ELM WOOD LOCAL NATURE RESERVE

MANAGEMENT PLAN
2018 - 2027

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Stage 1: Description

1.1 General Information

1.1.1 Location
Elm Wood is in the parish of Allenton on the south east edge of Derby, and lies within the grounds of Moorways Sports Centre, Moor Lane, Osmaston, Derby, DE24 9HY. The grid reference is SK 364 326.

1.1.2 Summary Description
The 1.86 hectare (4.6 acre) site lies at a height of around 70 metres above sea level. It is a small block of woodland bounded by Moor Lane to the west, a road and car park within the Rolls-Royce works to the south and the amenity grassland of the sports centre to the east. A new leisure pool is currently under construction to the north. The underlying bedrock geology is Edwalton Member mudstone, a sedimentary bedrock formed in the Triassic period. This is overlain with superficial deposits of Thrussington Member Diamicton, deposits formed up to 2 million years ago in the Quaternary Period.

1.1.3 Land Tenure
Owner of the whole of the site: Derby City Council, The Council House, Corporation Street, Derby, DE1 2XJ. It is managed by the City Council Parks Department.

1.1.4 Map Coverage
1:50,000 Landranger Map Sheet 128
1:25,000 Explorer Map 2000 Sheet 259
1:10,000 Sheets SK33SE
Pathfinder Sheet 23/33 Derby and Etwall 1:25,000

Geological Survey:
Geological Map of Derbyshire 1973 1:100,000
Geological Survey of Great Britain (England and Wales) 1973 1:50,000
Geological Survey of England and Wales 1:409000

Historical maps
OS County Series, Derbyshire 1884 1:2,500
OS County Series, Derbyshire 1887-1888 1:10,560
OS County Series, Derbyshire, dates from 1901 through to 1955 1:10,560
OS Plan 1:10,000 from 1962 to 1988 at scale 1:10,000 or 1:2,500

1.2 Environmental Information

1.2.1 Habitat Description

The key habitat type is semi-natural mixed deciduous woodland, the main canopy species being elm and ash with some oak and a shrub layer of hawthorn, ash saplings, young elm, holly and blackthorn. There are also 2 very small ponds in the wood - created in 2010, neither support any aquatic vegetation or amphibians and virtually no invertebrates. The habitats are shown on Map 1: Existing Habitats. A more detailed description of the habitats can be found in the Prescriptions section in Stage 3.

1.2.2 Fauna

Butterfly records include speckled wood and past records of purple hairstreak. Records of bird species include greater spotted woodpecker, robin, blue tit, long-tailed tit, dunnock and sparrowhawk. There is evidence of badgers using the wood. Pipistrelle bats have been seen in the vicinity. Grey squirrels are plentiful, and there is evidence of use by small mammals such as wood mouse.

In 2011, Derbyshire Wildlife Trust carried out a survey of the ponds, but this revealed very little aquatic life due to heavy disturbance and littering.

1.2.3 Land Use

Since 2009, the wood has been used two days a week as a Forest School by Walbrook Nursery School and Peartree Infants School. Otherwise, public access is limited by a security fence along the road, and its position within Moorways Sports Centre, where dog walking is not permitted and access is only by permission. The surfaced path around the wood is occasionally used as part of a cycling and running cross-country course route.

Derby Parks Volunteers and Derby City Council Parks Department are involved in the management of the site.

1.2.4 Public Interest

There is one circular surfaced path round the perimeter for cross-country races as well as informal paths throughout. Otherwise Elm Wood is part of a secure site with no public access allowed without prior permission.

Stage 2: Evaluation and Objectives

2.1 Conservation status of the site

Elm Wood is Local Wildlife Site (LWS) reference no. DE 067. This is a non-statutory designation but one which does offer some protection through the planning process. It was designated as a LWS in 1990 because of its ancient woodland origin. It was declared as a Local Nature Reserve (LNR) in June 2009. LNR status is a statutory designation for nature reserves in Great Britain, of local but not necessarily national importance.

2.2 Evaluation of the features

Elm Wood is Lowland Mixed Deciduous Woodland, which is a UK Biological Action Plan (BAP) habitat. It is on the Deciduous Woodland Priority Habitat Inventory (PHI), which replaces Natural England's separate BAP habitat inventories. It is also on the Ancient Woodland Inventory as ancient semi-natural broadleaved woodland.
The wood forms a major part of the green wedge into the city between Chaddesden and Spondon.
A few native bluebells (Hyacinthoides non-scripta) are present, this is a protected species under the Wildlife and Countryside Act 1981.
A small badger sett has been noted in the wood - badgers and their setts are protected under the Protection of Badgers Act 1992.

