



Ecology Addendum Report

Dodworth Green Lane, Dodworth

Newett Homes Ltd

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Basis of Report

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Appendix C	Statutory Biodiversity Metric Excel Spreadsheet (to be supplied separately)



Acronyms and Abbreviations

BNG	Biodiversity Net Gain
DBH	Diameter at Breast Height
EclA	Ecological Impact Assessment
GLTA	Ground Level Tree Assessment
LWS	Local Wildlife Site
PRF	Potential Roosting Feature



1.0 Introduction

1.1 Background

SLR Consulting Ltd was instructed by Newett Homes Ltd to carry out a desk study data search, and an assessment of the potential of trees to be removed for roosting bats, and to prepare an Ecology Addendum report, in support of a planning application for the construction of a small residential development, of five units, on land off Dodworth Green Lane, Dodworth, Barnsley, South Yorkshire, S75 3RY (central OS grid reference SE 31451 05076). The application site (hereafter referred to as the 'Site') boundary is 0.314 hectares in size.

This Ecology Addendum Report is designed to be read alongside the Biodiversity Net Gain (BNG) Assessment produced by SLR in September 2024¹ and the Ecological Impact Assessment (EclA) produced by Whitcher Wildlife in January 2023².

1.2 Site Overview

The Site consists of a large detached residential property 'Hillside', set within a mature garden, with formal lawned areas, tree belts (most notably a belt of mature trees alongside Dodworth Green Road), dense and scattered scrub, patches of tall ruderal vegetation and young self-sown trees.

Although watercourses do not occur on Site, an unnamed stream is culverted beneath the Site for circa 40 metres; it emerges from a culvert approximately 0.5 m from the south-western Site boundary, and runs for 15 m within the 10 m wide riparian zone that abuts the Site.

1.3 Development Proposals

The trees which are due to be removed to facilitate the development are illustrated within the arboricultural impact assessment in Appendix A, and include ST1, T2, G3, G4, T16, T22, G23, G24, G28, T29, T30, T31 and potentially T33. Trees T6, T7 and T8 on the western boundary adjacent to Dodworth Green Road will be retained, and laterally reduced away from the proposal retaining a clearance of 2.5 m in line with BS3998:2010, limiting wound size to 75mm. Tree T8 will be crown lifted to 5 m above the highest point of the access to facilitate vehicle clearance. T19 will be crown lifted reduced away from the proposal retaining a clearance of 5 m in line with BS3998:2010 limiting wound size to 75 mm.

1.4 Report Aims

This Ecology Addendum Report provides the following additional information:

- Results of a desk study data search;
- Results of an assessment of the potential of trees for roosting bats;
- Precautionary Mitigation Measures for Roosting Bats; and
- An updated statement relating to Biodiversity Net Gain.

¹ SLR Consulting Ltd (September 2024) Dodworth Green Lane, Dodworth, Biodiversity Net Assessment, Ref 424.065401.00001 v1.

² Whitcher Wildlife Ltd (January 2023), Green Road, Dodworth, Ecological Impact Assessment, ref no: 220423/EIA



1.5 Evidence of Technical Competence and Experience

The assessment of trees for roosting bats and ecology addendum report were conducted by SLR Consulting Senior Ecologist Vanessa Jackson. Vanessa is an Associate Member of the Chartered Institute of Ecology and Environmental Management (ACIEEM), with over seven years' relevant experience within ecological consultancy, holds a Class 1 Natural England survey licence for bats (2017-28321-CLS-CLS) and great crested newts (2016-22169-CLS-CLS) and is a competent botanist.

The report has been reviewed by SLR Consulting Principal Ecologist Gary Oliver. Gary is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM), with over 28 years' relevant experience within ecological consultancy.



2.0 Methodology

2.1 Desk Study

The Barnsley Biological Records Centre (BBRC) was commissioned to undertake a search of statutory and non-statutory designated sites for nature conservation and protected/notable species for the Site and land within a 1.5 km radius of its centre. This data was obtained on the 13th November 2024.

Information on statutory designated sites for nature conservation and geological interest and granted European Protected Species Licences (EPSLs) for the Site and 2km radius, was also obtained from the MAGIC website managed by Natural England³. Information on Internationally designated sites (Special Protection Area (SPA), Special Area of Conservation (SAC) & Ramsar) was also obtained from the Magic website for a 10 km radius.

2.2 Assessment of the Potential of Trees for Roosting Bats

In compliance with best practice guidelines⁴, a Ground Level Tree Assessment (GLTA) was undertaken of the trees due to be removed or pruned back within the Site, these trees are listed in Section 1.3 and illustrated in Appendix A. The aim of the survey was to determine the need, or otherwise, for further bat surveys (for example dusk emergence bat detector surveys) and/ or mitigation.

The survey comprised a detailed inspection of the exterior of the trees from ground level to search for potential bat access points and features that bats could use for roosting (Potential Roosting Features or PRFs). Trees were inspected systematically and consistently from all sides (where accessible). Binoculars, and a powerful Clulite torch were used to scan for potential features from the ground.

The following table, adapted from current best practice guidelines was used as a guide to assess the potential suitability of the trees for roosting bats:

Table 2-1: Guidelines for Assessing the Potential Suitability of Trees for Roosting Bats

Suitability	Description Of Potential Roosting Features (PRFs)
Negligible	No Potential Roosting Features (PRFs) noted within a tree which could be exhaustively searched from the ground.
PRF- I	A tree with one or more PRFs that could be used opportunistically by individual bats. However, the PRFs do not provide enough space, shelter, or appropriate conditions, or have sufficient surrounding habitat, to be used on a regular basis by larger numbers of bats. A tree of sufficient size and age to support PRFs, which could not be exhaustively searched from the ground, for example due to the presence of dense foliage or because not all sides of the tree could be fully accessed, would typically fall into in this category, in instances where no PRFs were noted.

³ Natural England. (2023). Multi-Agency Geographic Information for the Countryside. www.magic.defra.gov.uk

⁴ Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines. Fourth Edition. Bat Conservation Trust, London.



PRF- M	A tree with one or more PRFs which are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time. These trees have potential to support high conservation roosts such as a maternity colony.
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3.0 Results

3.1 Desk Study

Section 3.1, in part, makes reference to the BBRC data search, a copy of which has been provided as Appendix B.

3.1.1 Designated Sites

3.1.1.1 Statutory Designated Sites

The Site and its immediate surroundings do not contain any statutory designated sites, and there are no statutory designated sites within 2km of the Site.

There are no internationally designated sites (SPA, SAC & Ramsar) within 10 km of the Site.

3.1.1.2 Non-statutory Designated Sites

The Site and its immediate surroundings do not contain any non-statutory designated areas, however, there are two non-statutory designated sites within 1.5 km of the Site, both of which are Local Wildlife Sites (LWS), which are described in Table 3-1 below.

Table 3-1: Non-statutory designated sites

Site Name and Designation	Reason for Designation	Distance from Site ⁵
Silkstone Fall Wood LWS	Semi-natural broadleaved woodland and ancient replanted woodland	975 m to the west
Falthwaite and Lowe Wood LWS	Ancient and semi-natural woodland	975 m to the south

Both LWS are separated from the Site by residential development, railway lines, roads and arable land. The small-scale proposals within the Site are unlikely to impact upon these LWS.

3.1.1.3 Priority Habitats

The Site and its immediate surroundings do not contain any priority habitats.

Scattered areas of lowland deciduous woodland priority habitat are present within the wider landscape, the closest of which is approximately 155 m to the south of the Site.

The closest ancient woodland priority habitat is approximately 1.2 km to the west of the Site.

The small-scale proposals within the Site are unlikely to impact upon these priority habitats.

3.1.2 Species

3.1.2.1 Plants (including Schedule 9 species)

The desk study data from the BBRC included a total of 67 records of flowering plant species, including records of three species of Schedule 9 non-native invasive plant species including Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*), and giant hogweed (*Heracleum mantegazzianum*).

⁵ At closest point, measured 'as the crow flies'.



None of these invasive non-native plant records relate to the Site or its immediate surroundings.

One Schedule 9 invasive non-native species was identified within the Site, *Rhododendron ponticum* within tree groups G4, G23, and G24. All three tree groups will be removed to facilitate the development. Further mitigation measures relating to non-native invasive plant species are provided in Section 4.7 of the EclA report.

3.1.2.2 Birds

The desk study data from the BBRC returned 394 records of 42 species of bird dating between 1993 and 2023.

Of these species, those on the red list of conservation concern⁶ were: common redpoll (*Acanthis flammea*), cuckoo (*Cuculus canorus*), fieldfare (*Turdus pilaris*), greenfinch (*Chloris chloris*), grey partridge (*Perdix perdix*), house martin (*Delichon urbicum*), house sparrow (*Passer domesticus*), lapwing (*Vanellus vanellus*), lesser spotted woodpecker (*Dryobates minor*), linnet (*Linaria cannabina*), marsh tit (*Poecile palustris*), mistle thrush (*Turdus viscivorus*), ring ouzel (*Turdus torquatus*), skylark (*Alauda arvensis*), starling (*Sturnus vulgaris*), swift (*Apus apus*), tree sparrow (*Passer montanus*), yellowhammer (*Emberiza citrinella*) and willow tit (*Poecile montanus*).

Of these species, those on the amber list of conservation concern⁷ were: bullfinch (*Pyrrhula pyrrhula*), dunnoek (*Prunella modularis*), grey wagtail (*Motacilla cinerea*), kestrel (*Falco tinnunculus*), mallard (*Anas platyrhynchos*), meadow pipit (*Anthus pratensis*), moorhen (*Gallinula chloropus*), pink-footed goose (*Anser brachyrhynchus*), redwing (*Turdus iliacus*), rook (*Corvus frugilegus*), reed bunting (*Emberiza schoeniclus*), song thrush (*Turdus philomelos*), sparrowhawk (*Accipiter nisus*), stock dove (*Columba oenas*), tawny owl (*Strix aluco*), whitethroat (*Curruca communis*), willow warbler (*Phylloscopus trochilus*) and wren (*Troglodytes troglodytes*).

None of these records relate to the Site or its immediate surroundings.

The Site habitats, including the woodland, dense and scattered scrub habitats and individual trees have the potential to be used by a small number of nesting birds.

Mitigation measures for nesting birds are provided in Section 4.2 of this report.

3.1.2.3 Amphibians

The desk study data from the BBRC returned four records of amphibian, specifically common frog (*Rana temporaria*), dating from 2012 to 2020. These records relate to a garden pond 400 m to the north of the Site.

There are no great crested newt European Protected Species Licences (EPSL) or survey returns within 1.5 km of the Site on the MAGIC website.

The closest known pond is approximately 380 m to the south-west of the Site. There are no other known ponds within 500 m of the Site. This pond is located in private land, with no access. The pond is located within a small area of woodland, on the opposite side of Dodworth Green Road. This main road is likely to act as a barrier to the movement of newts

⁶ Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I. (2021) Birds of Conservation Concern 5: the population status of birds in the UK, Channel Islands and Isle of Man. *British Birds*, 114

⁷ Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I. (2021) Birds of Conservation Concern 5: the population status of birds in the UK, Channel Islands and Isle of Man. *British Birds*, 114



as well as the residential development to the south-west of the Site. If there were great crested newts within this pond, it is considered highly unlikely that great crested newts would disperse to the Site due to the good terrestrial habitat in close proximity to the pond, and the barriers and distance between the pond and the Site itself.

Amphibians including great crested newt are therefore not considered further in this report or the EclA.

3.1.2.4 Reptiles

The desk study data from the BBRC returned one record of reptile, specifically grass snake (*Natrix helvetica*) from 2021. This record relates to within Falthwaite and Lowe Wood LWS, 1.19 km to the south-east of the Site.

The Site does provide some suitable habitat for reptiles with the woodland and scrub habitats, although the Site is relatively isolated from other areas of suitable habitat. There is therefore a low potential for low numbers of reptiles to be found within the Site.

Precautionary mitigation measures for reptiles are provided in Section 4.3 of this report.

3.1.2.5 Invertebrates

The desk study data from the BBRC returned 19 records of six invertebrate species, dingy skipper (*Erynnis tages*), small heath butterfly (*Coenonympha pamphilus*), wall butterfly (*Lasiommata megara*), white-letter hairstreak (*Satyrium w-album*), cinnabar moth (*Tyria jacobaeae*) and shaded broad-bar moth (*Scotopteryx chenopodiata*) dating between 2008 and 2021. None of these records relate to the Site or its immediate surroundings, the majority relate to Falthwaite and Lowe Wood LWS or Dodworth Colliery spoil heap, and are all over 800 m from the Site.

The Site supports common and widespread habitats, which are capable of supporting only common and widespread invertebrate species. Invertebrates are therefore not considered further within this report or the EclA.

3.1.2.6 Mammals

Bats

The desk study data from the BBRC returned 17 records of bats, including common pipistrelle (*Pipistrellus pipistrellus*), brown long eared bat (*Plecotus auritus*) and unknown bat species, dating from 1994 to 2008.

None of these records relate to the Site or its immediate surroundings. Several of the records relate to bat roosts at residential properties on Ratten Row, approximately 200 m to the south-west of the Site, and Strafford Walk, approximately 200 m to the south-east of the Site. The largest roost surveyed at Strafford Walk was a count of 34 common pipistrelle bats emerging from the property in 2006, and the largest roost surveyed at Ratten Row was a count of 29 common pipistrelle bats emerging from the property in 1997.

The results of the assessment of the potential of trees for roosting bats are provided in Section 3.2, and further mitigation measures are provided in Section 4.1 of this report.

Badger

The desk study data from the BBRC returned five records of badger (*Meles meles*) dating between 1996 and 2021.

None of these records relate to the Site or its immediate surroundings. All of the records are over 1km from the Site.



No badger setts or field signs such as latrines, snuffle holes, hairs or paths were identified within the Site during the GLTA survey.

Badgers are therefore not considered further within this report or the EclA report.

Otter and Water Vole

The desk study data from the BBRC returned one record of water vole (*Arvicola amphibius*) dating from 1981, which relates to Stainborough Lowe – a watercourse within Falthwaite and Lowe Wood LWS, over 1.5 km from the Site.

There were no records of otter (*Lutra lutra*) provided by BBRC.

The culvert beneath the Site is not considered to provide suitable habitat for otter or water vole, as they lack a suitable level of water or vegetation cover for these species.

Otter and water vole are therefore not considered further within this report or the EclA report.

Hedgehog

The desk study data from the BBRC returned eight records of hedgehog (*Erinaceus europaeus*) dating between 1983 and 2019. The closest of these records relates to Dodworth Green Road in 2019. Only a six-figure grid reference is provided, however the closest possible distance to the Site would be 25 m to the west.

The Site does provide suitable habitat for hedgehogs, including the scrub, woodland and grassland habitats.

Further mitigation measures for hedgehogs are provided in Section 4.4 of this report.

Brown Hare

The desk study data from the BBRC returned one record of brown hare (*Lepus europaeus*) from 2010. This record relates to Stainborough Lowe, within Falthwaite and Lowe Wood LWS over 1.5 km from the Site.

Brown hare tend to favour open farmland habitats, however there is a low possibility of brown hare being present within the Site.

