Hazeldene Woodland Management Plan

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Section 1 Introduction

Date of plan production

12th April 2018

Revised 2nd May 2018

Planning permission application no.

2018/62/90406/W

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Summary

This document forms the management plan for woodland within the ownership boundary. It will form part of a Section 106 Unilateral Obligation to manage the woodland as set out in this management plan. The Section 106 obligation accompanies a planning application ref. 2018/62/90406/W for 'erection of two dwellings including formation of new access on land at Hazeldene. The management plan covers a 10-year period; when this period is up a new survey of the woodland will take place and a new 10-year management plan will be produced.

Section 2 Description

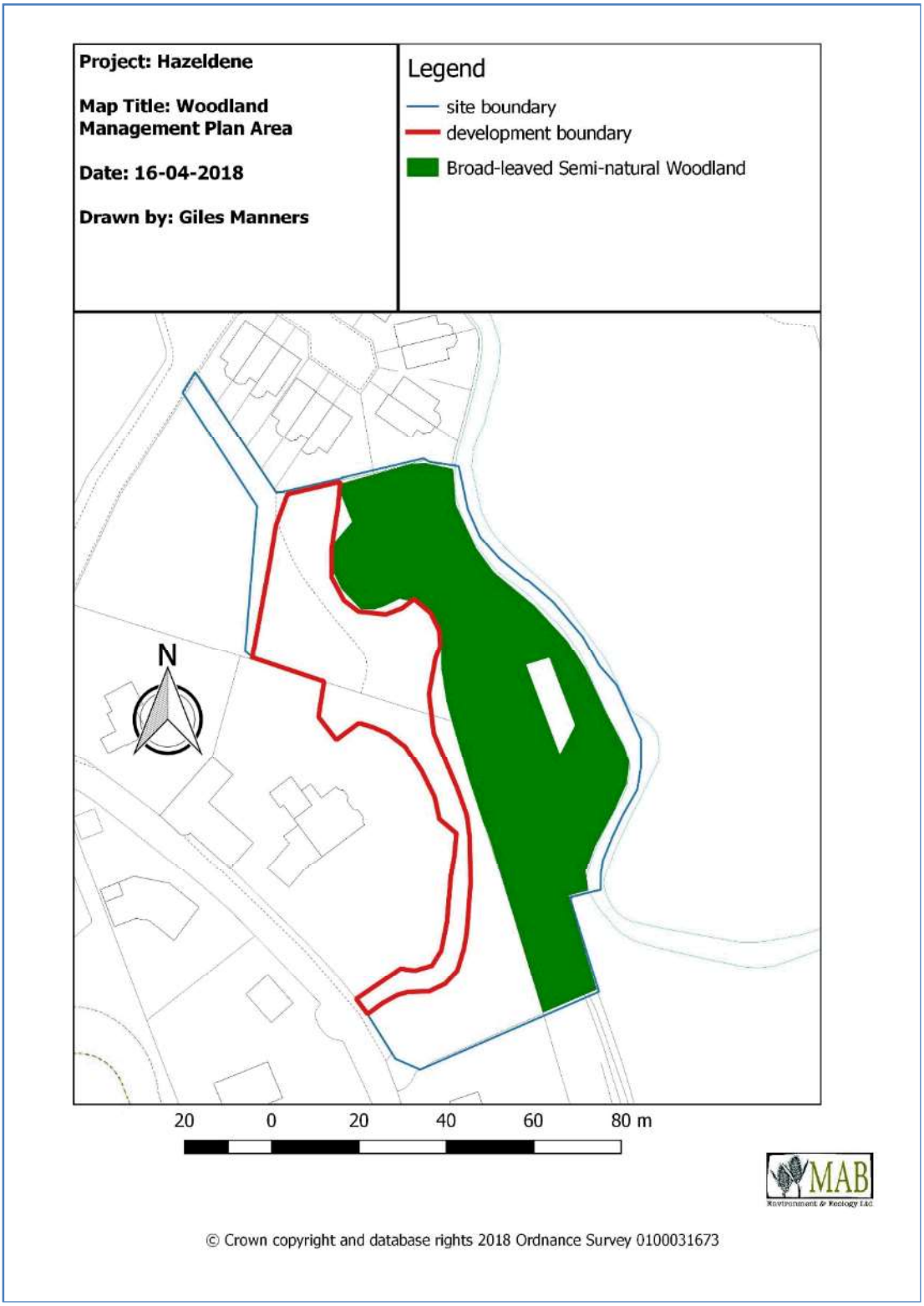


Figure 1 Woodland management area

Woodland type:

The woodland NVC community W10b *Quercus robur-Pteridium aquilinum-Rubus fruticosus agg.* with sub-community *Anemone nemorosa* (goodness of fit 70 – good).

Altitudinal limits:

143 m

Status:

No statutory or non-statutory designations.

General Description

The small area of woodland lies on the valley side, facing east with Mill Brook at the eastern boundary of the woodland. The woodland is dominated by pedunculate oak with some ash, elm. sycamore and birch. The age class structure is fairly poor; there are young saplings but these are often non-natives such as beech and horse chestnut. There are very few mature specimens though there are two mature beech trees within the woodland. There are no veteran trees. There is little standing and fallen dead wood.

Ground flora is diverse with bluebell, wood anemone, bramble, broad buckler fern and an area of bistort. See Appendix 1 for full species list.

There are remnants of mill workings with a concrete lined pool and dry stone walled ditch running parallel to Mill Brook through the woodland. It is likely that the woodland was cleared when the mill was in use.

Himalayan Balsam is invading the woodland from the riparian edge into the woodland.

Physical aspects:

Underlying geology is carboniferous and Jurassic sandstone- with well-drained coarse loamy soils over sandstone.

Key Features:

Historical features of the old mill workings

Land Use:

The land was once part of the adjacent mill (now converted to housing) and there are features of the industrial use within the woodland.

The woodland probably formed part of a woodland garden at Hazeldene. Specimen trees have been planted in the past (two beech trees within the management plan area) and many more – eg. horse chestnut, eucalyptus, monkey puzzle etc. to the west of the management plan area. These are now a seed source for non-natives.

Mill Brook is a source of seed dispersal for Himalayan Balsam along the riparian edge.

Evaluation:

Nationally, the W10 b *Quercus robur-Pteridium aquilinum-Rubus fruticosus* woodland with an *Anemone nemorosa* sub community is the characteristic woodland of base-poor brown soils in the temperate lowlands. Some woodlands of this type are ancient but many have been derived by relatively recent invasion or planting. The tendency to spring and winter waterlogging causes a switch from bluebell to anemone as the vernal dominant in the field layer. Ornamentation, which is what has happened in this woodland with the planting of beech and other ornamentals higher up the valley edges and closer to Hazeldene House, is quite widespread in this community and where the trees are not too densely spaced the vegetation can retain the greater richness of the typical community (Rodwell 1991).

On a local level the surrounding area is urbanised with a lot of new housing development but the typical W10 community woodland is still common. The woodland forms a riparian corridor, which has been compromised by the development at the adjacent Mill, but this corridor in the valley bottom is important as a wildlife corridor.

The woodland is of landscape significance being on a visible hill side and screening housing developments on the hill top.

There are no rare or unusual species. The ground flora of the woodland is relatively rich with bluebell, anemone, archangel and a patch of bistort.

The woodland is very interesting historically. There are remains of a lined pool, sluice gates and a dry ditch (mill race?) with a steep, dry stoned bank side. These are all features of interest; the dry stoned embankment also provides interesting habitat for various ferns.

Threats to the woodland are invasion by non-native species – Himalayan balsam is invasive along the valley bottom and threatens the ground flora and non-native tree species are regenerating in the woodland eg horse chestnut, laurel.

Area:

The woodland area is 0.24 Ha.