2.3 Management Objectives

2.3.1 Objective: To maintain and enhance the existing habitats.

Woodland Elm Wood is a small mixed broadleaved woodland with a canopy of pedunculate oak, English elm and ash. There are also a few mature hornbeam and the occasional lime. The main objective is to maintain the woodland without loss of area, flora or fauna, or ancient woodland character. The important species in the canopy are mature oak, elm and ash. The long term goal is to retain the canopy cover of these native species, ideally by allowing natural regeneration into suitable gaps. It could also be helpful to support regeneration by collecting and growing the native oak acorns, hornbeam and elm seeds from the wood for replanting back into the wood. It may be beneficial to plant disease-resistant elms to ensure the future of this species.
There is a diverse shrub layer of hawthorn, holly, blackthorn, field maple and young ash and oak. The wood would benefit from more light reaching the ground in some of the dense younger areas, and there is an opportunity to create a couple of small woodland glades to help achieve this. A small area adjacent to Pond 2 (see Map 1: Existing Habitats) could also be coppiced on rotation to allow more light to the pond.
Creation of a shrubby woodland edge on the currently close-mown grass on the eastern side would be both attractive and beneficial to wildlife by providing a sunlit area that would be warmer than the rest of the wood. It could be planted with species such as primrose, cowslip and foxgloves.

The ground flora is not characteristic of ancient woodland and does currently have non-native species such as Persian ivy, Japanese knotweed and hybrid bluebell. Ivy is abundant in the ground flora. There is also lesser celandine, cow parsley, nettle, cocksfoot, bramble and wood avens. There is an opportunity for habitat enhancement by removing the non-native species and planting native bluebell bulbs and other native ground flora species from a local source.

Ponds There are two small ponds (some 16 to 20 square metres in area) in the wood, created in 2010. They suffer continual disturbance and have been filled with woody debris. One of the ponds (Pond 2) is in a fairly light and open area of elm re-growth and holds water well. The objective for this pond is to maintain it with a sufficient area of clean, open water free of algae, debris, litter or other material. There should be some light to the pond surface and some open shallow water all year. The surrounding habitat should be maintained so as not to encroach or excessively shade out the pond by coppicing trees and cutting back bramble where necessary.

The other pond (Pond 1) is not considered worthwhile maintaining, as it is very small in area, within an area of deep shade, nettle and bramble; has suffered continual disturbance and being filled with debris; supports no wildlife and is not accessible for educational activities.

2.3.2 Objective: To support the educational use of the site.

A central objective is to support the use of Elm Wood for educational activities, particularly for Forest School - Walbrook Nursery School started a Forest School programme in 2009 and visit Elm Wood regularly every Wednesday and Friday throughout the year, and Peartree Infants School visit on Wednesdays.

Safety is paramount, and some of the older trees need work carrying out to reduce the risk of falling limbs. The location of the Forest School's fire site is important for reasons of safety and environmental benefits, and it is recommended that the current position is moved from under the canopy of older woodland, to younger woodland where a glade could be created. The muddy path against the roadside railings on the outside of the running track is a potentially dangerous area due to the age and condition of some of the trees. To avoid having to carry out lengthy safety work here, this area should be avoided by the Forest School children. It is in any case close to the traffic on the road with no woodland 'feel' to it.

It is also important to maintain the site's infrastructure by maintaining paths, collecting litter and repairing vandalism and any accidental damage so that potential abuses do not become acceptable through familiarity.

If guidance were provided, simple woodland tasks could be undertaken by the children, such as planting bluebell bulbs, planting trees and shrubs and planting cowslip and other woodland plants. This could foster a sense of caring for nature as well as teaching practical skills.

Also, if webcams were to be set up in some of the nest boxes, it would be a useful educational resource, enabling the children to observe the birds much more closely.

2.4 Description of Optimal State for the site

The ideal condition of Elm Wood is a long term continuation of the ancient woodland in the best condition for wildlife:
The woodland would have a canopy of native species including oak and elm, with good natural regeneration to replace them. Ivy on the trunks would be abundant and provide habitat for both birds and bats, an early supply of berries and a source of nectar in autumn and winter. There would be lying tree stumps and logs left to rot down naturally which as well as providing habitats for fungi and invertebrates, also returns nutrients to the soil for future plant growth. The ground flora would have a good cover with abundant native bluebell. There would be a couple of maintained woodland clearings with coppiced trees allowing plenty of light to the woodland floor where bluebells and other native woodland flora flourish and might also support species such as speckled wood butterflies. One pond would have some clear open water with no disturbance or debris and have some light falling on it, with clean water that warms up in spring and in an ideal world would support invertebrates such as dragonflies as well as amphibians. The oaks would once more support a population of purple hairstreak butterflies. Elms would once again be thriving and free of disease.
There would be a shrubby woodland edge on the eastern side adjacent to the mown grass of the sports centre, and one on the northern edge. The shrubs would be native species currently found in the wood, providing good berry and nut production, and an attractive woodland edge ground flora including cowslip and primrose would be flourishing.

The wood would better support the Forest School activities by simple adjustments to the usage: The children's fire site, activity area and shelter would be moved so as to be positioned in a glade within an area of younger woodland where there is no risk of falling branches or fire damage to trees. Bird boxes would provide roosting and nest sites and if fitted with a camera, could provide an educational resource for the Forest School. Paths would be maintained and litter and damage made good. The management needed to achieve these ideals is shown on Map 2 - Management Operations.