Further mitigation measures for brown hare are similar to reptiles, detailed in Section 4.3 of this report.

3.2 Assessment of the Potential of Trees for Roosting Bats

The results of the assessment of the potential of trees for roosting bats are described and illustrated in Table 3-2.

In summary, two trees, Tree T8 and T29, were identified as of low potential / PRF-I, the remaining trees were identified as of negligible potential for roosting bats.



Table 3-2: Results of the Assessment of the Potential of Trees for Roosting Bats

Tree Number	Description	Photograph
ST1	<p>Mature common plum (<i>Prunus domestica</i>)</p> <p>Ivy cover – diameter at breast height (DBH) of ivy < 5 cm. Ivy cover not thick or dense enough to provide PRFs.</p> <p>Negligible Potential</p>	
T2	<p>Early mature Lawson cypress (<i>Chamaecyparis lawsoniana</i>)</p> <p>Negligible Potential</p>	
G3	<p>Semi-mature sycamore (<i>Acer pseudoplatanus</i>), holly (<i>Ilex aquifolium</i>), goat willow (<i>Salix caprea</i>), elder (<i>Sambucus nigra</i>) and rhododendron (<i>Rhododendron</i>)</p> <p>Negligible Potential</p>	



Tree Number	Description	Photograph
G4	Semi-mature sycamore, holly, elder and rhododendron Negligible Potential	
T6	Mature sycamore Negligible Potential	 (tree to the right)
T7	Mature sycamore Negligible Potential	 (central tree)
T8	Mature horse chestnut (<i>Aesculus hippocastanum</i>) Split and lifted bark on limb on south-western aspect between 3-5 metres in height Low potential / PRF-I	 (tree to the left)

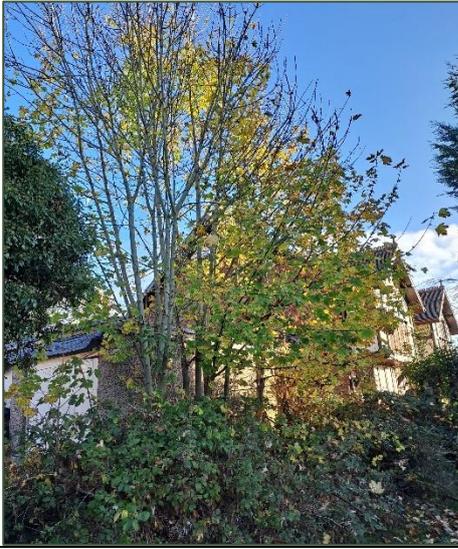


Tree Number	Description	Photograph
		
T16	<p>Mature ash (<i>Fraxinus excelsior</i>)</p> <p>Ivy cover – diameter at breast height (DBH) of ivy < 5 cm. Ivy cover not thick or dense enough to provide PRFs.</p> <p>Negligible Potential</p>	



Tree Number	Description	Photograph
T19	Early-mature common walnut (<i>Juglans regia</i>) Negligible Potential	
T22	Early-mature silver birch (<i>Betula pendula</i>) Negligible Potential	
G23	Semi-mature sycamore, hawthorn, holly, elder and rhododendron Negligible Potential	



Tree Number	Description	Photograph
G24	<p>Early-mature Leyland cypress (<i>Cupressus x leylandii</i>)</p> <p>Negligible Potential</p>	
G28	<p>Semi-mature sycamore and ash</p> <p>Negligible Potential</p>	
T29	<p>Mature common pear (<i>Pyrus communis</i>)</p> <p>Mature ivy cover with a DBH of > 5 cm. Low potential for ivy to cover PRFs however dense ivy foliage may obstruct clear flight path for bats.</p> <p>Low potential / PRF-I</p>	



Tree Number	Description	Photograph
		
T30	Semi-mature ash Negligible Potential	
T31	Early-mature common plum Negligible Potential	



Tree Number	Description	Photograph
T33	Early-mature silver birch Negligible Potential	



4.0 Assessment and Mitigation Measures

4.1 Roosting Bats

4.1.1 Potential Impacts

Trees T8 and T29 were considered to have low / PRF-I potential for roosting bats.

T29 will be removed, and there is a low risk of killing or injuring roosting bats if present.

T8 will be crown lifted to 5 m above the highest point of the access to facilitate vehicle clearance. The PRF on T8 is lifted and split bark on the south-western aspect between 3 – 5 m in height. It is considered that pruning of this limb could be avoided, however if this limb requires removal, there is a low risk of killing or injuring roosting bats within the tree.

4.1.2 Proposed Mitigation Measures

In line with the BCT good practice guidelines⁸, the trees should be soft felled by cutting the tree down in sections, gently lowering each section to the ground, and leaving in situ on the ground for a minimum of 24 hours before chipping or removing from the Site.

In addition, three bat boxes shall be installed on retained trees, such as the mature trees on the western and south-western Site boundary, facing south at a height of at least three to six metres. The tree mounted bat box design would be 2F Schwegler Bat Boxes⁹ or similar.

4.1.3 Significance of Residual Effects

With the above measure in place, no contravention of relevant wildlife legislation is anticipated, and impacts upon roosting bats are considered to be non-significant.

4.2 Nesting Birds

4.2.1 Potential Impacts

The Site has potential to support small numbers of nesting birds within the woodland, scattered and dense scrub and individual trees required for removal. Therefore, if unmitigated, construction activities have the potential to cause injury or mortality of breeding birds, and damage or destruction of eggs or nests during construction.

4.2.2 Proposed Mitigation Measures

To avoid the killing/injury of birds and damage/destruction of active nests during vegetation clearance and construction, Site clearance and vegetation removal will ideally take place outside of the main bird breeding season (which for most species extends from March to August inclusive). If this is not feasible, a search for active nests would first be undertaken by a suitably qualified ecologist within the 24 hours prior to vegetation clearance and building demolition. If an active nest was identified, it would be left in situ until the breeding attempt was concluded and the young had fledged.

In addition, three bird boxes shall be installed on retained trees, such as the mature trees on the western Site boundary, facing east at a height of at least two metres. These nest boxes

⁸ Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.

⁹ [2F Schwegler Bat Box \(General Purpose\) | NHBS Practical Conservation Equipment](#)



shall comprise a mixture of different specifications¹⁰ to suit a variety of locally occurring bird species.

4.2.3 Significance of Residual Effects

With the above measure in place, no contravention of relevant wildlife legislation is anticipated, and impacts upon birds are considered to be non-significant.

4.3 Reptiles and Brown Hare

4.3.1 Potential Impacts

In the absence of mitigation, there is a low possibility of killing or injuring reptiles or brown hare which may be present within the Site.

4.3.2 Proposed Mitigation Measures

A toolbox talk shall be given to all personnel working on the Site, to provide a brief on the identification of reptile species and brown hare, and their potential presence within the Site.

Clearance of dense ground vegetation such as the scrub habitats, shall initially be carried out to a minimum of 150 mm to avoid harming faunal species at ground level, including reptiles and brown hare. This will encourage any animals to move away from the area, and make the area less attractive before it is cleared down to ground level.

In the unlikely event that hibernating reptiles are found, professional advice shall be sought from a professional ecologist who will assess the remaining works and will advise on how to proceed.

4.3.3 Significance of Residual Effects

With the above measure in place, no contravention of relevant wildlife legislation is anticipated, and impacts upon reptiles and brown hare are considered to be non-significant.

4.4 Hedgehogs

4.4.1 Potential Impacts

In the absence of mitigation, there is a risk of harm to hedgehog during construction, should animals become trapped in footings or other on-site hazards.

4.4.2 Proposed Mitigation Measures

The clearance of dense ground vegetation to a minimum initial height of 150 mm as described in Section 4.3.2 above will avoid harm to hedgehogs during initial vegetation clearance.

Where possible, all trenches, pits and other diggings at the Site will be closed before nightfall. Where these must be left over night, they should be covered and sealed, or an escape ramp should be provided using wood planking or suitably compacted earth. All pipework and ironworks should be sealed or covered overnight. Alternatively, such trenches pipes or other workings may be fenced off to prevent large mammals coming into contact with them.

¹⁰ Such as the Vivara Pro Seville and 1B Schwegler nest box (26mm and 32mm entrance holes), available at: <https://www.nhbs.com/>



In addition, hedgehog highways would be created in all proposed garden fences, comprising minimum 15 cm x 15 cm gaps at the base of fencing, to allow hedgehog unimpeded access across the Site and between gardens. The access gaps shall be appropriately labelled with signs on both sides, to deter householders from blocking the purpose made gaps. An example of a hedgehog highway gap with appropriate labelling is shown in Plate 4-1. Hedgehog highway signs can be purchased from a number of manufacturers, such as The British Hedgehog Preservation Society.

Plate 4-1: Example hedgehog highway fence gap with sign



4.4.3 Significance of Residual Effects

With the above measure in place, no contravention of relevant wildlife legislation is anticipated, and impacts upon hedgehog are considered to be non-significant.



5.0 Biodiversity Net Gain Assessment

The full BNG assessment is included within the BNG report¹¹ produced by SLR in September 2024.

5.1 Biodiversity Net Gain Summary

Table 5-1 summarises the predicted net change in biodiversity units post-development. The full calculations are provided in Appendix C (the statutory metric, supplied in Excel format).

Table 5-1: Biodiversity Net Gain Assessment Summary

Biodiversity Net Gain Unit Type	Baseline Biodiversity Units	Post-Development Biodiversity Units	On-Site Net Change
Habitat units (area)	1.26	0.66	-0.60 units
Hedgerow units (linear)	0.22	0.22	No Change
Watercourse units (linear)	0.28	0.28	No Change

This indicates that, under this scenario, there will be no change in the number of watercourse units or linear habitat units, and a 0.6 biodiversity unit reduction in habitat units.

As the original planning application was made on the 25th of March 2024, before the requirement for a 10% net gain for 'small sites' came into force, no formal 10% net gain is required for hedgerow units or watercourse units.

However, in order to provide a measurable net gain (of 1%) 0.613 habitat units shall be delivered off-Site via a Habitat Bank/ Environment Bank or similar biodiversity credit provider, or through the direct purchase of credits from Barnsley Metropolitan Borough Council.

The precise delivery details of the BNG units shall be secured by a planning condition requiring the preparation and submission of a Biodiversity Gain Plan.

¹¹ SLR Consulting Ltd (September 2024) Dodworth Green Lane, Dodworth, Biodiversity Net Assessment, Ref 424.065401.00001 v1.





Appendix A Arboricultural Impact Assessment

Ecology Addendum Report

Dodworth Green Lane, Dodworth

Newett Homes Ltd

SLR Project No.: 424.065401.00001

18 November 2024

Arboricultural Impact Assessment

At: Dodworth, Barnsley, S75 3RR

For: Newett Homes

Date: 23/08/2024

Reference: BA230623

DOCUMENT CONTROL

Surveyed by*	Matt Metcalfe and Lloyd Barnes			Report date	22/08/2024
Prepared by*	Matt Metcalfe				
Reviewed by*	Sue Barnes				
Revision	A	Date	23/08/2024	Notes:	
	* Refer to qualifications and experience appendix				

VALIDATION STATEMENT FOR LPA REGISTRATION

This report contains information relating to the proposed building development at Dodworth, Barnsley, S75 3RR.

For Local Planning Authority (LPA) validation purposes, this report contains the following:

- An **Arboricultural Impact Appraisal** of the proposed development, detailing trees to be retained and the proposed protection measures (Impact Appraisal).
- Appended information on trees and protection methods (Appendices)

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TREE MANAGEMENT TO ENABLE SCHEME

SUMMARY OF TREE INFORMATION

The Proposal. This arboricultural impact appraisal accompanies the planning application at Dodworth, Barnsley, S75 3RR as detailed in the extract of the block plan copied opposite.

Tree Information. This impact assessment is based upon our Tree Assessment reference BA230623TS, which includes information on the trees condition and minimum protection requirements – attached in APPENDIX – PLANS.

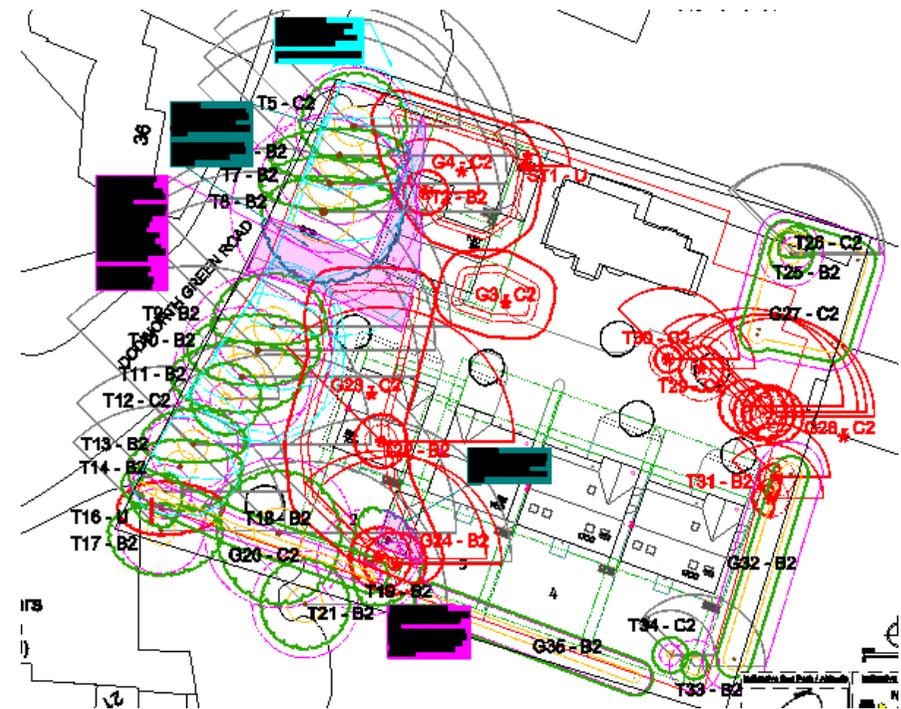
The Scheme. Details and shown on the Implication Assessment Plan reference BA230623AIA – in APPENDIX – PLANS.

General Tree Losses. The site currently hosts ST1 and T16 categorised as U in line with BS5837:2012 and these should be removed due to safety concerns.

Tree losses to enable the scheme.

	A	B	C	U
Individual Tree loss	0	3	2	0
Entire Group loss	0	1	4	0
Partial Group loss	0	0	0	0
Entire Hedge loss	0	0	0	0
Partial Hedge loss	0	0	0	0

Tree pruning to enable development: Tree pruning of retained trees is required and outlined within BA230623_AIA



Replacement Trees: Tree planting schemes are included within the scheme.

Trees Protection: The scheme does enter the Root Protection Areas of retained trees, where it may be defendable with alternative construction methods and specialist design.

This assessment considers the potential conflicts with existing trees, along with protection recommendations which are detailed on the Tree Protection Plan reference BA230623TPP – in APPENDIX – PLANS.

General protection can be easily achieved by erecting and maintaining Tree Protection Fencing (TPF) to restrict access close to trees and establishing and maintaining Construction Exclusion Zones.