Section 3 Management Aim

To maintain and enhance the woodland and its associated ground flora. The historical interest should be preserved where possible. Biodiversity of the woodland should be enhanced by installation of bird and bat boxes.

Management Objectives

To maintain and enhance the condition of the W10 woodland

Removal of non-native seedlings (maximum stem diameter at base of 75mm) within the management area – horse chestnut, beech, laurel, conifers, flowering cherry and sycamore. These should be cut down and stumps treated with glyphosate to prevent re-growth. Larger non-natives will be left to continue to preserve the age-class structure and diversity within the woodland.

Oak trees struggle to regenerate naturally so 10 trees should be planted, with the correct protection, throughout the management area with a check to replace them after five years.

Standing and fallen dead wood should be left in situ. Dead wood provides a valuable resource for saproxylic invertebrates and fungi.

To maintain the diverse ground flora

A programme of Himalayan balsam eradication should be initiated to stop it encroaching from the riparian area into the woodland. Hand pulling or strimming is the best method. If strimming, avoid any interesting areas of ground flora. Himalayan balsam is an annual and so is easily controlled though seed will spread into areas of river flooding each year. A management aim would be to pull himalayan balsam annually and maintain the area to the west of the ditch free of Himalayan balsam.

To preserve the historical interest

Consultation with the local archaeological records before work starts is advisable to find out about the history of the site and any site records. At the present time the historical remains are fairly well preserved but parts of the dry-stone walling along the embankment are collapsing. These should be repaired.

To fulfil all contractual and legal obligations committed to within the plan period

To increase crevice and nesting habitat be addition of 10 bird and 10 bat boxes

There are no veterans or protoveterans within the woodland so crevices and holes in the trees are limited. To increase opportunities for nesting and roosting and thus increase biodiversity ten bird boxes suitable for redstarts and pied flycatchers, such as Schwegler 1B, will be erected in woodland trees along the riparian corridor. Ten bat boxes will be erected in mature trees in the woodland. These will comprise 6 woodland bat boxes such as the Schwegler 2F, 2 noctule boxes such as the Schwegler 2FN, and 2 general breeding boxes such as the Schwegler 1FD.

Section 4 Constraints

Public use – there is a lot of housing surrounding the woodland area this may mean the woodland is used as a dump site particularly with garden refuse.

Vehicular access to the woodland will need to be maintained from the road to carry out woodland work.

Obligations

Maintenance of the fence separating the woodland management area boundary from the area of development. This post and rail fence must be maintained.

Section 5 Prescriptions

Removal of non-native young trees/seedlings – beech, conifers, laurel, horse chestnut etc. Stump treat with glyphosate. Seedlings are referred to as any non-native tree with a base diameter of 75mm or less. Any non-natives with a larger diameter should be retained within the woodland.

Planting of 10 *Quercus robur* trees in the woodland. These should have a minimum height of 150 cms and be protected with tree guards to prevent rabbit damage. Oaks should be checked five years later and replanted if they have failed.

Check boundary fences requiring maintenance.

Himalayan balsam removal.

Erection of bat and bird boxes.

Preservation of historic features.

Prescription	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Removal of young non native seedlings	*				*					*	
Plant 5 oaks	*				*						
Himalayan balsam removal from west of ditch	*	*	*	*	*	*	*	*	*	*	
Erection of boxes	*										
Consult with county archaeologist	*	*									
Preservation of historic features by drystone walling			*								
Review and refresh Woodland Management Plan											*

Appendix 1 species list for woodland

Acer pseudoplatanus
Anemone nemorosa
Betula pendula
Conopoodium majus
Dryopteris dilatata
Fagus sylvatica
Fraxinus excelsior
Galium aparine
Heracleum sphondylium
Holcus mollis
Hyacinthoides non scripta
Impatiens glandiferula
Lamiastrum galeobdolon
Oxalis acetosella
Polygonum bistorta
Quercus robur
Ranunculus ficaria
Rubus fruticosus agg
Salix caprea
Sambucus nigra
Ulmus glabra
Veronica hederifolia