Stage 3: Prescription

3.1 Project register and prescription

3.1.1. Habitat Management

Woodland

Description

Elm Wood is a small isolated block of mixed deciduous woodland believed to be of ancient origin. There are 2 different stand types: The older woodland, mostly on the fringes of the wood, has a canopy with a high proportion of mature oaks as well as elm and ash. There are also are a few large hornbeam and lime in the canopy. The stand of younger woodland lacks mature trees with a mixed canopy of ash, elm and sycamore, many multi-stemmed, coming from coppice stools. On the northern edge are some thirty hybrid poplars, several of which are unsound and have dead limbs.

The understorey generally has frequent hawthorn, with blackthorn, ash saplings, occasional field maple and elder and more rarely holly and dogwood.

The ground flora is not typical of ancient woodland and may indicate past disturbance or grazing. There is abundant ivy, locally frequent nettle, bramble and cow parsley with cocksfoot, wild garlic, wood avens, cleavers and bare areas devoid of vegetation and trampled. There is a central area of the non-native Persian ivy with some Japanese knotweed. A patch of hybrid bluebell lies adjacent to the perimeter path along the southern edge.

There is a small abandoned badger sett under some fallen elm branches.

Objectives:

- Maintain the current area of woodland. If possible, extend area by creating shrubby edge.
- Maintain as 100% native tree cover of ash, oak and elm trees in the canopy and understorey with no invasive or non-native species.
- Ensure future canopy cover of oak and elm.
- Increase cover of English bluebells and other native ground flora.
- Maintain abundant ivy.
- Maintain current dead standing and lying wood. If possible, provide more dead wood habitat.
- Eliminate invasive non-native species such as Persian ivy and Japanese knotweed.
- Add diversity by creating 2 open glades and a shrubby woodland edge extending the wood to the east.
- Increase safety and reduce potential hazards by clear-felling the unsound hybrid poplars. Use the opportunity to create open shrubby area on the northern edge.
- Provide more nesting and roosting sites.
- Keep free of litter and repair damage by vandalism.

Prescriptions:

- Create 2 small glades of about 15 metres in diameter, by coppicing all the sycamore trees in those areas (see Map 2). The stumps should not be treated, but allowed to re-grow and maintained on a coppice cycle.
- Move the current Forest School fire/activities site some 25 metres from its current position, away from the mature trees into a new glade in the younger woodland area.
- Plant approximately 20 disease-resistant elms such as *Ulmus japonica*, 'sapporo autumn gold' within the woodland where any gaps in the canopy open up within the next 5 years, perhaps through loss of elms by disease.
- Twice each summer until they are well established, use hand tools to clear all vegetation from around the base of each recently-planted young elm for a diameter of 2 metres around each trunk.
- Leave all standing dead wood (if not considered a safety hazard) and fallen logs in place to rot down.
- Create log piles for any brashing, and branches felled for safety reasons. Tie down to prevent unauthorised removal.
- Create a shrubby woodland edge of about 10 metres in width, if possible, on currently mown grass on the edge of the wood by planting with suitable shrubs and native pot-grown plants or plant plugs. Suggested numbers and species of shrubs are as follows:

  Hazel *Corylus avellana* 10
  Elder *Sambucus nigra* 8
  Holly *Ilex aquifolium* 12
  Field maple *Acer campestre* 10
  Honeysuckle *Lonicera periclymenum* 5
  Dog rose *Rosa canina* 5

  The trees should be 60 to 90 cm, pit-planted and provided with a tree guard or spiral rabbit guard and stake. The holly should be 45 cm, pot-grown and provided with a 'Netlon' guard. Weed around the base of each stem twice a year for a few years to help keep the trees free from competition for moisture. Pot-grown plants or plant plugs of the following species should be planted, as many as the budget allows for:
  Primrose *Primula vulgaris*
  Cowslip *Primula veris*
  Wood anemone *Anemone nemorosa*
  Dog-violet *Viola riviniana*
  Foxglove *Digitalis purpurea*
  Ensure all plants are from as local a source as possible and are provided by a reputable company that guarantee they were grown in the UK. 24 plug plants of primrose cost about £12, pot-grown plants are more expensive but look attractive and establish and spread more quickly. They may cost around £1 each if bought in quantity, and can be split after about 3 years. Weed around each plant twice a year for 2 or 3 years.
  There should be no further dumping of grass cuttings and brash in this area, but the existing compost piles can be left to rot down.

Mow grass paths through area regularly in summer. Mow whole area once annually. Remove cuttings from site.