Ground Protection where changes extend into the Root Protection Area, can be adopted to provide temporary or permanent access.

These protection methods can, if required, be expanded upon within a conditional Arboricultural Method Statement.

Providing appropriate protection is installed the risks to trees can be controlled enabling trees to continue to screen the site to help provide separation between the site, neighbouring properties, and the public realm.

IMPACT ASSESSMENT

This assessment describes how the proposal will affect trees and any impact this will have on local amenity and character.

Tree Constraints. Typically, trees can offer constraints to potential layouts. Ideally, the requirements of the trees and the proposal should be considered at the design stage. A general guide to potential tree constraints is included in APPENDIX – TREE CONSTRAINTS.

Limiting Damage to Trees. Care has been taken regarding the retention of large, mature, over-mature or veteran trees which become enclosed within the new development. Achieving successful integration has required careful consideration during the design stages and has considered the constraints offered by trees and follows the general guidelines, included in APPENDIX – DESIGN CONSIDERATIONS.

General Risks to Trees. The development process does have the potential to both damage existing trees and compromise tree planting opportunities through the severance of roots or changes to the soil levels, volume, or structure. A general guide to potential tree damage is included in APPENDIX – RISKS TO TREES DURING CONSTRUCTION.

Protection of Trees. The potential for conflicts between the proposal can be defended through the adoption of tree protection to help protect the RPA and maintain sufficient space to enable the confident retention of trees. In general, tree protection requires a combination of protective fencing, ground protection, and the adoption of building design, materials, and techniques that can sustain normal growth, further details included in APPENDIX – TREE PROTECTION.

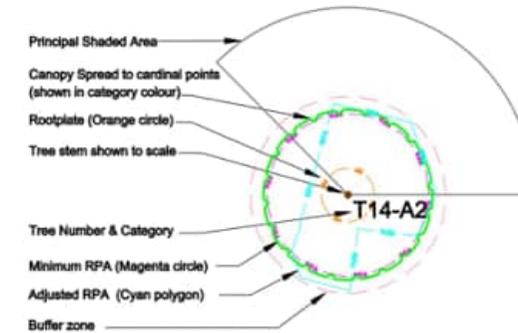
Retained trees need to be considered as part of any site changes and protected from the potentially negative effects of alterations or construction. Where

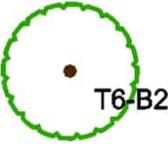
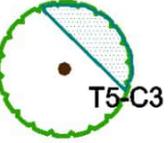
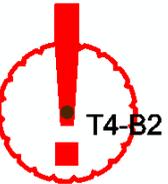
protection is not possible removal and replacement of a tree with a suitable landscaping scheme could offset losses and improve the overall levels of screening and biodiversity.

Legislative Protection.

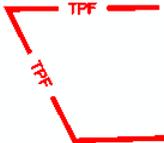
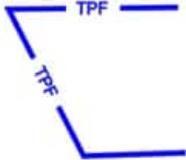
Type of Check	Body	Date	Status
Tree Preservation Orders	Barnsley Borough Council	22/08/2024	TPO's on western and southern boundary
Conservation Area	Barnsley Borough Council	22/08/2024	N/A
National Park	Natural England http://tinyurl.com/3n2u3cdd	22/08/2024	N/A
Listed Buildings	Historic England https://historicengland.org.uk/listing/the-list/	22/08/2024	N/A
National Landscapes, Ancient Woodlands/other Woodland Habitats	DEFRA Magic Map https://magic.defra.gov.uk/magicmap.aspx	22/08/2024	N/A
Ancient Trees	Woodland Trust Ancient Tree Inventory https://ati.woodlandtrust.org.uk/tree-search/	22/08/2024	N/A

Tree Management requirements



Management	Symbol
Retained tree	 T6-B2
Tree pruning outlined within marked quadrant. Trees works in line with BS3998:2010	 T5-C3
Tree to be removed due to condition/location- not scheme related	 T4-B2
Tree to be removed to enable the scheme.	 T4-B2

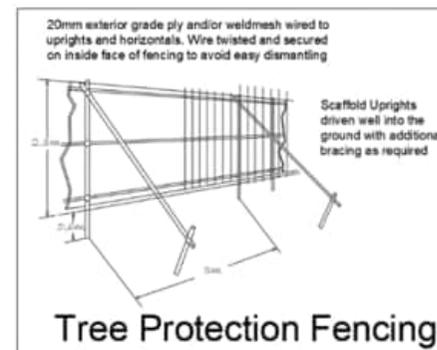
Tree Protection Measures.

Protection method	Symbol
High Risk Tree Protection Fencing Type 1 (TPF)	
Moderate Risk Tree Protection Fencing Type 2 (TPF)	
Low Risk Tree Protection Fencing Type 3 (TPF)	
Construction Exclusion Zones (CEZ)	
Tree Precautionary Zone (TPZ)	
Stem Protection Box (SPB)	

Reducing Risks to Trees. Potential conflicts between the proposal and the existing trees do exist where site levels and significant material changes extend into the Root Protection Area and protection is not used.

Foreseeable risks to the retained trees can be largely defended through the use of Tree Protective Fencing (TPF) outside the Root Protection Areas indicated by the magenta circle around retained trees, or adjusted cyan area. The location of (TPF) as shown below is included on the Arboricultural Impact Assessment Plan - APPENDIX – PLANS.

Examples of protective fencing types are included on the plan, the final choice for these barriers should be agreed within an Arboricultural Method Statement, though for construction of this type TPF1 should be used, an example of which is shown below from the BS5837, an alternative suitable for such a scheme is also shown. This product provides ease of access to operatives due to no bracing required and acts a dust / visual barrier.



Example above showing tree protection fencing 1 (BS5837:2012)



Example above showing tree protection fencing by the use Heras Steel Boarding. <https://www.heras-mobile.co.uk/fencing/steelboard>

Tree Protection Fencing (TPF) is to be used to define the location of **Construction Exclusion Zones (CEZ)** which are indicated by red net hatching shown opposite and on the Tree Protection Plan BA230623TPP attached as APPENDIX – PLANS.



The final details are to be agreed within an Arboricultural Method Statement, which shall detail access and activity within the **Tree Precautionary Zone (TPZ)**.

Principally, protection of retained trees will avoid excavation and minimise soil level changes and limit access by use of Tree Protection Fencing to limit access and avoid the effects of compaction and works within these areas.

Potential conflicts through the removal of existing hard surfacing shall be controlled using appropriate techniques and ground protection this should be detailed within an arboricultural method statement, to avoid direct damage and compaction and contamination of the soils.

The potential conflicts from traditional 'Cut and Fill' construction can be readily defended through the adoption of lower impact methods as outlined within BS5837:2012. Techniques and materials, which limit excavation and minimise soil level or compaction changes will need to be adopted within the Tree Precautionary Zone.

The principal protection requirements are shown on the Arboricultural Impact Assessment Plan BA230623AIA attached as APPENDIX – PLANS.

Where hard surfacing is required close to trees, BS5837:2012 and the principles of Arboricultural Practice Note 12, through the Trees to Development, AAIS 2007, [APN 12] regarding "No-Dig" surfacing will be employed, although incorporating improvements to the construction methods.

Location of Services. Services may be located within the RPA or close to retained trees, if required they should be located outside the RPA of retained trees. Where there is not an alternative and they need to enter the RPA, they can be readily defended by adopting low impact methods for installation. Ideally, services that are required will be installed away from trees.

Underground services near to trees will need to be installed in accordance with the guidance given in BS5837 together with the National Joint Utilities Group Volume 4 [NJUG4]: 2007. Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees (Issue 2).

Location of landscape areas within RPA. Where RPA's of retained trees enter the proposed landscape areas of the proposal, these areas should always be protected from compaction and level changes.

Post Development Pressure. Considering the layout and height of the buildings, some pruning will be required to prevent direct damage only and no other pressures are expected. Leaf litter will not cause additional conflict to the users and would not oblige the council to give consent for inappropriate tree works.

Conclusion.

Retained trees will need to be considered as part of the site and protected at every stage of the scheme from the potentially negative effects of groundworks and construction.

Foreseeable risks to the retained trees can be readily defended through the creation of Construction Exclusion Zones which will restrict access to the Root Protection Areas.

Where access into these areas is required, protection of the ground can be achieved through the establishment of Tree Precautionary Zones where required. as detailed on the Arboricultural Impact Assessment Plan - APPENDIX – PLANS.



Matt Metcalfe

Lead Surveyor/Consultant/UAS Pilot

FdSc Arboriculture

Arboricultural Association Professional Member (*M.Arbor.A*)

VALID Tree Risk Validator

APPENDICES

APPENDIX – CONSULTANT BRIEF QUALIFICATIONS AND EXPERIENCE

Mr Ian Barnes - Director
RCArbor.A, F.Arbor.A, C.Hort, CEnv,
Arboricultural Association Registered Consultant, Fellow Arboricultural Association, Chartered Horticulturalist, Chartered Environmentalist.
Professional member Consulting Arborist Society.
BSc (Hons), Arboriculture and Urban Forestry, HND Arboriculture, NDHI/Arb, Cert Arb L4 (ABC), ISA TRAQ Trained, QTRA Licensed

Ian has been in the Horticulture and Arboricultural industry since 1985. He has experience in commercial horticulture, Local Authority, and Highway Authority tree surveying. He has been a commercial Arboricultural climber for 15 years. He ran in partnership a tree and landscape contracting business for over 15 years. He has been a full time Arboricultural consultant since 2007. His main area of works are trees and development (BS5837) and advanced tree assessments using various advanced techniques. He is a qualified tree risk assessor and experienced in trees and subsidence claims. He is a trainer in the UK for Fakopp equipment, Sonic and Electronic tomography, and Dynaroot and Static Tree pulls. He is also director of a hi-tech arborist/ landscape equipment and training company Tree Diagnostics - providing training to arborists in advanced assessments. He undertakes ground-penetrating radar (Tree Radar) scans.

Mrs Sue Barnes- Director
CMLI, F.Arbor.A, C.Hort, CEnv, MBALI
Chartered Landscape Architect, Fellow Arboricultural Association, Chartered Horticulturalist, Chartered Environmentalist, Registered Designer BALL.
FdSc Arboriculture, NDHI/Arb
Professional Member Consulting Arborist Society, Affiliate member RIBA,

Sue has been in the Horticulture / Arboricultural industry since 1986. She has experience in amenity parks and gardens and has been a head gardener for Local Health Authority. In partnership she ran a tree contracting and landscape design and build company for 15 years and also has been a tree and landscape consultant full time since 2007. Her main area of works is detailed commercial planting design, specifications (NBS), tree planting specifications and Arboricultural management, Trees on development sites BS5837 reports and plans. Experienced in trees and subsidence and also legal and planning conditions in regard to trees and landscapes. Experienced in large scale landscape design for Housing developers, commercial schemes along with school design primarily detailed planting plans. Specialist landscape surveyor – Poisonous plants / Invasives. LVIA Landscape Visual Impact Assessments. Tree and Landscape planning locum consultant for Local authorities. Sue assists in undertaking ground-penetrating radar (Tree Radar) scans along with assisting with other further investigation works on trees such as tomography scans and assists in dynamic and static tree tests.

Mr Matt Metcalfe – Lead Surveyor/Consultant/UAS Pilot
M.Arbor.A
Professional member of the Arboricultural Association,
City and Guilds NPTC assessor/ Instructor
FdSc Arboriculture, National Diploma in Arboriculture, Level 5 Certificate in Education.
VALID tree risk validator
GVC Commercial Drone Pilot
IOSH Managing Safety in the Workplace

Matt has worked in the Arboricultural Industry since 2000. Firstly, as a climbing arborist in both the public and private sector. In 2009 Matt started teaching Arboriculture at a land-based college in York and became a City and Guilds NPTC assessor. In 2013 he became a course manager and internal verifier for the level 2 work-based learning-apprenticeships where later he became a senior course manager overseeing the management of other arboricultural courses. In 2018 he became a fulltime consulting arborist and provides advanced tree assessment training, undertakes BS5837 tree surveys, Arboricultural safety audits and is a trained tree risk assessor/validator. He undertakes ground-penetrating radar (Tree Radar) scans along with other further assessments on trees such as tomography, dynamic tree testing and static tree pulls. In 2021 he undertook the A2CoC and GVC Drone licences and carries out drone surveys of trees which also includes 2D and 3D mapping of sites. Also, in 2021 mat completed IOSH Managing safety in the workplace.

Mr Trevor Grigg – Consulting Arborist
Technical member of the Arboricultural Association,
Cert Arb L4 (ABC)
NC Horticulture (Arboriculture)
Lantra Professional Tree Inspector
QTRA Licensed

Since 2004, Trevor has been involved in Arboriculture firstly as a climbing arborist, then as an Arboricultural Officer for a local authority. He has gained experience of working with a wide range of clients, from residential tree owners to schools, Parish Councils and Highways departments providing a variety of tasks and requests such as risk assessments, management plans and replanting schemes. Trevor joined Barnes Associates in 2021 with a view to widening his experience of trees in relation to developments and further investigations of trees using the specialist equipment available.

Mr John Evans – Consulting Arborist
Technical member of the Arboricultural Association,
Forestry and Arboriculture Level 3
Lantra Professional Tree Inspector

For the past six years, John has been a climbing arborist, firstly working freelance for utility and domestic clients, then joining Darlington Borough Council. Whilst working for the council, he continued his professional development and working below and observing Darlington's Tree Officer. John was very excited to move into a role with Barnes Associates to continue his development, learning how to use the advanced tree surveying equipment and developing into BS5837 report writing.

Mr Benjamin Stoker - Project Coordinator/ Arb Surveyor/A2CoC UAS Pilot
Technical member of the Arboricultural Association
Forestry and Arboriculture Level 3
FdSc Arboriculture (ongoing)
Lantra Professional Tree Inspector

Ben started with Barnes Associates as a student placement whilst studying for his level 3 in Arboriculture and currently completing his foundation degree in Arboriculture. With a background originally in hospitality, his role of project coordinator has developed over the years, supporting clients and helping things run smoothly. His professional development is ongoing with studies for the FdSc in Arboriculture and progressing his career as a surveyor under mentorship from the Barnes Team.

Mr Jim Barnes – Arboricultural Surveyor
Technical member of the Arboricultural Association,
Extended Diploma Level 3 in Arboriculture & Forestry

Jim completed his Level 3 Extended Diploma in 2017 to become a commercial tree climber and tree care assistant as part of a private company. He gained experience of dealing with the latest, most invasive pest in Southern England, the Oak Processionary Moth, carrying out aerial decontamination and collection. He performed tree care works for District Councils and Highways, the Environment Agency through to medium to large scale forestry clearance and planting schemes. He has also undertaken plant healthcare throughout the country, using the latest modern technology and methods from soil aeration/decompaction works, utilising Air-Spade for root/ground care investigation, and remedial works to soil and/or roots in sensitive and hard to access locations. He then set up his own tree care company, focusing on proper care and management and carrying out remedial soil/ground works, general Arboricultural and tree surgery; coping with a range of clients and meeting the Local Authorities policies with managing planning applications and necessary aftercare, working to BS:3998:2010 standards. Before this he was involved within the Consulting industry from a young age, assisting with walkthrough tree assessments and further investigation works such as Tomography. He is now looking forward to expanding his education within the consulting industry by furthering his technical knowledge of further investigations and working towards advancing in BS5837 surveys.

