attracting species rich vegetation & invertebrates, & improving potential for fishing
- Local Nature Reserve - environmental asset preserved & enhanced through management
- Management of existing woodland
- Proposed woodland
- Management of existing species rich grassland
- Proposed species rich grassland
- Proposed shrub planting
- Nature trails with interpretation
- Grass rides - wildlife corridors
- Security Fencing protects the habitats within from vehicular damage
- Diversification of perimeter planting to create species rich green corridor

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PROJECT
**NEWLANDS
BIDSTON MOSS**

TITLE
**ANALYSIS PLAN
ENVIRONMENTAL**

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Project partners



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