- Clear fell most of the 30 or so hybrid poplars from the northern part of the wood. Select 2 or 3 of the most sound-looking trees with no dead limbs and that are not rotting or leaning. These should not be felled. Kill the stumps of the felled trees to prevent re-growth, and remove from site all branches apart from the largest logs, to prevent re-rooting The largest logs can be left to rot down, thus providing habitat for invertebrates and fungi. Fell outside the bird nesting season and plant during early winter on a mild day with no frost. Plant with a mixture of native species with a high proportion of shrubs. Suitable numbers and species to re-plant with:
  Pedunculate (English) oak *Quercus robur* 10
  Hazel *Corylus avellana* 10
  Holly *Ilex aquifolium* 10
  Hawthorn *Crataegus monogyna* 10
  Field maple *Acer campestre* 10
  The trees should be 60 to 90 cm, pit-planted and provided with a tree guard or spiral rabbit guard and stake. The holly should be 45 cm, pot-grown and provided with a 'Netlon' guard. Weed around the base of each stem for 2 or 3 years to help keep the trees free from competition for moisture.
- Plant native bluebell bulbs and other woodland ground flora plant plugs and pot-grown plants throughout the wood, and particularly around the edges of the new glades. Suitable species other than bluebell that will look attractive, are native and local and thrive in shade are as follows:
  Wild garlic *Allium ursinum*
  Red campion *Silene dioica*
  Foxglove *Digitalis purpurea*
  Yellow archangel *Lamium galeobdolon*
  Cowslip *Primula veris*
  Simply plant as many bulbs, plug plants and pot-grown plants as the budget allows.
- Collect litter and repair damage by vandalism regularly.
- Monitor the cover of the non-natives Persian ivy and Japanese knotweed, controlling the ivy by cutting back or pulling out as necessary and allowing to rot down in piles. The Japanese knotweed should be treated with a glyphosate-based weedkiller in May when the plants are around 90 cms high by a suitably qualified person. The re-growth should be re-sprayed in mid-summer and treatment may need to be repeated for several years for complete eradication.
- Monitor ash for Chalara ash dieback and elms for signs of Dutch elm disease to inform future planting and management.
- Collect and grow in pots acorns and hornbeam and elm seeds from trees in the wood for re-planting into suitable gaps in the canopy when the plants are a few years old. This is something the Forest School could perhaps do, if a place to use as a tree nursery was available.

Ponds

Description: Both ponds measure about 16 to 20 square metres and are full of muddy and moderately polluted water for part of the year only. They were dug in 2010 and provided with a liner. They do not support any aquatic vegetation or invertebrates except for one species of non-biting midge. They are both water-holding for some of the year, but the liner is exposed in places and both are full of woody debris. Shading is quite heavy, particularly around pond 1, which is in the shadow of a large elm tree.

Objectives:

Pond 2:

- Maintain water levels with no loss of area of open water or condition.
- Prevent anaerobic conditions, nutrient build-up, algal bloom and loss of light to the pond by removing decaying woody and other plant material.
- Prevent litter and discarded items becoming unsightly by frequent regular removal of rubbish throughout the year.
- Allow more light to the pond.
- As far as possible reduce shading and encroachment by surrounding vegetation.

Pond 1: Save time, work and resources by *not* maintaining this pond, it is simply not considered worthwhile.

Prescriptions:

Pond 2:

- Remove all litter, branches, logs, debris etc. from the pond 2 several times a year, the work to be done at any time of year initially, but only between August and December if there are any breeding or active amphibians in the future, although this is unlikely.
- Put removed woody material at some distance from pond so it doesn't get thrown straight back in.
- Clear silt from pond if this looks to be reducing the area of open water. Be careful not to damage or expose the liner.
- Manage bramble, scrub and cut back trees where necessary to prevent them encroaching in to the pond or shading it out, particularly on the south side, work to be carried out in autumn or early winter. Cut all trees except the mature ones for 10 metres to the south of Pond 2. Work in winter and allow stems to re-grow, managing them in future on a coppice cycle.
- The pond should be surveyed using Predictive System for Multimetrics (PSYM) methodology to monitor for any colonisation by aquatic flora or fauna.
- The ponds should be annually surveyed for breeding amphibians between March and June and any records of amphibians should be sent to the County Amphibian Recorder (Chris Monk)

3.1.2 Support Educational Use

The woodland is part of a secure site with no public access, but is regularly visited twice a week by Walbrook Nursery School as the location for their Forest School sessions. Here the 3, 4 and 5-year old children learn to hunt for 'minibeasts', build dens, make a fire to cook food, observe the seasonal changes, explore, climb, make bird-feeders, play and identify trees and plants. There are temporary tool and activity areas and a more permanent fire site with log surrounds. Peartree Infants School visit on Wednesdays and carry out similar activities.
Elm Wood is used because it is secure both while the children are on site and afterwards, when the access gate is locked. All rubbish is removed and no trace is left of the day's activities. The day's shelter is set up at the beginning and taken down at the end of the day.

Objectives
The previous Management Plan (2009-13) predates the use of the wood as a Forest School, but included an objective to make the wood accessible to the local community. It is felt that on such a small area of woodland, the use as a Forest School venue is the most important use of the site and should be given priority with very limited public access otherwise.
Safety is paramount and some tree felling, pollarding and coppicing will be needed. To minimise the amount of dead wood that needs to be removed for safety reasons, educational activites should be concentrated within the younger woodland area where there are few older trees. Also for safety reasons the fire site should be moved. An ideal location would be one of the newly created galdes in the younger woodland.
The paths should be maintained and any damage repaired.
Nest boxes with webcams would provide an exciting educational resource.

Prescriptions
The trees need a full detailed inspection by someone competent to assess trees and their defects, in order to evaluate the trees in need of pruning or felling work. The work must be carried out by trained specialists and should be done outside the bird nesting season, or with an ecologist present to check for birds' nests before work starts. The trees should be monitored at least annually to check their condition and records should be kept of work done and any deterioration.