Mr Lloyd Barnes – Arboricultural Surveyor
Technical member of the Arboricultural Association,
Extended Diploma Level 3 in Arboriculture & Forestry

Lloyd completed his Level 3 Extended Diploma in 2020 and then started working for a small private tree surgery firm, carrying out all aspects of tree work from tree management to soil care and everything in between in domestic, highway, and forestry settings. He has worked for large councils, Environment Agency, Forestry Commission, large development sites with large planting schemes and aftercare. He then set up his own tree care business focusing on the care and management of trees, undertaking works to BS3998:2010 standards. He also got into the specialist area of soil/ ground care management for trees. He worked with a wide range of clients throughout the time of running the business, dealing with all sorts of problems that come with running your own business. He has grown up being surrounded by the arboricultural industry. He now undertakes walk-round tree risk assessments and further assessments using sonic and electrical impedance tomography, expanding his knowledge, experience, and education in these areas. He is advancing into BS5837 surveys, working with numerous architects and developers.

APPENDIX - DESIGN CONSIDERATIONS

Care is needed regarding the retention of large, mature, over-mature or veteran trees which become enclosed within the new development. Where such trees are retained, adequate space should be allowed for their long-term physical retention and future maintenance. However, such retentions are seen as beneficial, helping to contribute to climate change resilience, amongst other benefits of habit and biodiversity. Achieving successful integration of large species trees requires careful consideration at the conceptual and design stages and specialist arboricultural input.

Design Considerations. To enable a realistic assessment of the probable impacts of any proposed development on the trees, and vice versa, the characteristics and condition of the trees should be taken into account. To maximize the probability of successful tree retention, the following factors are considered:

- Shading of Buildings. This can be a problem, particularly where there are rooms which require natural light.
- Shading of Open Spaces & Gardens. Enjoyment of outdoor spaces normally requires direct sunlight for at least for part of the day. However, *shading can be desirable to reduce glare or excessive solar heating, or to provide for comfort during hot weather.*
- Privacy and screening. The retention of trees helps to reduce overlooking by neighbours or to mitigate undesirable views, such as busy roads, railway lines or industrial premises.
- Direct damage. Below ground, damage to structures can occur because of incremental root and stem growth. In addition, above ground damage can occur to trees and structures by the continuous whipping of branches against the fabric of a building. Therefore, this needs to be considered to avoid the need for frequent remedial pruning or other maintenance.
- Future pressure for removal. The relationship of buildings to large trees can cause apprehension to occupiers or users of nearby buildings or spaces, resulting in pressure for the removal of the trees. Buildings and other structures should be sited to allow adequate space for a tree's natural development, with due consideration given to its predicted height and canopy spread.
- Seasonal nuisance. Trees are naturally growing and shedding organisms. Leaves of some species can cause problems, particularly in the autumn, by blocking gullies and gutters. Fruit can cause slippery patches or accumulations of honeydew, which can be damaging to surfaces. These aspects should also be considered.

In general, developments close to trees needs to maintain the site, and particularly the soils, close to the current prevailing conditions and avoid significant changes. However, a development is achievable providing the 8 key points listed below can be incorporated into the proposal's design: -

1. Available Space, the proposal should consider the available space both now and in the future, and avoid the need to remove large diameter branches and stems whilst providing sufficient space for future growth.
2. Foundations, the proposal will need to offer support to the structures with the need for minimal excavation to avoid tree root severance, typically a pile and beam or partial cantilever solution could be considered following the advice of a structural engineer.
3. The Building, particularly the underside of the proposal, will need to be above the current soil level to avoid compaction, excavation and ensure continued soil hydration and aeration. Typically, either a timber frame or block and beam can be adopted to achieve this relatively simply.
4. Ground Protection needs to be a principal theme running throughout the proposal with the current ground being protected from Excavation, Cultivation or Compaction and should remain wherever possible close to its current condition. This can be significantly simplified through the adoption of timber frame construction avoiding the need for potentially damaging heavy weights and potential noxious material such as concrete blocks, bricks and chemicals such as cements to be used near trees.

5. Services for the proposal should be located outside the Root Protection Area to avoid the need for excavation. Where new services are required within the Root Protection Area, these should adopt low impact methods of installation such as moling. Ideally, existing site utilities should be either isolated and retained in situ where they extend into the RPA or recycled or upgraded where this can be done without excavation.
6. Hard surfacing will typically be required unless it can be substituted for decking or above ground walkways. Hard surfacing will need to be installed without the need for excavation and should be porous to allow continued soil hydration and aeration. Typically, either a porous paving system or gravel supported by a NO-dig foundation such as Cell-Web can be adopted to achieve this.
7. Building use, within the proposal, available light should help inform the building design, layout and its use. Ideally, windows and views should be directed away from trees and toward open areas. In addition, the use of secondary or passive light through light reflecting tubes should be considered to help reduce the negative aspects of large trees.
8. Building maintenance will be required, particularly where canopies of trees extend close to or above the roofline, causing maintenance difficulties due to leaf and organic matter build up in the gutters and down pipes. This problem needs to be designed out as far as possible by the addition of filters in the gutters to restrict the access to leaves and small twigs.

The design should take account of the effects of any tree loss required to implement the design, and any potentially damaging activities proposed near retained trees. This might include the removal of existing structures and hard surfacing, the installation of new hard surfacing and the installation of services.

APPENDIX - RISKS TO TREES DURING CONSTRUCTION

The following operations are all very damaging to trees. I have included a poster that demonstrates these points, and this might be useful for full circulation:

Compaction of the soil - Compaction will destroy the soil structure by removing the spaces between soil particles preventing the uptake of oxygen and nutrients. Compaction is caused by storage of materials, including bricks, soil, gravel and cement, and even a single vehicle movement will cause damage. Compacted ground will also affect soil drainage, which may then cause waterlogging.

Excavations - any excavations close to the tree are likely to cause root severance. The closer excavations occur to the tree the more severe the damage. Root severance will lead to loss of vigour of the tree, reduce uptake of water and nutrients, allow access for decay organisms, and increase likelihood of wind throw.

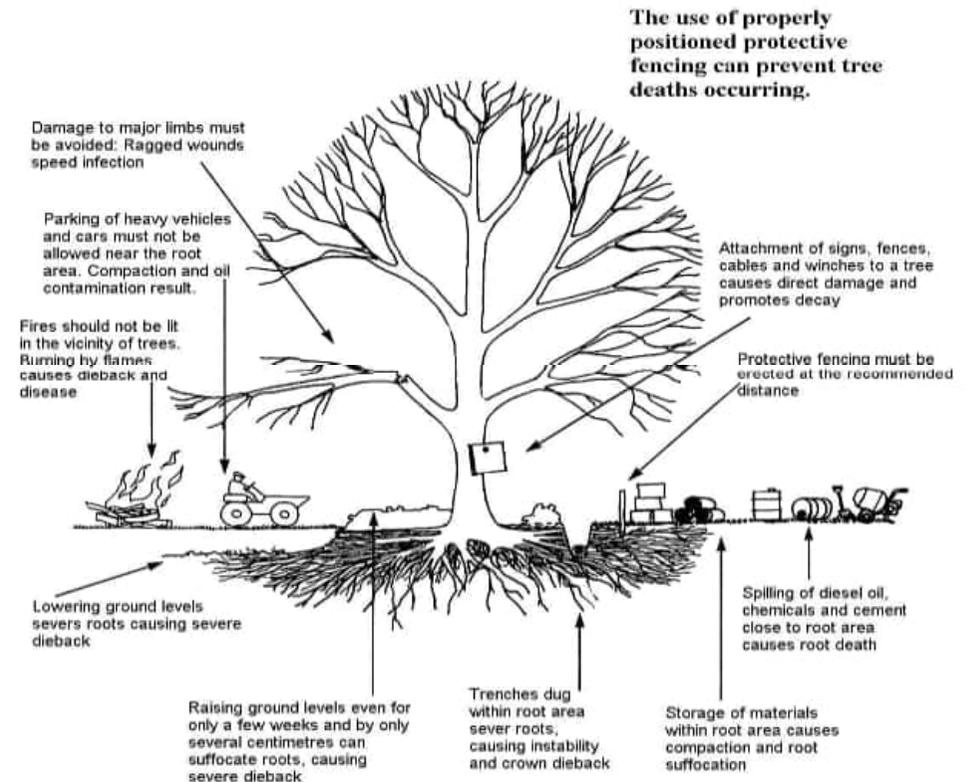
Ground level changes - both reduction and raising of soil levels will be detrimental even if this is only by a few centimetres. Reducing ground levels will sever roots and can increase the drainage of a site thereby reducing water availability. Raising ground levels will cause compaction, suffocate roots and damage fibrous roots.

Impact damage - this can be caused by machinery - including torn branches and damage to bark and trunks. This will lead to entry for decay organisms and reduced vigour.

Soil contamination - this can be caused by spillage of oil, fuel and chemicals, and mixing cement or other materials. Allow for sloping ground – keeping toxic material downhill from trees and aim to store them 10m from the Protected Zone to allow for leaching through the soil.

Fires - both the intense heat and direct flame will damage the trees causing loss and damage to both major roots and fibrous roots. Intense heat will damage the trees vascular system under the bark even if the bark does not appear burnt.

Common causes of Tree Death



APPENDIX - TREE CONSTRAINTS

Legal constraints. Trees can be protected by planning legislation in several ways. These include being located within a National Park or on a Site of Special Scientific Interest, located within the grounds of a listed building, conservation area or by being subject to a current Planning condition. In general, the main type of protection for trees adopted by the Local Planning Authority (LPA) on potential development sites is the Tree Preservation Order (TPO).

The protection of trees is a duty of the LPA under the Town and Country Planning act 1990 and aims to encourage rational discussion and consideration of trees within the design process. The following guidelines are proposed to encourage rational discussion and consideration of trees within the design process. Legislation indicates that protection should be used to protect healthy trees that are likely to have a reasonable safe useful life expectancy. Generally, those classified with a condition rating of (A) Excellent & (B) Good are worthy of a TPO. Those classified (C) Fair are generally poorer and therefore unlikely to qualify for a TPO on grounds of poor appearance, management issues or unlikely to have a sufficient safe life expectancy. Those trees classified (U) are Unsuitable for retention, generally contain structural defects, have a short safe useful life expectancy or are dangerous and therefore would not qualify for a TPO as indicated within the legislation.

The presence of a TPO should be expected upon development sites for the above reasons. It can however only be regarded as a material consideration, as can any other tree or significant natural feature, and cannot be used as a means of preventing development. Any trees protected or otherwise, which are located on or close to the site can be expected to be regarded as a material consideration or offer a design constraint within the development process.

General Constraints posed by existing trees. The constraints imposed by trees, both above and below ground should inform the site layout design, although it is recognized that the competing needs of development mean that trees are only one factor requiring consideration.

Certain trees are of such importance and sensitivity as to be major constraints on development or to justify its substantial modification. However, care should be taken to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal.

Our tree survey schedule in APPENDIX – BS5837 TREE SCHEDULE & EXPLANATORY NOTES and the tree survey plan in APPENDIX - PLANS includes the relevant constraint information, plotted around each of the categories A, B and C trees and included information on shading and the minimum Root Protection Area (RPA), in addition to a suggested limit for construction.

Typically, development should endeavour to retain category A & B trees and category C trees where they can be either improved and included in low risk areas or help improve biodiversity.

Ideally, structures should be located outside areas of shading and the recommended construction limit (Minimum Root Protection Areas plus an additional 2 metres) of trees to be retained should inform the development. However, in some cases the existing site layout has impacted on the trees, in particular when existing structures or hard surfacing extend or have been installed in the root protection areas. To help understand this I have colour coded the principal Structures, Hard Surfacing, Services, Earthworks and areas of High water content on the tree survey plan in APPENDIX - PLANS

However, where there is an overriding justification for construction within the RPA, technical solutions might be available that prevent damage to the tree(s). If operations within the RPA are proposed additional information can be provided to demonstrate that the tree(s) can remain viable and offer mitigation measures such as but not limited to, improvements to the soil environment that is to be used by the tree for growth.

APPENDIX - TREE PROTECTION

Protection of retained trees. The successful retention of trees depends on the quality of the protection and the administrative procedures to ensure those protective measures remain in place while there is a risk of damage. An effective means of doing this is through an arboricultural method statement that can be specifically referred to in a planning condition. A method statement for this site should ideally be agreed. Implementation of a method statement will allow all the retained trees to survive without any adverse impact and allow them to continue to contribute to local amenity and character.

Limiting Threats to Trees. To help reduce the potential impact of site changes BS5837:2012 recommends in Section 3.7 that a Root Protection Area (RPA) is included as a layout design tool. This protected area is based upon the Root Protection Area - a point equivalent to 12 times the trunk diameter. This indicates the minimum area around a tree deemed to contain sufficient roots and rooting volume to sustain the tree's viability, though ideally the offset shown as the Construction Limit should be adopted to provide additional space and enable trees to thrive.

Tree Protection: where retained trees need to be protected this is most easily achieved by establishing a Construction Exclusion Zone (CEZ) as part of a Tree Protection Zone (TPZ) to protect the roots and aerial parts as recommended in BS5837:2012 – further details upon request. Within this area, retained trees need to be protected from the effects of site changes and in particular excessive root severance, soil level changes or soil compaction.

Appropriate site organisation and management are essential following the adage of '*Prevention is better than Cure*'. Unfortunately, tree damage can easily occur and although it is costly to repair, it comes with few guarantees.

Inside the exclusion area of the fencing, the following actions need to be avoided: -

- No linear mechanical excavation whatsoever.
- No excavation by any other means without arboricultural site monitoring.
- No hand digging without a written Method Statement having first been approved in writing by the consulting arboriculturist.
- No lowering of levels for any purpose (except removal of grass sward by hand).
- No construction of a sealed hard surface (except where agreed with the arborist)
- No storage of plant or materials.
- No storage or handling of any chemical, including cement washings.
- No vehicular access.
- No fire lighting.

In addition to the above, further precautions are necessary adjacent to trees: -

- A 10m separation distance shall be observed between any tree and substances injurious to tree health, including fuel, oil, bitumen, cement (including cement washings), builders' sand, concrete mixing and other chemicals.
- No fire shall be lit such that flames come within 5m of tree foliage; this shall be taken to mean a fire separation distance of 20m from any tree's canopy.

Protective Fencing: Based on tree survey data, Root Protection Area (RPA) have been calculated for the trees identified for retention and included in the tree schedule in Appendix C. The RPA's are designed to protect at least a functional minimum of tree root mass in order to ensure that the trees survive the construction process. Tree protection will need to

be installed following the initial tree works and before the onset of any demolition or ground works. The RPA should remain in position for the whole of the construction and demolition phase.

Protection fencing is highlighted on the Impact assessment Plan.



Severe Risk Area's - Stem Protection (TST).

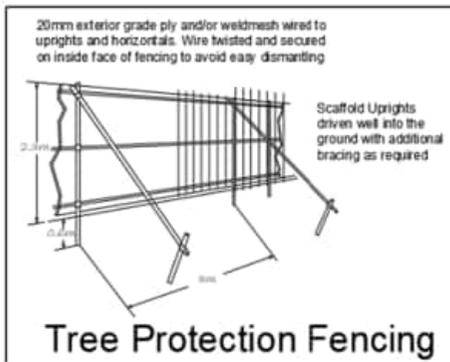
To be protected from impact damage by Boarding or Plywood Boxes constructed clear of the stem. Boxes are to contain compressible material to absorb shock loading. To be located where vehicles may come into direct contact with existing trees.

High Risk - Tree Protection Fencing (TPF1)



High Risk - Tree Protection Fencing (TPF1)

Alternative TPF1 – upon agreement only.
Ideal for where space is limited. Posts are fixed into ground.



This is to be provided by Braced Heras Fencing or solid panels. Post-holes shall be excavated by powered hand auger or low ground-pressure plant working of ground protection or outside the Precautionary Zone. Alternative more traditional post supports such as the Heras Steadfast system with an additional brace can be used where this can be pinned into position and fitted with an Anti-Tamper Coupler.



Protection Fencing (TPF2)

This is to be erected as a temporary barrier to protect areas designated for later construction or landscaping the Precautionary Zone. This shall consist of Heras type panels mounted onto rubber/concrete 'boots' as shown opposite.



Low Risk - Protection Fencing (TPF3)

This is to be erected as a visual barrier to protect areas designated for no or later construction. Consisting either stock fencing, post and rail fencing, Chestnut Pale fencing or Orange Extruded Plastic Netting.

Ground Protection (Temporary): Access across the RPA, if this is required this can be achieved for the duration of the development phase in such a way, which will reduce the potential negative effects of compaction.



No Dig-Ground Protection GP1 - Option 1
For lower traffic areas, where heavy vehicles are expected, substitute compacted stone infill with a temporary above ground Trackway. This avoids the need for excavation and limits the weight of material build up and limits compaction when installed with compressible sub-surface.



Ground Protection GP2 - Option 1
Where pedestrian-operated plant up to a gross weight of 2t are forecasted, proprietary, interlinked ground protection boards are available, such as DuraDeck or Ground Guard. These can limit compaction when installed with compressible sub-surface.



No Dig-Ground Protection GP1 - Option 2
For high use areas or where heavy vehicles are expected, substitute traditional dig out and compacted stone infill with an above ground Cellweb or similar, to avoid the need for excavation and limit compaction – may be retained as a porous sub base for hard Surfacing within the scheme.



Ground Protection GP2 - Option 2
For more permanent small plant and pedestrian movements ground protection in the form of a single thickness of scaffold boarding supported by scaffold, as opposite, can be adopted to bridge areas and avoid compaction.



No Dig-Ground Protection GP1 - Option 3
Void forming system such as Permavoid or ArborRaft act as a protection to the tree roots and avoid the need for excavation. These systems also limit the weight of material build up and can be installed with compressible sub-surface. – may be retained as a porous subbase for hard surfacing within the scheme.

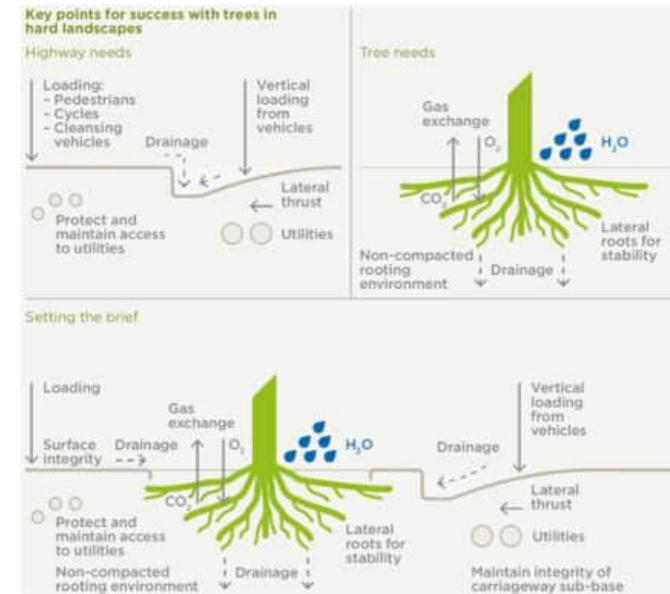


Ground Protection GP3
For Pedestrian movements ground protection in the form of a single thickness of scaffold boards or plywood on top of a compressible layer (Woodchip) laid onto a geotextile, or supported can be used to form the access or provide a sub base to other ground protection.

Ground Protection (Permanent): The creation of Hard Surfacing within or close to trees offers a risk to trees through compaction, excavation, soil level changes or contamination and these need to be avoided or appropriately defended as indicated opposite, so that underlying soils can continue to allow the ingress of water and exchange of gas between the soil and the atmosphere. Protective measures can be adopted successfully to help retain trees and this information should be agreed within Arboricultural Method Statement.

To counter risks, all hard surfacing shall be above the existing ground within the Root Protection Area using a porous sub-base or by bridging to support f a permanent porous surface/wearing course. This will maintain continued gaseous exchange and water ingress as outlined in the opposite brief copied from Tree in the Hard Landscape (TDAG).

On the majority of sites, substituting traditional compacted stone infill with ArborRaft or Cellweb as described above will provide appropriate protection. Alternatives may include grates, a suspended pavement or road by installing pre-cast elements avoiding largescale excavation and limiting the weight of material build up. Alternatively, a cast concrete slab or above ground concrete deck supported by piles can be adopted for sites with difficult access, soils or strata as shown in the examples below.



Construction within the Root Protection Area: The creation of structures within or close to trees offers a risk to trees through compaction, excavation, soil level changes or contamination and again these need to be avoided or appropriately defended so that underlying soils can continue to allow the ingress of water and exchange of gas between the

soil and the atmosphere. Protective measures can be adopted successfully to help retain trees and this information should be agreed within Arboricultural Method Statement. The work is in line with best practice guidance detailed in section 7.5.2 and 7.5.5 of BS5837:2012 Trees in relation to design, demolition and construction – Recommendations, that states:

Section 7.5.2 recommends Root damage can be minimized by using:

- piles, with site investigation used to determine their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600 mm.
- beams laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

In section 7.5.5 the standard states - Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters for temporary ground protection given in 6.2.3. Use of the smallest practical piling rig is also important where piling within the branch spread is proposed, as this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete, e.g. Sleeved bored pile or screw pile.

Example 1 -Screw Piles. Using the hydraulic rotation motor, the screw pile can be installed from outside the outside the Root protection area. Usually, heavy buildings that need several piles to be installed use this method of installation before being joined by a beam.



Example 2 – Thrust or Bored Piles. Small plant piles can be installed within Root protection area. To enable heavy buildings to be supported several smaller piles can be connected to form a pile cap providing improved support as shown below.



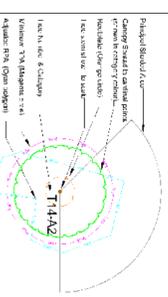
APPENDIX – PLANS

Tree Impact Appraisal Plan – BA230623AIA (A1 Plan Attached)

Stonenhurst

© Barnes Associates Ltd. This plan should be viewed in colour. Please do not scale from this drawing. All dimensions should be checked on site. Any errors or omissions should be reported to the author. No liability is accepted for any loss or damage, including consequential loss, arising from the use of this plan. The plan remains the property of Barnes Associates Ltd until all fees are paid in full.

Individual Tree Symbols



Tree Management Requirements

Trees to be retained within the scheme are protected in line with the guidelines set out in BS5837.

Tree Group Hedge & Woodland Shelterbelt

- Retained group hedge
- Retained group shelterbelt
- Retained group canopy
- Retained group canopy (open)
- Group trees to be retained
- Group trees to be retained (open)
- Group trees to be retained (open)
- Group trees to be retained (open)

Zone of Infringement (ZOI)

Indicated by Magenta shading. Areas of conflict within RPA's of retained trees.

Trees to be retained and protected in line with BS5837 through requiring facilitation pruning. Pruning to be in line with BS3998.

Trees to be removed to enable the scheme to be carried out as proposed. All works to be undertaken in line with BS3998.

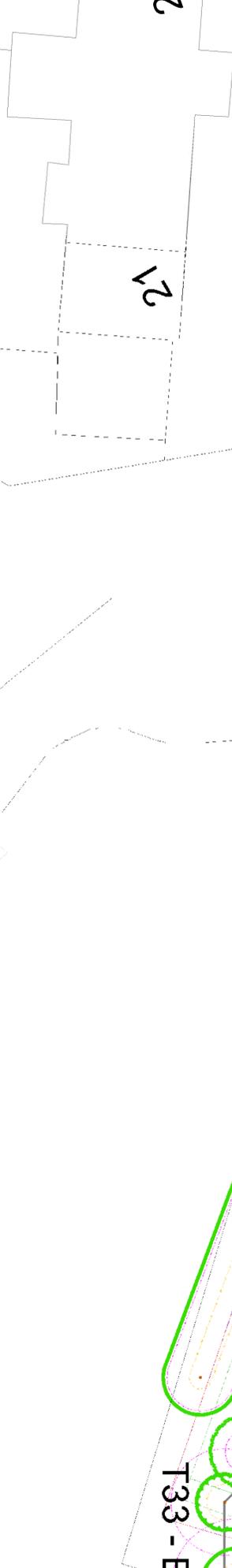
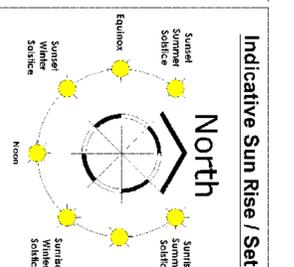
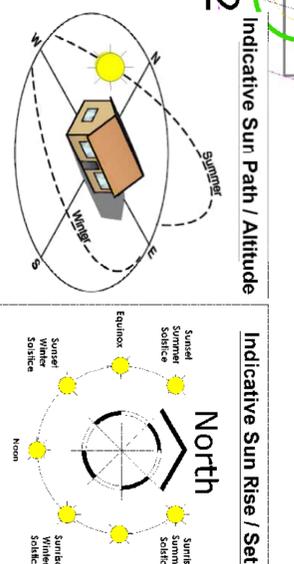
Trees identified as U category requiring management, irrespective of scheme.

Plan is based upon the supplied topographical survey. Plans of this plan are available in CAD format. dwg & dxf upon request. Dimensions/height/width not provided. Existing/Proposed level data not provided. Excavation dimensions/depth not provided. No detailed cross sections/drawings provided of structures.

Client	Newett Homes
Address	Dodworth, Barnsley, S75 3RR
Project	BARNES Associates Ltd
Reference	BA230623A/A
Date	1:150 @ A1
Issue	22/08/2024
Author	SB
Checker	SB

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Horticulture BAU



Tree RPA Modification
 TS, T11 and T13 and T14's RPA has been modified due to the presence of the stone retaining wall. Assumed RPA positions are estimated.

Tree Pruning
 T6-T8 should be heavily reduced away from the proposal retaining a clearance of 2.5m. In line with BS3998:2010 limiting wound size to 75mm.
 T6 should also be crown lifted to 5m above the highest point of the access to facilitate vehicle clearance.

Zone of Infringement (ZOI)
 This proposal impacts on trees T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T68, T69, T70, T71, T72, T73, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85, T86, T87, T88, T89, T90, T91, T92, T93, T94, T95, T96, T97, T98, T99, T100.
 This proposal impacts on trees T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T68, T69, T70, T71, T72, T73, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85, T86, T87, T88, T89, T90, T91, T92, T93, T94, T95, T96, T97, T98, T99, T100.
 This infringement is thought to be defensible using specialist design and construction methods in line with an Arboricultural Method Statement such as bridging the highway on either side foundations or cantilevering from the retaining wall subject to an engineers report.
 Unit 1 should adopt pile foundations due to the infringement and to allow future root development.

Tree Pruning
 T19 should be crown lifted reduced away from the proposal retaining a clearance of 2.5m. In line with BS3998:2010 limiting wound size to 75mm.

Zone of Infringement (ZOI)
 The proposal impacts on T19's Root Protection Area by an estimated 15%. This infringement is thought to be defensible using specialist design and construction methods in line with an Arboricultural Method Statement.

TREE MANAGEMENT REQUIRED TO ENABLE SCHEME: REFER TO BA230623AIA

Est	Tag No.	Name	Age	Height (m)	Height (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Tree works to enable the scheme	Arboricultural Impact and Protection Measures	Risk	Rootplate (m)	Root Protection Radius (m)	Root Protection Area (m ²)
Est DBH	ST1	Common Plum	M	5	0	0.5	0.5	0.5	0.5	Poor	10 or less	U	400	1	Remove to enable the scheme	Loss of a high stump.	Minimal	1.6	4.8	72.39
Est DBH	T2	Lawson Cypress	EM	6	0	2.5	2.5	2.5	2.5	Good	20 or more	B2	100 100 100 100	4	Remove to enable the scheme	Loss of a good category tree.	Insignificant	0.8	2.4	18.1
Est Pos, Est DBH	G3	Sycamore, European Holly, Goat Willow, Elder, Rhododendron	SM	8	1	3	3	3	3	Fair	10 or more	C2	100	1	Remove entire group to enable the scheme	Loss of a fair category group which is thought to be self seeded.	Minimal	0.4	1.2	4.52
Est Pos, Est DBH	G4	Sycamore, European Holly, Elder, Rhododendron	SM	8	1	3	3	3	3	Fair	10 or more	C2	75	1	Remove entire group to enable the scheme	Loss of a good category group which is thought to be self seeded.	Minimal	0.3	0.9	2.55
	T5	Horse Chestnut	M	12	1	6	6	4	6	Poor	10 or less	C2	550	1	None	RPA infringement unable to calculate accurately due to offset RPA. Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Slight	2.2	6.6	136.87
Est Height	T6	Sycamore	M	20	5	3	8	3	8	Good	20 or more	B2	640	1	Lateral reduction from the proposal in line with BS3998:2010 by 2.5m limiting wound size to 75mm	RPA infringement unable to calculate accurately due to offset RPA. Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Insignificant	2.56	7.68	185.32

Est	Tag No.	Name	Age	Height (m)	Height (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Tree works to enable the scheme	Arboricultural Impact and Protection Measures	Risk	Rootplate (m)	Root Protection Radius (m)	Root Protection Area (m ²)
Est Height	T7	Sycamore	M	20	5	3	8	3	8	Good	20 or more	B2	650	1	Lateral reduction from the proposal in line with BS3998:2010 by 2.5m limiting wound size to 75mm	RPA infringement unable to calculate accurately due to offset RPA. Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Insignificant	2.6	7.8	191.16
Est Spread, Est Height	T8	Horse Chestnut	M	20	3	4	9	8	7	Good	20 or more	B2	870	1	Lateral reduction from the proposal in line with BS3998:2010 by 2.5m limiting wound size to 75mm. Crown lift above access point/highway facilitating 5m for vehicles.	RPA infringement unable to calculate accurately due to offset RPA. Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Minimal	3.48	10.44	342.46
Est Spread, Est Height, Est DBH	T9	Horse Chestnut	M	20	3	6	6	2	7	Good	20 or more	B2	550	1	None	RPA infringement unable to calculate accurately due to offset RPA. Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Minimal	2.2	6.6	136.87
Est Height, Est Spread, Est DBH	T10	Sycamore	M	20	6	4	7	4	8	Good	20 or more	B2	700	1	None	Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Insignificant	2.8	8.4	221.7
Est Height, Est Spread, Est DBH	T11	Sycamore	M	20	6	4	7	4	8	Good	20 or more	B2	650	1	None	Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Insignificant	2.6	7.8	191.16