3.2 Natural and Man-induced trends

Natural trends: Although climate change has so far had little effect on woodland composition in England, species such as insects and birds have shown some change in their range, and higher temperatures have led to faster tree growth in some areas. It is not possible to predict how a long-term change in climate will affect Elm Wood, in any case, ecological changes in woodland happen very slowly. Natural processes will continue to shape the woodland as they have done for centuries.
Elm will probably continue to die and be replaced in the canopy by fast-growing species such as sycamore. If ash dieback reaches the wood it will decimate the ash there, which will also most likely be replaced by sycamore.

The small ponds will rapidly silt up and vegetate over. Any coppiced stems in the wood will grow out to their full height. The non-native species are competitive and will probably become more dominant. It is unlikely to ever develop a woodland ground flora, due to its isolated position. In an ageing wood without active management the light levels are likely to be reduced, favouring shade-tolerant species.

Man-induced trends: The woodland is very small and less resilient in withstanding heavy multiple uses than a larger area. The current use of the site looks to be having some limited adverse impact on the wildlife interest, including heavy trampling, littering, vandalism, debris in the ponds, etc.
The proposed management of coppice rotation in glades will tend to favour light-loving ground flora species. Planting native wildflowers will support these species as they will grow and spread.

3.3 Management Constraints

3.3.1 Legal Obligations:
The Wildlife and Countryside Act 1981 and subsequent amendments has relevant sections and should be consulted. There is an obligation not to disturb or damage protected species including birds in the nesting season (February to August) and also applies to badgers, bats and newts. This will apply to the tree felling and tree safety work in Elm Wood, and any activity near the badger sett. This does not mean that the work cannot take place, but the presence of birds nests, badgers, etc, must be checked beforehand by an ecologist or other suitably qualified person.
Occupiers' Liability Act 1984 is an act of Parliament of the UK covering the occupiers of land and refers to the duty of care owed by land owners and occupiers to those who come onto their land, including trespassers.

The Equality Act 2010 (replacing the Disability Discrimination Act 1995)
This legislation applies to organizations providing goods, services or facilities direct to the public. Local Nature Reserves are not exempt from the Act and it will need to be considered as regards signs, information media, access and volunteer and other opportunities at Elm Wood. LNRs are an opportunity for everyone to enjoy nature and all LNRs should provide safe and reasonable access for people with disabilities, in keeping with the site conditions. Information points and signage should indicate which parts are accessible.

Health and Safety The Health and Safety at Work etc Act 1974 places a duty on all employers to ensure the health, safety and welfare of all employees. Most of the legislation regarding health and safety is aimed at the workplace and volunteers are not covered. It is, however, good practice to comply, and consider safety while training, or using equipment, tools and first aid equipment. The act of felling or lopping a tree clearly falls within the scope of this duty. Groups and individuals undertaking work at Elm Wood should always undertake a risk assessment, be insured, given appropriate training, have clear safety instructions and have a first-aid certificate holder present.

Under both civil law and criminal law, an owner of land on which a tree stands has responsibilities for the health and safety of those on or near the land and has potential liabilities arising from a tree or branch falling.

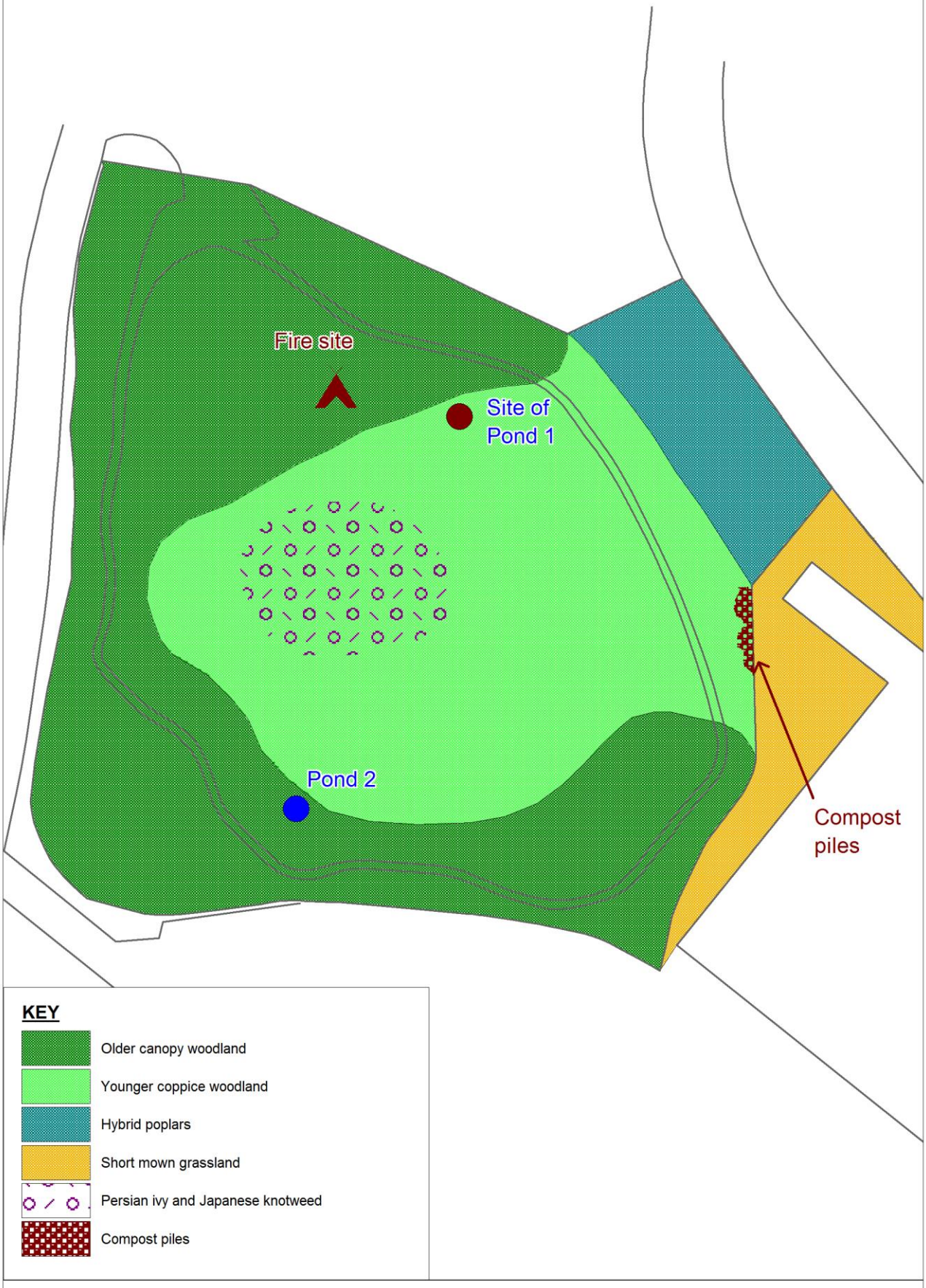
Natural Environment and Rural Communities (NERC) Act 2006 replaced Section 15 of the National Parks and Access to the Countryside Act 1949. Local Authorities have a duty to conserve biodiversity. LNRs like Elm Wood play a key role in helping Local Authorities meet their biodiversity duty under Section 40 of the NERC Act 2006.