Est	Tag No.	Name	Age	Height (m)	Height (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Tree works to enable the scheme	Arboricultural Impact and Protection Measures	Risk	Rootplate (m)	Root Protection Radius (m)	Root Protection Area (m ²)
	T12	Horse Chestnut	EM	6	2	4	4	4	4	Fair	10 or more	C2	150	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	0.6	1.8	10.18
Est Spread, Est Height	T13	Horse Chestnut	EM	20	2	4	6	2	6	Good	20 or more	B2	420	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	1.68	5.04	79.81
Est Spread, Est Height	T14	Horse Chestnut	EM	20	2	3	7	5	6	Good	20 or more	B2	450	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	1.8	5.4	91.62
Est Spread, Est Height	T15	Sycamore	EM	14	3	2	2	4	4	Good	20 or more	B2	250	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	1	3	28.28
Est Pos, Est DBH, Est Spread	T16	Common Ash	M	16	5	3	7	3	5	Poor	10 or less	U	500	1	Remove due to safety	Loss of poor tree.	Moderate	2	6	113.11

Est	Tag No.	Name	Age	Height (m)	Height (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Tree works to enable the scheme	Arboricultural Impact and Protection Measures	Risk	Rootplate (m)	Root Protection Radius (m)	Root Protection Area (m ²)
Est Spread, Est Height, Est DBH	T17	Horse Chestnut	EM	14	2	3	7	5	6	Good	20 or more	B2	400	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	1.6	4.8	72.39
Est Height, Est Spread, Est DBH	T18	Common Ash	M	20	5	7	7	8	7	Good	20 or more	B2	700	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	2.8	8.4	221.7
Est Pos, Est Height, Est Spread	T19	Common Walnut	EM	16	2	6	6	5	2	Good	20 or more	B2	350 350	2	Crown lift above outbuilding to facilitate 5m ground clearance.	RPA infringement 15%. Tree Protection Fencing Tree Precautionary Zone Construction Exclusion Zone.	Insignificant	1.98	5.94	110.86
Est Pos, Est DBH	G20	Sycamore, Common Hawthorn	SM	5	0	2	2	2	2	Fair	10 or more	C2	100	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	0.4	1.2	4.52

Est	Tag No.	Name	Age	Height (m)	Height (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Tree works to enable the scheme	Arboricultural Impact and Protection Measures	Risk	Rootplate (m)	Root Protection Radius (m)	Root Protection Area (m ²)
Est Pos, Est DBH, Est Spread	T21	Sycamore	EM	16	3	5	5	5	5	Good	20 or more	B2	500	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	2	6	113.11
Est Pos	T22	Silver Birch	EM	15	2.5	3	3	3	3	Good	20 or more	B2	150	1	Remove to enable the scheme	Loss of a good category tree.	Insignificant	0.6	1.8	10.18
Est Pos, Est DBH	G23	Sycamore, Common Hawthorn, European Holly, Elder, Rhododendron	SM	8	1	3	3	3	3	Fair	10 or more	C2	100	1	Remove entire group to enable the scheme	Loss of a fair category group which is thought to be self seeded.	Minimal	0.4	1.2	4.52
Est Pos, Est DBH, Est Spread	G24	Leyland Cypress	EM	12	1	3.5	3.5	3.5	3.5	Good	20 or more	B2	200	1	Remove entire group to enable the scheme due to excessive pruning required to retain.	Loss of a good category group.	Insignificant	0.8	2.4	18.1
Est DBH, Est Height, Est Pos, Est Spread	T25	Sycamore	EM	10	1	2.5	2.5	2.5	2.5	Good	20 or more	B2	300	1	None	Tree Protection Fencing Construction Exclusion Zone.	Minimal	1.2	3.6	40.72
	T26	Common Ash	SM	10	2.5	3	2	0.5	2	Fair	10 or more	C2	150	1	None	Tree Protection Fencing Construction Exclusion Zone.	Minimal	0.6	1.8	10.18
Est DBH, Est Group Numbers, Est Pos, Est Spread	G27	Common Ash, Common Plum, Elder	EM	10	0.5	2	2	2	2	Fair	10 or more	C2	250	1	None	Tree Protection Fencing Construction Exclusion Zone.	Minimal	1	3	28.28

Est	Tag No.	Name	Age	Height (m)	Height (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Tree works to enable the scheme	Arboricultural Impact and Protection Measures	Risk	Rootplate (m)	Root Protection Radius (m)	Root Protection Area (m ²)
Est DBH, Est Group Numbers, Est Pos, Est Spread	G28	Sycamore, Common Ash	SM	11	0.5	3	3	3	3	Fair	10 or more	C2	150	1	Remove entire group to enable the scheme	Loss of a fair category group	Slight	0.6	1.8	10.18
	T29	Common Pear	M	6	0.5	2.5	2.5	2.5	2.5	Poor	10 or more	C2	300	1	Remove to enable the scheme	Loss of fair category tree.	Minimal	1.2	3.6	40.72
	T30	Common Ash	SM	8	0.5	1.5	1.5	1.5	1.5	Fair	10 or more	C2	175	1	Remove to enable the scheme	Loss of fair category tree.	Insignificant	0.7	2.1	13.86
	T31	Common Plum	EM	6	0.5	1.5	0.5	2	2	Fair	20 or more	B2	175	1	Remove to enable the scheme due to excessive pruning requirements to retain.	Loss of good category tree.	Insignificant	0.7	2.1	13.86
Est DBH, Est Group Numbers, Est Pos, Est Spread	G32	Sycamore, Common Ash, Apple, Elder, Leyland Cypress	M	9	0.5	2	2	2	2	Fair	20 or more	B2	300	1	None	Tree Protection Fencing Construction Exclusion Zone.	Minimal	1.2	3.6	40.72
	T33	Silver Birch	EM	8	0.5	1.5	1.5	1.5	1.5	Good	20 or more	B2	170	2	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	0.96	2.88	26.06
	T34	Goat Willow	EM	5	0.5	2	2	2	2	Fair	10 or more	C2	100	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	0.4	1.2	4.52

Est	Tag No.	Name	Age	Height (m)	Height (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Tree works to enable the scheme	Arboricultural Impact and Protection Measures	Risk	Rootplate (m)	Root Protection Radius (m)	Root Protection Area (m ²)
Est DBH,Est Group Numbers,Est Pos,Est Spread	G35	Sycamore, Common Hawthorn, Common Ash, Elder, Rowan, Common Juniper, Leyland Cypress	EM	7	0.5	2	2	2	2	Good	20 or more	B2	150	1	None	Tree Protection Fencing Construction Exclusion Zone.	Insignificant	0.6	1.8	10.18

TREE SURVEYS

Health & Safety Surveys
Risk Assessments
Homebuyer (Mortgage and Insurance)
Veteran & Venerable Trees
Legal & Law (TPO & Valuations)

ADVANCED ASSESSMENTS

Decay & Defect Scans
Tree Stability Checks
Tree & Plant Health Care
Root Detection & Mapping
Aerial Inspections

PLANNING & DEVELOPMENT

BS5837 Tree Surveys
Impact Assessments
Method Statements
Planning Conditions
CAD Plans (2D & 3D)

LANDSCAPE ARCHITECTURE

Commercial Landscape Design
LVIA (Landscape Visual Impact Assessments)
Landscape Management
Garden Design
Green Infrastructure



Appendix B Desk Study Data

Ecology Addendum Report

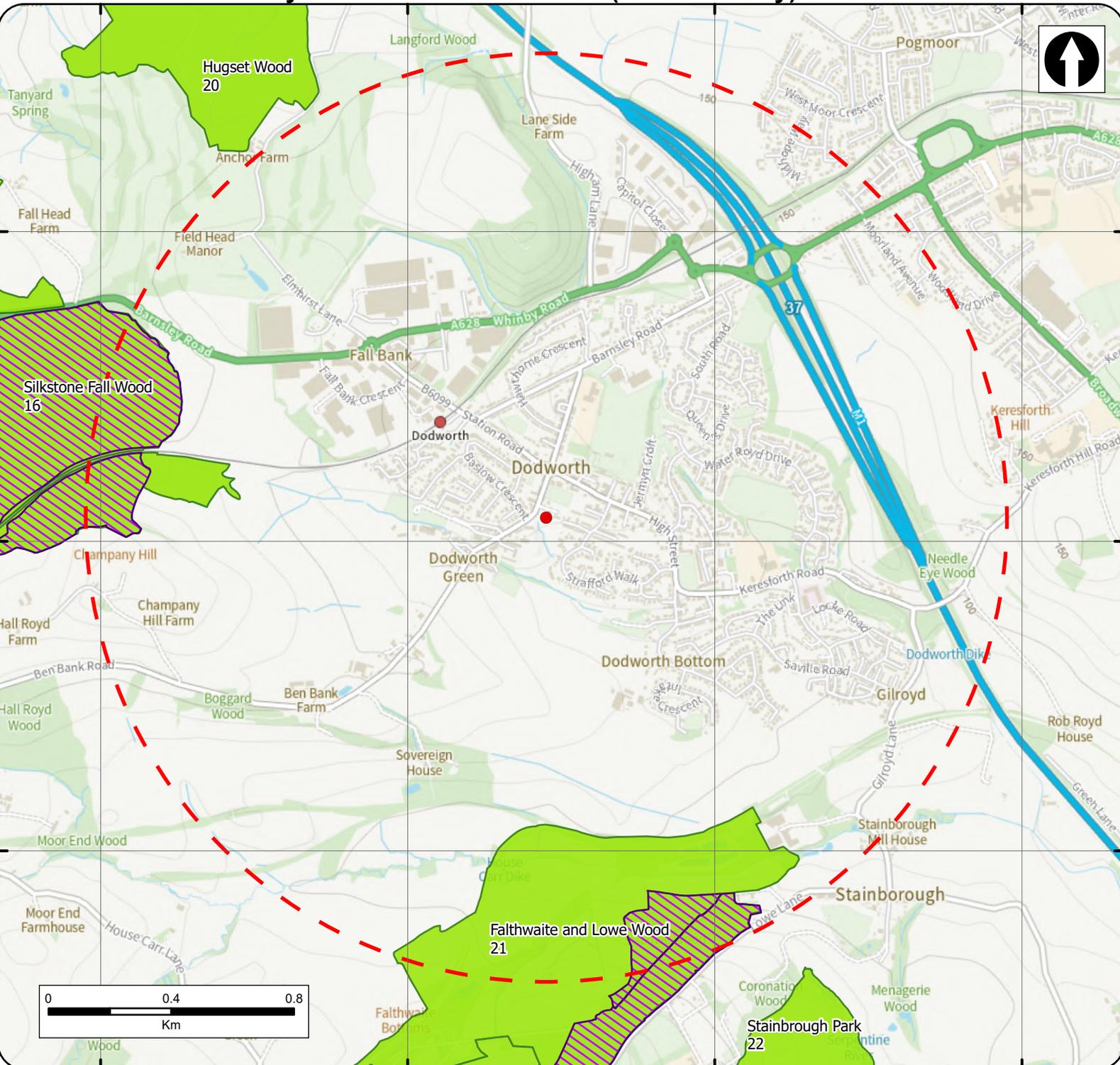
Dodworth Green Lane, Dodworth

Newett Homes Ltd

SLR Project No.: 424.065401.00001

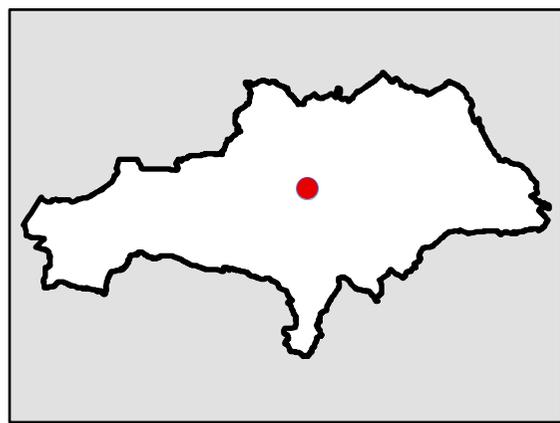
18 November 2024

Boundaries of Statutory and Local Wildlife Sites (non-statutory) Within the Search Area



Dodworth Green Lane Barnsley

-  Centre of Search Area
-  Local Wildlife Sites - Barnsley
-  Barnsley Boundary
-  1.5km radius
-  Ancient Woodland Natural England selection



Site Name:	Silkstone Fall Wood
Site Area:	62.36ha
Survey Date:	August 2010
Nearest Settlement:	Silkstone
Grid Reference at Centre:	SE29814, 05464
Surveyor(s)	LAC, VG

Site Description:

This site lies to the west of Dodworth and the M1, occupying an area that is on the register of replanted ancient woodland sites. The site slopes from the southeast to the northwest, from about 150m above sea level to around 90m above sea level in the valley of Silkstone Beck on its northwest edge. The site is crossed in the north by the A628 Barnsley Road and in the south by the railway between Penistone and Barnsley.

Large areas of the woodland have been planted with coniferous plantation (TN1, TN5, TN10) and mixed plantation (TN11) and there is also some broadleaved plantation (TN2, TN6). However, to the north of the A628 the woods are quite diverse semi-natural broadleaved woodland (TN7, TN8). Similar strips travel around the edges of the largest and mainly replanted central plantation block, southwards to the railway (TN3, TN9, TN12) generally following the courses of northwest flowing tributaries of Silkstone Beck.

There are various small watercourses running through this central area and also one small pond. South of the railway there is a more-or less even distribution of semi-natural broad-leaved woodland and conifer plantation.

Important Species:

Remote sedge (*Carex remota*), bluebell (*Hyacinthoides non-scripta*), wood millet (*Milium effusum*), dog's mercury (*Mercurialis perennis*), sessile oak (*Quercus petraea*), greater stitchwort (*Stellaria holostea*), wood speedwell (*Veronica montana*), wood melick (*Melica uniflora*), wood sorrel (*Oxalis acetosella*), yellow archangel (*Lamium galeobdolon*) and yellow pimpernel (*Lysimachia nemorum*) are all present on this site. These ancient woodland indicator species for South Yorkshire.

UKBAP breeding bird species include willow tit (*Poecile montanus*), dunnock (*Prunella modularis*), bullfinch (*Pyrrhula pyrrhula*) and song thrush (*Turdus philomelos*). Lesser spotted woodpecker (*Dendrocopos minor*) has been recorded a few years ago and may still breed in the area and is overlooked.