3.3.2 Consultations:
As Elm Wood LNR is not an SSSI then there is no compulsory requirement for Natural England to be consulted about work done on the site or about its management. It is good practice however, for Natural England to be consulted on the Management Plan.
Natural England must be consulted on any proposal that will have an impact on the site and/or if the development is likely to result in the LNR being de-declared.

3.3.3 Cost
Items such as wildflower bulbs and plants are expensive and without extra money may be difficult to afford in any useful quantities.There is no automatic entitlement to grants for LNRs and currently a shortage of Government funds.

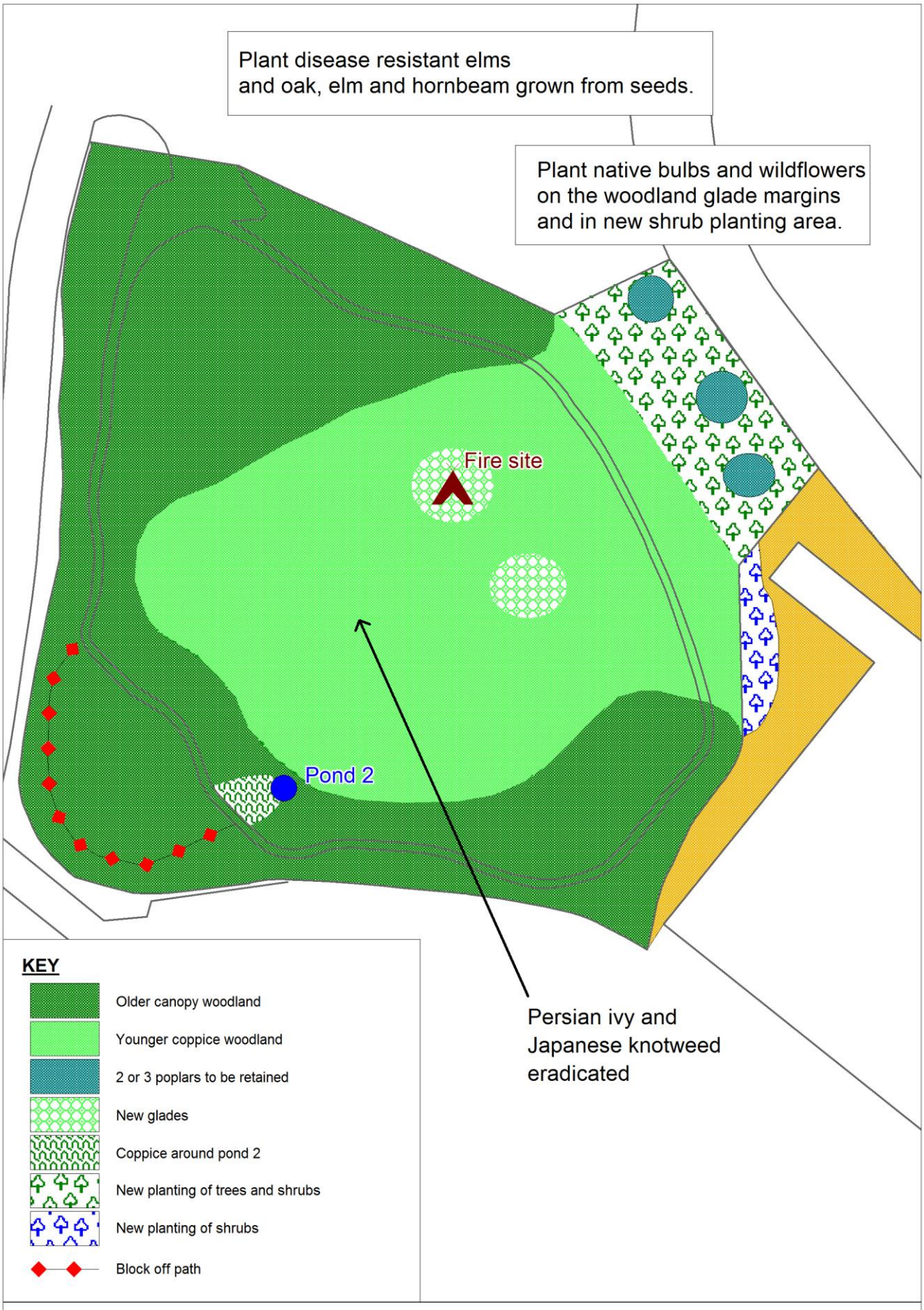
3.3.4 Knowledge There is a lack of up to date information about several species, e.g. bats and breeding birds, which makes targeted planning for wildlife on the site difficult.