UKBAP species brown hare (*Lepus europaeus*) was noted in the south of the site during the 2010 survey.

Target Note:	TN1	
Habitat:	Coniferous plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Pinus nigra</i>	Black Pine	D
<i>Rubus fruticosus agg.</i>	Bramble	A
<i>Pteridium aquilinum</i>	Bracken	F
<i>Larix sp.</i>	Larch species	F
<i>Geum urbanum</i>	Wood Avens	O
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Hyacinthoides non-scripta</i>	Bluebell	R
<i>Betula sp.</i>	Birch species	R
<i>Epilobium montanum</i>	Broad-leaved Willowherb	R
<i>Sambucus nigra</i>	Elder	R
<i>Castanea sativa</i>	Sweet Chestnut	R
<i>Sorbus aucuparia</i>	Rowan	R
<i>Alliaria petiolata</i>	Garlic Mustard	R
<i>Ilex aquifolium</i>	Holly	R
<i>Quercus petraea</i>	Sessile Oak	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN2	
Habitat:	Broadleaved plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Acer pseudoplatanus</i>	Sycamore	D
<i>Milium effusum</i>	Wood Millet	A
<i>Hedera helix</i>	Ivy	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Betula sp.</i>	Birch species	O
<i>Corylus avellana</i>	Hazel	O
<i>Ilex aquifolium</i>	Holly	O
<i>Sambucus nigra</i>	Elder	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Viburnum opulus</i>	Guelder-rose	R
<i>Acer campestre</i>	Field Maple	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN3	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Acer pseudoplatanus</i>	Sycamore	D
<i>Sambucus nigra</i>	Elder	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Milium effusum</i>	Wood Millet	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Ilex aquifolium</i>	Holly	F
<i>Hedera helix</i>	Ivy	F
<i>Moss sp.</i>	Moss species	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Stellaria media</i>	Chickweed	O

<i>Fraxinus excelsior</i>	Ash	O
<i>Fagus sylvatica</i>	Beech	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Corylus avellana</i>	Hazel	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Betula sp.</i>	Birch species	O
<i>Sorbus aucuparia</i>	Rowan	O
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Polytrichum sp.</i>	Moss species	R
<i>Betula pubescens</i>	Downy Birch	R
<i>Viburnum opulus</i>	Guelder-rose	R
<i>Populus sp.</i>	Poplar species	R
<i>Taxus baccata</i>	Yew	R
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Lonicera pileata</i>	Box-leaved Honeysuckle	R
<i>Phyllitis scolopendrium</i>	Hart's-tongue	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN4	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Betula pendula</i>	Silver Birch	D
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	A
<i>Agrostis capillaris</i>	Common Bent	F
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Quercus robur</i>	English Oak	O
<i>Quercus petraea</i>	Sessile Oak	O
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Polytrichum sp.</i>	Moss species	R
<i>Hieracium sp.</i>	Hawkweed species	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN5	
Habitat:	Coniferous plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Pinus nigra</i>	Black Pine	D
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Moss sp.</i>	Moss species	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Larix sp.</i>	Larch species	O
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Quercus petraea</i>	Sessile Oak	O
<i>Betula pendula</i>	Silver Birch	O
<i>Ilex aquifolium</i>	Holly	O
<i>Fagus sylvatica</i>	Beech	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Polytrichum sp.</i>	Moss species	R

<i>Castanea sativa</i>	Sweet Chestnut	R
<i>Ranunculus repens</i>	Creeping Buttercup	R
<i>Epilobium montanum</i>	Broad-leaved Willowherb	R
<i>Pinus sylvestris</i>	Scots Pine	R
<i>Taraxacum sp.</i>	Dandelion	R
<i>Sorbus aucuparia</i>	Rowan	R
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN6	
Habitat:	Broadleaved plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Fagus sylvatica</i>	Beech	D
<i>Pinus nigra</i>	Black Pine	O
<i>Larix sp.</i>	Larch species	O
<i>Pinus nigra</i>	Black Pine	O
<i>Geum urbanum</i>	Wood Avens	R
<i>Lonicera periclymenum</i>	Honeysuckle	R
<i>Rubus fruticosus agg.</i>	Bramble	R
<i>Ilex aquifolium</i>	Holly	R
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Hyacinthoides non-scripta</i>	Bluebell	R
<i>Dryopteris dilatata</i>	Broad Buckler-fern	R

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Target Note:	TN7	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Acer pseudoplatanus</i>	Sycamore	D
<i>Holcus mollis</i>	Creeping Soft-grass	A
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Geum urbanum</i>	Wood Avens	F
<i>Moss sp.</i>	Moss species	O
<i>Cupressocyparis leylandii</i>	Leyland Cypress	O
<i>Hedera helix</i>	Ivy	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Milium effusum</i>	Wood Millet	O
<i>Urtica dioica</i>	Nettle	O
<i>Corylus avellana</i>	Hazel	O
<i>Betula pendula</i>	Silver Birch	O
<i>Tilia sp.</i>	Lime species	O
<i>Ilex aquifolium</i>	Holly	O
<i>Sorbus aucuparia</i>	Rowan	O
<i>Quercus robur</i>	English Oak	O
<i>Castanea sativa</i>	Sweet Chestnut	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Veronica montana</i>	Wood Speedwell	O
<i>Fraxinus excelsior</i>	Ash	R
<i>Phyllitis scolopendrium</i>	Hart's-tongue	R
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Melica uniflora</i>	Wood Melick	R

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Target Note:	TN8	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	A
<i>Quercus petraea</i>	Sessile Oak	A
<i>Betula pendula</i>	Silver Birch	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Castanea sativa</i>	Sweet Chestnut	F
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Agrostis capillaris</i>	Common Bent	F
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Moss sp.</i>	Moss species	O
<i>Polytrichum sp.</i>	Moss species	O
<i>Sorbus aucuparia</i>	Rowan	O
<i>Pinus sylvestris</i>	Scots Pine	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Digitalis purpurea</i>	Foxglove	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Lonicera periclymenum</i>	Honeysuckle	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Hedera helix</i>	Ivy	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Corylus avellana</i>	Hazel	O
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Sambucus nigra</i>	Elder	O
<i>Ilex aquifolium</i>	Holly	O
<i>Milium effusum</i>	Wood Millet	O
<i>Populus nigra</i>	Black Poplar agg.	R
<i>Tilia x europaea</i>	Common Lime	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Melica uniflora</i>	Wood Melick	R
<i>Stellaria nemorum</i>	Wood Stitchwort	R
<i>Stachys sylvatica</i>	Hedge Woundwort	R

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Target Note:	TN9	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Urtica dioica</i>	Nettle	A
<i>Rubus fruticosus</i> agg.	Bramble	A
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Quercus petraea</i>	Sessile Oak	F
<i>Mercurialis perennis</i>	Dog's Mercury	F
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Betula pendula</i>	Silver Birch	F
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Moss sp.</i>	Moss species	O
<i>Polytrichum sp.</i>	Moss species	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Salix caprea</i>	Goat Willow	O
<i>Pinus nigra</i>	Black Pine	O
<i>Quercus robur</i>	English Oak	O

<i>Alnus glutinosa</i>	Alder	O
<i>Larix sp.</i>	Larch species	O
<i>Rosa canina agg.</i>	Dog Rose	O
<i>Lonicera periclymenum</i>	Honeysuckle	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Fagus sylvatica</i>	Beech	O
<i>Hedera helix</i>	Ivy	O
<i>Corylus avellana</i>	Hazel	O
<i>Prunus avium</i>	Wild Cherry	O
<i>Lysimachia nemorum</i>	Yellow Pimpernel	O
<i>Castanea sativa</i>	Sweet Chestnut	O
<i>Pinus nigra</i>	Black Pine	O
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Oxalis acetosella</i>	Wood Sorrel	O
<i>Milium effusum</i>	Wood Millet	O
<i>Lamium galeobdolon</i>	Yellow Archangel	O
<i>Ulmus glabra</i>	Wych Elm	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Sambucus nigra</i>	Elder	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Stellaria media</i>	Chickweed	R
<i>Blechnum spicant</i>	Hard Fern	R
<i>Carex remota</i>	Remote Sedge	R
<i>Tilia x europaea</i>	Common Lime	R
<i>Pinus sylvestris</i>	Scots Pine	R
<i>Alliaria petiolata</i>	Garlic Mustard	R
<i>Vaccinium myrtillus</i>	Bilberry	R
<i>Viola riviniana</i>	Wood-dog-violet	R
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Lapsana communis</i>	Nipplewort	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN10	
Habitat:	Coniferous plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Pinus nigra</i>	Black Pine	D
<i>Rubus fruticosus agg.</i>	Bramble	A
<i>Quercus petraea</i>	Sessile Oak	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Hedera helix</i>	Ivy	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Sambucus nigra</i>	Elder	O
<i>Melica uniflora</i>	Wood Melick	R
<i>Acer pseudoplatanus</i>	Sycamore	R
<i>Sorbus aucuparia</i>	Rowan	R
<i>Dryopteris dilatata</i>	Broad Buckler-fern	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Milium effusum</i>	Wood Millet	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN11	
Habitat:	Mixed plantation	
Species List:		
Scientific Name	Common Name	Frequency

<i>Larix sp.</i>	Larch species	D
<i>Rubus fruticosus agg.</i>	Bramble	D
<i>Holcus mollis</i>	Creeping Soft-grass	A
<i>Betula pendula</i>	Silver Birch	F
<i>Quercus petraea</i>	Sessile Oak	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Moss sp.</i>	Moss species	O
<i>Ilex aquifolium</i>	Holly	O
<i>Quercus robur</i>	English Oak	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Oxalis acetosella</i>	Wood Sorrel	R
<i>Dryopteris dilatata</i>	Broad Buckler-fern	R
<i>Lonicera periclymenum</i>	Honeysuckle	R
<i>Castanea sativa</i>	Sweet Chestnut	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN12	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	A
<i>Betula pendula</i>	Silver Birch	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Hedera helix</i>	Ivy	F
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Quercus petraea</i>	Sessile Oak	F
<i>Geum urbanum</i>	Wood Avens	F
<i>Hyacinthoides non-scripta</i>	Bluebell	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Milium effusum</i>	Wood Millet	O
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Lapsana communis</i>	Nipplewort	O
<i>Oxalis acetosella</i>	Wood Sorrel	O
<i>Stellaria holostea</i>	Greater Stitchwort	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Urtica dioica</i>	Nettle	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Castanea sativa</i>	Sweet Chestnut	R
<i>Pinus sylvestris</i>	Scots Pine	R
<i>Dryopteris filix-mas</i>	Male-fern	R
<i>Lonicera periclymenum</i>	Honeysuckle	R
<i>Pinus nigra</i>	Black Pine	R
<i>Alliaria petiolata</i>	Garlic Mustard	R
<i>Pinus nigra</i>	Black Pine	R
<i>Mercurialis perennis</i>	Dog's Mercury	R
<i>Aesculus hippocastanum</i>	Horse-chestnut	R
<i>Hypericum pulchrum</i>	Slender St John's-wort	R
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	R
<i>Bromopsis ramosus</i>	Hairy-brome	R
<i>Tilia sp.</i>	Lime species	R
<i>Rosa arvensis</i>	Field Rose	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Sorbus aucuparia</i>	Rowan	R
<i>Vaccinium myrtillus</i>	Bilberry	R
<i>Carex sylvatica</i>	Wood Sedge	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Management Issues:

Although large areas have been planted with both conifers and broadleaved trees, the woodland has not been heavily managed since establishment and in many places thinning would be advantageous.

An overall management plan for ecological diversity is recommended, taking into account other users of the woodland, including walkers, mountain bikers and also scouting; there is a scout encampment area in the eastern side of the woods just south of the A628.

In the northern section of the woods, there are signs of littering and burning that require management.

Diversity:

During the 2010 fieldwork a total of 82 plant species was recorded from this site. Large tracts are plantation woodland of fairly recent origin and with not much in the way of natural groundflora; however, some of the semi-natural broadleaved woodland areas have quite diverse flora, with 11 plants indicative of ancient woodland in South Yorkshire being recorded here.

The whole site is either plantation or semi-natural broadleaved woodland, with only minor watercourses and a small pond to add ecological diversity; watercourses fringe much of the woodland at the site edges also.

Naturalness:

Outside the plantation areas the woodland has a very natural feel, with diversity of both species and structure. Natural processes are also taking place in areas of coniferous plantation, with native trees noted seeding into some areas.

Within the naturally regenerated areas the plant and bird life is significant and overwhelmingly native. The local watercourses all still appear to be flowing along their natural shallow valleys.

Rare or Exceptional Features:

The survival of a good array of plant species indicative of ancient woodlands is the most significant feature of this site. More groundflora plant species would likely have been recorded here in 2010 had survey been possible earlier in the season.

Fragility:

There would not appear to be any serious current threats to this woodland resource, though there are great opportunities for potential enhancement of the plantation areas for ecological diversity.

Areas of rich groundflora may require monitoring to ensure that long-term damage is not done by mountain bike routes through this area.

Typicalness:

Past site surveys show that the woodlands here generally have a richer than typical groundflora than many other woodlands in the Barnsley area. Otherwise this is a typical woodland wildlife site one of a valuable network of such sites.

Recorded History & Cultural Associations:

It is highly likely that charcoal was produced from these woods to fire the glass house that originally occupied the site of the Pot House on the northwest fringes of the site. Charcoal was also much used in local metal working activities. Coal was mined here on a small scale for local use many years prior to the industrial revolution, with bell pits recorded within Silkstone Fall Wood. Acts of Parliament in 1793 and 1809 led to construction of wagon ways south to the canal basin at Cawthorne and large scale mining grew, mainly south of the site in the Silkstone Common area. Signs of small-scale quarrying were noted on site. Research into details of local industrial history and history of forestry practices on site could add great interest to visits here.

Connectivity within the Landscape:

Although mainly surrounded by arable landscapes, this site has strong connections to other wooded habitats in the area by belts of trees, broad hedgerows and small interlocking woodland blocks. However, the landscape to the south-east is much more open and the links are not so strong in that direction.

Value for appreciation of Nature and Learning:

The site is readily accessible by road and there is a very good local network of public footpaths. Footpaths cut through all areas of the site linking them with each other and also to the nearby residential areas and schools. Three public footpath routes cross the railway line in the southern part of the site.

Recommendations:

This large site has within it 11 ancient woodland indicator species and around half of the site is recognised as ancient woodland on Natural England's Ancient Woodland Inventory. Whilst some of the site is coniferous in nature, several of the indicator species remain in these plantation areas.

This site satisfies the site selection criteria and should be retained as a Local Wildlife Site.

Action:

Retain a Local Wildlife Site

Work with landowners/managers to promote wildlife-friendly management regimes



21. Falthwaite and Lowe Wood

LWS Assessment and Phase 1 Survey

Prepared by
TEP

for

Barnsley Metropolitan Borough Council

January 2011
(Edited December 2011)

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Site Name:	Falthwaite and Lowe Wood
Site Area:	74.23ha
Survey Date:	September 2010
Nearest Settlement:	Hood Green, Dodworth
Grid Reference at Centre:	SE31509, 03652
Surveyor(s)	PG, VG

Site Description:

This is a large site with a diverse array of habitats stretching between two former collieries that lie to the north-west of the Wentworth castle estate in the broad shallow valley of the House Carr Dike and its tributaries. Land-ownership is quite complex and survey was carried out mainly from the public footpath system. No access was made into the former colliery area that is fenced-off in the south-western part of the site.