3.3.5 Practical constraints
Walbrook Nursery School and Peartree Infants School consider themselves as 'Friends' of Elm Wood. Derby Parks Volunteers provide the labour supported by Derby City's Community Leisure (Parks) department. Work such as felling and planting bulbs is fairly labour-intensive and time specific, however and it may prove difficult to get a group to undertake a task just when it is needed.



Plan 1. Existing State

Not to scale N



Plan 2. Management Operations

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Table 1. Elm Wood 10-YEAR WORK PROGRAMME, Years 1 to 5

Project Register	Management Prescription	Priority		Year 1	Year 2	Year 3	Year 4	Year 5
		Essential	Desirable					
WOODLAND MANAGEMENT	Create 2 glades by coppicing all sycamore for a 15 metre diameter. Allow stumps to re-grow and manage on coppice cycle. Plant bluebell bulbs around the edges.		●	✓				✓
	Create open area on the south of the pond by cutting the trees and allowing them to re-grow on a coppice cycle.		●	✓				✓
	Make new Forest School fire site 25 metres away from current site into area of younger woodland.	●		✓				
	Plant around 20 or so disease-resistant elms in gaps left by dying elms over 5 years.		●	✓	✓	✓	✓	✓
	Use hand tools to weed planted elm trees for 2 metre diameter twice a year for several years.	●		✓	✓	✓	✓	
	Leave all standing dead wood (if not considered a safety hazard) in place to rot down.	●		✓	✓	✓	✓	✓
	Create log piles of any brashing and branches felled for safety reasons. Tie down to prevent unauthorised removal.		●	✓	✓	✓	✓	✓
	Plant the following trees and shrubs to create woodland edge area: hazel 10, elder 8, holly 12, field maple 10, honeysuckle 5, dog rose 5. The trees should be 60 to 90 cm, pit-planted and provided with a tree guard or spiral rabbit guard and stake. The holly should be 45 cm, pot-grown and provided with a 'Netlon' guard.		●	✓		✓		✓

Project Register	Management Prescription	Priority		Year 1	Year 2	Year 3	Year 4	Year 5
WOODLAND MANAGEMENT (contd.)	Weed a 2 metre diameter around the base of each stem twice a year for a few years.		●	✓	✓	✓	✓	
	Plant pot-grown plants of primrose, cowslip, foxglove, wood anemone and dog violet.		●	✓				
	Working outside bird nesting season, fell most of the 30 or so hybrid poplars from the northern part of the wood. Select 2 or 3 trees with no dead limbs - these should not be felled. Kill the stumps of the felled trees to prevent re-growth, and remove from site all branches apart from the largest logs, to prevent re-rooting.		●	✓				
	Plant felled area with a suitable mix of oak and native shrubs: Pedunculate oak *Quercus robur* 10 Hazel *Corylus avellana* 10 Holly *Ilex aquifolium* 10 Hawthorn *Crataegus monogyna* 10 Field maple *Acer campestre* 10 The trees should be 60 to 90 cm, pit-planted and provided with a tree guard or spiral rabbit guard and stake. The holly should be 45 cm, pot-grown and provided with a 'Netlon' guard.		●	✓				
	Weed a 2 metre diameter around the base of each stem twice a year for 2 or 3 years to help keep the trees free from competition for moisture.	●		✓	✓	✓		

Project Register	Management Prescription	Priority		Year 1	Year 2	Year 3	Year 4	Year 5
WOODLAND MANAGEMENT (contd.)	Plant native bluebell bulbs and other woodland ground flora plant plugs and pot-grown plants throughout the wood, and mostly around the edges of the new glades and shrub areas as follows: Bluebell *Hyacinthoides non-scripta* Wild garlic *Allium ursinum* Red campion *Silene dioica* Foxglove *Digitalis purpurea* Yellow archangel *Lamium galeobdolon* Cowslip *Primula veris* Plant as many bulbs, plug plants and pot-grown plants as the budget allows.		●	✓		✓		✓
	Monitor the cover of the non-natives Persian ivy and Japanese knotweed and control these species by cutting back or pulling out as necessary and allowing to rot down in piles.	●		✓	✓	✓	✓	✓
	Monitor ash for Chalara ash dieback and elms for signs of Dutch elm disease to inform future planting and management.	●		✓	✓	✓	✓	✓
	Collect and grow in pots acorns and elm seeds from trees in the wood for re-planting into suitable gaps in the canopy when the plants are a few years old.		●	✓	✓	✓	✓	✓
	Collect litter and repair damage by vandalism regularly.		●	✓	✓	✓	✓	✓

Project Register	Management Prescription	Priority		Year 1	Year 2	Year 3	Year 4	Year 5
POND MANAGEMENT	After creating coppice woodland to south of pond, manage by re-cutting stems as necessary.	●				✓		
	Maintain pond several times a year at any time initially but only between August and December if there are breeding newts, by cleaning out debris, dead plants, silt and litter. Put woody material some distance from pond so it doesn't get thrown back in.	●		✓	✓	✓	✓	✓
	In autumn or early winter cut back bramble, scrub and trees where necessary to prevent them encroaching into the pond or shading it out.	●		✓	✓	✓	✓	✓
	Survey for breeding amphibians between March and June. Pass any records to County Recorder.	●		✓	✓	✓	✓	✓
	The pond should be surveyed using Predictive System for Multimetrics (PSYM) methodology to monitor for any colonisation by aquatic flora or fauna.	●		✓	✓	✓	✓	✓
EDUCATIONAL USE SUPPORT	Monitor trees for dead limbs, splits, cracks and other sites of weakness and carry out remedial safety work as necessary.	●		✓	✓	✓	✓	✓
	Erect nestboxes, some with webcams		●	✓				

Elm Wood 10-YEAR WORK PROGRAMME, Years 6 to 10

Project Register	Management Prescription	Priority		Year 6	Year 7	Year 8	Year 9	Year 10
		Essential	Desirable					
WOODLAND MANAGEMENT	Create 2 glades by coppicing all sycamore for a 15 metre diameter. Allow stumps to re-grow and manage on coppice cycle.		●				✓	
	Create open area on the south of the pond by cutting the trees and allowing them to re-grow on a coppice cycle.		●				✓	
	Leave all standing dead wood (if not considered a safety hazard) in place to rot down.	●		✓	✓	✓	✓	✓
	Create log piles of any brashing and branches felled for safety reasons. Tie down to prevent unauthorised removal.		●	✓	✓	✓	✓	✓
	Plant native bluebell bulbs and other woodland ground flora plant plugs and pot-grown plants throughout the wood, and mostly around the shaded edges of the new glades and shrub edge areas as follows: Bluebell *Hyacinthoides non-scripta* Wild garlic *Allium ursinum* Red campion *Silene dioica* Foxglove *Digitalis purpurea* Yellow archangel *Lamium galeobdolon* Cowslip *Primula veris* Plant as many bulbs, plug plants and pot-grown plants as the budget allows.		●		✓		✓	
	Monitor the cover of the non-natives Persian ivy and Japanese knotweed and control these species by cutting back or pulling out as necessary and allowing to rot down in piles.	●		✓	✓	✓	✓	✓

Project Register	Management Prescription	Priority		Year 6	Year 7	Year 8	Year 9	Year 10
WOODLAND MANAGEMENT (contd.)	Monitor ash for Chalara ash dieback and elms for signs of Dutch elm disease to inform future planting and management.	●		✓	✓	✓	✓	✓
	Collect and grow in pots acorns and elm seeds from trees in the wood for re-planting into suitable gaps in the canopy when the plants are a few years old.		●	✓	✓	✓	✓	✓
	Collect litter and repair damage by vandalism regularly.		●	✓	✓	✓	✓	✓

Project Register	Management Prescription	Priority		Year 6	Year 7	Year 8	Year 9	Year 10
POND MANAGEMENT	After creating coppice woodland to south of pond, manage by re-cutting stems as necessary.	●				✓		
	Maintain pond several times a year at any time initially but only between August and December if there are breeding newts, by cleaning out debris, dead plants, silt and litter. Put woody material some distance from pond so it doesn't get thrown back in.	●		✓	✓	✓	✓	✓
	In autumn or early winter cut back bramble, scrub and trees where necessary to prevent them encroaching into the pond or shading it out.	●		✓	✓	✓	✓	✓
	Survey for breeding amphibians between March and June. Pass any records to County Recorder.	●		✓	✓	✓	✓	✓
	The pond should be surveyed using Predictive System for Multimetrics (PSYM) methodology to monitor for any colonisation by aquatic flora or fauna.	●		✓	✓	✓	✓	✓
EDUCATIONAL USE SUPPORT	Monitor trees for dead limbs, splits, cracks and other sites of weakness and carry out remedial safety work as necessary.	●		✓	✓	✓	✓	✓