Lowe Wood (TN21), facing Wentworth Castle, is semi-natural broadleaved woodland, with some past planting, over an area that is partly registered as ancient woodland and partly as a replanted ancient woodland site. There are also other areas of mature woodland along watercourses, such as House Carr Dike and Bagger Brook Dike, around much of the site boundary (TN1, TN3, TN9, TN11, TN17) and also within the main body of the site (TN15). Within the site there is much natural spread of silver birch (*Betula pendula*) dominated canopy over areas of tipped colliery waste. There are also areas of broadleaved plantation and areas of neutral grassland, possibly of seeded origin (TN12, TN18).

Small patches of acid grassland survive between areas of spreading canopy and disturbed areas (at TN14, for example). In the north-west, the site includes land still in agricultural use and has pastures improved for grazing (TN8) and arable fields. Fields are defined by a network of hedgerows with mature trees (TN4, TN5, TN6, TN7), including many large oaks (*Quercus robur*). In the south-west, the access road into the fenced off former colliery is lined on each side with low clipped hawthorn hedges.

In the north-east there are some newly constructed (2008) waterbodies surrounded by seeded amenity grassland. This area has not yet developed any significant vegetation cover, but is within an area of broadleaved woodland which has developed over parts of the former Strafford Colliery.

Important Species:

Bluebell (*Hyacinthoides non-scripta*), Dog's Mercury (*Mercurialis perennis*), Yellow Archangel (*Lamiastrum galeobdolon*), Remote Sedge (*Carex remota*), Yellow Pimpernel (*Lysimachia nemorum*), Greater Stitchwort (*Stellaria holostea*), Wood Sorrel (*Oxalis acetosella*), Bush Vetch (*Vicia sepium*) are all present on the site and are considered as ancient woodland indicator species in South Yorkshire.

Great crested newt (*Triturus cristatus*) occurs on this site, as well as a number of nationally notable invertebrate species.

Breeding UKBAP bird species are dunnock (*Prunella modularis*), bullfinch (*Pyrrhula pyrrhula*) and song thrush (*Turdus philomelos*).

Target Note:	TN1	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	A
<i>Urtica dioica</i>	Nettle	A
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Salix fragilis</i>	Crack Willow	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Chamerion angustifolium</i>	Rosebay Willowherb	F
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	F
<i>Corylus avellana</i>	Hazel	O
<i>Ilex aquifolium</i>	Holly	O
<i>Thuja plicata</i>	Western Red Cedar	R
<i>Rosa arvensis</i>	Field Rose	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN2	
Habitat:	Species poor intact hedge	
Species List:		
Scientific Name	Common Name	Frequency
No species list recorded for this managed hawthorn hedge.		

Target Note:	TN3	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	A
<i>Fraxinus excelsior</i>	Ash	F
<i>Urtica dioica</i>	Nettle	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Epilobium hirsutum</i>	Great Willowherb	F
<i>Hedera helix</i>	Ivy	F
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Rosa canina agg.</i>	Dog Rose	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Betula pubescens</i>	Downy Birch	O
<i>Salix fragilis</i>	Crack Willow	O
<i>Galium aparine</i>	Cleavers	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Betula pendula</i>	Silver Birch	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Plagiomnium undulatum</i>	Moss species	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Ilex aquifolium</i>	Holly	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	O

<i>Festuca gigantea</i>	Giant Fescue	O
<i>Sambucus nigra</i>	Elder	O
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Lonicera periclymenum</i>	Honeysuckle	R
<i>Lamium galeobdolon</i>	Yellow Archangel	R
<i>Lapsana communis</i>	Nipplewort	R
<i>Viola riviniana</i>	Wood-dog-violet	R
<i>Carex remota</i>	Remote Sedge	R
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	R
<i>Rumex sanguineus</i>	Wood Dock	R
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Cirsium arvense</i>	Creeping Thistle	R
<i>Acer campestre</i>	Field Maple	R
<i>Taxus baccata</i>	Yew	R
<i>Rosa arvensis</i>	Field Rose	R
<i>Lysimachia nemorum</i>	Yellow Pimpernel	R
<i>Circaea lutetiana</i>	Enchanter's Nightshade	R
<i>Viburnum opulus</i>	Guelder-rose	R
<i>Atrichum undulatum</i>	Catherine's Moss	R
<i>Philadelphus coronarius</i>	Mock-orange	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN4	
Habitat:	Species-poor hedge with trees	
Species List:		
Scientific Name	Common Name	Frequency
<i>Arrhenatherum elatius</i>	False Oat-grass	A
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Quercus robur</i>	English Oak	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Corylus avellana</i>	Hazel	O
<i>Acer campestre</i>	Field Maple	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Urtica dioica</i>	Nettle	O
<i>Rosa canina agg.</i>	Dog Rose	O
<i>Tamus communis</i>	Black Bryony	O
<i>Acer pseudoplatanus</i>	Sycamore	O

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN5	
Habitat:	Species-poor hedge with trees	
Species List:		
Scientific Name	Common Name	Frequency
<i>Crataegus monogyna</i>	Hawthorn	D
<i>Prunus spinosa</i>	Blackthorn	D
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Sambucus nigra</i>	Elder	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Urtica dioica</i>	Nettle	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Hedera helix</i>	Ivy	O
<i>Quercus robur</i>	English Oak	R
<i>Rosa canina agg.</i>	Dog Rose	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN6	
Habitat:	Species-poor hedge with trees	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	D
<i>Crataegus monogyna</i>	Hawthorn	A
<i>Arrhenatherum elatius</i>	False Oat-grass	A
<i>Anthriscus sylvestris</i>	Cow Parsley	F
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Prunus spinosa</i>	Blackthorn	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Galium aparine</i>	Cleavers	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Rosa canina</i> agg.	Dog Rose	O
<i>Stachys sylvatica</i>	Hedge Woundwort	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Sambucus nigra</i>	Elder	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Urtica dioica</i>	Nettle	O
<i>Taraxacum officinale</i> agg.	Dandelion	O
<i>Elytrigia repens</i>	Common Couch	O
<i>Ilex aquifolium</i>	Holly	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Hedera helix</i>	Ivy	O
<i>Bromus commutatus</i>	Meadow Brome	R
<i>Trifolium hybridum</i>	Alsike Clover	R
<i>Avena fatua</i>	Wild Oat	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN7	
Habitat:	Species-poor hedge with trees	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	D
<i>Rubus fruticosus</i> agg.	Bramble	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Hedera helix</i>	Ivy	O
<i>Prunus spinosa</i>	Blackthorn	O
<i>Rosa canina</i> agg.	Dog Rose	O
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN8	
Habitat:	Species-poor semi-improved grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Cynosurus cristatus</i>	Crested Dog's-tail	F
<i>Trifolium repens</i>	White Clover	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Lolium perenne</i>	Ryegrass	F
<i>Dactylis glomerata</i>	Cock's-foot	F
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN9	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	D
<i>Betula pendula</i>	Silver Birch	D
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Holcus mollis</i>	Creeping Soft-grass	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	O
<i>Rosa arvensis</i>	Field Rose	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Rumex sanguineus</i>	Wood Dock	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Hedera helix</i>	Ivy	O
<i>Dactylis glomerata</i>	Cock's-foot	O
<i>Hyacinthoides non-scripta</i>	Bluebell	O
<i>Elytrigia repens</i>	Common Couch	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Urtica dioica</i>	Nettle	O
<i>Betula pubescens</i>	Downy Birch	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Galium aparine</i>	Cleavers	O
<i>Viola riviniana</i>	Wood-dog-violet	R
<i>Rubus idaeus</i>	Raspberry	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Athyrium filix-femina</i>	Lady-fern	R
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	R
<i>Carex remota</i>	Remote Sedge	R
<i>Acer campestre</i>	Field Maple	R
<i>Galium saxatile</i>	Heath Bedstraw	R
<i>Geranium robertianum</i>	Herb-Robert	R
<i>Festuca gigantea</i>	Giant Fescue	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R

<i>Potentilla sterilis</i>	Barren Strawberry	R
<i>Stellaria holostea</i>	Greater Stitchwort	R
<i>Digitalis purpurea</i>	Foxglove	R
<i>Prunus avium</i>	Wild Cherry	R
<i>Ilex aquifolium</i>	Holly	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Hieracium sp.</i>	Hawkweed species	R
<i>Oxalis acetosella</i>	Wood Sorrel	R
<i>Glyceria fluitans</i>	Floating Sweet-grass	R
<i>Lapsana communis</i>	Nipplewort	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN10	
Habitat:	Species-poor hedge, running water	
Species List:		
Scientific Name	Common Name	Frequency
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Ilex aquifolium</i>	Holly	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Urtica dioica</i>	Nettle	O
<i>Hedera helix</i>	Ivy	O
<i>Quercus robur</i>	English Oak	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Glyceria fluitans</i>	Floating Sweet-grass	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Rumex sanguineus</i>	Wood Dock	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Veronica beccabunga</i>	Brooklime	R
<i>Solanum dulcamara</i>	Bittersweet	R
<i>Rosa arvensis</i>	Field Rose	R
<i>Fagus sylvatica</i>	Beech	R
<i>Cirsium arvense</i>	Creeping Thistle	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN11	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	D
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Urtica dioica</i>	Nettle	F
<i>Betula pendula</i>	Silver Birch	F
<i>Festuca rubra</i>	Red Fescue	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Sambucus nigra</i>	Elder	O
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Salix caprea</i>	Goat Willow	O
<i>Rosa canina agg.</i>	Dog Rose	O
<i>Quercus petraea</i>	Sessile Oak	O
<i>Ilex aquifolium</i>	Holly	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Hedera helix</i>	Ivy	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Digitalis purpurea</i>	Foxglove	R

<i>Senecio erucifolius</i>	Hoary Ragwort	R
<i>Tussilago farfara</i>	Colt's-foot	R
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Rumex sanguineus</i>	Wood Dock	R
<i>Calystegia silvatica</i>	Large Bindweed	R
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Holcus lanatus</i>	Yorkshire-fog	R
<i>Dactylis glomerata</i>	Cock's-foot	R
<i>Fagus sylvatica</i>	Beech	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN12	
Habitat:	Modified neutral grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Arrhenatherum elatius</i>	False Oat-grass	A
<i>Holcus lanatus</i>	Yorkshire-fog	A
<i>Dactylis glomerata</i>	Cock's-foot	F
<i>Agrostis capillaris</i>	Common Bent	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Poa annua</i>	Annual Meadow-grass	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Senecio jacobaea</i>	Ragwort	O
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Quercus robur</i>	English Oak	R
<i>Cirsium vulgare</i>	Spear Thistle	R
<i>Angelica sylvestris</i>	Wild Angelica	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN13	
Habitat:	Ephemeral/short perennial	
Species List:		
Scientific Name	Common Name	Frequency
<i>Triticum aestivum</i>	Wheat	A
<i>Brassica sp.</i>	Mustard/Cress species	F
<i>Festuca rubra</i>	Red Fescue	O
<i>Persicaria maculosa</i>	Redshank	O
<i>Plantago lanceolata</i>	Ribwort Plantain	R
<i>Stellaria graminea</i>	Lesser Stitchwort	R
<i>Chenopodium album</i>	Fat-hen	R
<i>Holcus mollis</i>	Creeping Soft-grass	R
<i>Vicia cracca</i>	Tufted Vetch	R
<i>Ranunculus acris</i>	Meadow Buttercup	R
<i>Angelica sylvestris</i>	Wild Angelica	R
<i>Trifolium pratense</i>	Red Clover	R
<i>Senecio sylvaticus</i>	Heath Groundsel	R
<i>Rumex crispus</i>	Curled Dock	R
<i>Achillea millefolium</i>	Yarrow	R
<i>Plantago major</i>	Greater Plantain	R
<i>Sonchus asper</i>	Prickly Sow-thistle	R
<i>Artemisia vulgaris</i>	Mugwort	R
<i>Urtica dioica</i>	Nettle	R
<i>Trifolium hybridum</i>	Alsike Clover	R
<i>Galium aparine</i>	Cleavers	R
<i>Vicia hirsuta</i>	Hairy Tare	R
<i>Veronica persica</i>	Persian speedwell	R
<i>Rumex acetosella</i>	Sheep's Sorrel	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN14
Habitat:	Unimproved acid grassland

Species List:

Scientific Name	Common Name	Frequency
<i>Nardus stricta</i>	Mat-grass	D
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Agrostis capillaris</i>	Common Bent	F
<i>Galium saxatile</i>	Heath Bedstraw	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Danthonia decumbens</i>	Heath Grass	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN15
Habitat:	Semi-natural broadleaved woodland, plantation

Species List:

Scientific Name	Common Name	Frequency
<i>Betula pendula</i>	Silver Birch	D
<i>Alnus cordata</i>	Italian Alder	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Cladonia sp.</i>	Cladonia species	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Rosa canina agg.</i>	Dog Rose	O
<i>Crepis capillaris</i>	Smooth Hawk's-beard	O
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	O
<i>Festuca ovina</i>	Sheep's Fescue	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Moss sp.</i>	Moss species	O
<i>Hypochaeris radicata</i>	Common Cat's-ear	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Alnus glutinosa</i>	Alder	O
<i>Quercus robur</i>	English Oak	O
<i>Betula pubescens</i>	Downy Birch	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Senecio jacobaea</i>	Ragwort	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Potentilla erecta</i>	Tormentil	R
<i>Laburnum anagyroides</i>	Laburnum	R
<i>Centaurium erythraea</i>	Common Centaury	R
<i>Hieracium sp.</i>	Hawkweed species	R
<i>Tussilago farfara</i>	Colt's-foot	R
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN16	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Alnus glutinosa</i>	Alder	A
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Quercus robur</i>	English Oak	F
<i>Betula pendula</i>	Silver Birch	O
<i>Fraxinus excelsior</i>	Ash	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Rosa canina agg.</i>	Dog Rose	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		
Target Note:	TN17	
Habitat:	Semi-natural broadleaved woodland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Quercus robur</i>	English Oak	A
<i>Alnus glutinosa</i>	Alder	A
<i>Ilex aquifolium</i>	Holly	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Poa trivialis</i>	Rough Meadow-grass	F
<i>Hedera helix</i>	Ivy	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	F
<i>Stachys sylvatica</i>	Hedge Woundwort	O
<i>Senecio erucifolius</i>	Hoary Ragwort	O
<i>Rumex sanguineus</i>	Wood Dock	O
<i>Epilobium montanum</i>	Broad-leaved Willowherb	O
<i>Senecio jacobaea</i>	Ragwort	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Prunus avium</i>	Wild Cherry	O
<i>Rosa canina agg.</i>	Dog Rose	O
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN18	
Habitat:	Semi-improved neutral grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Lolium perenne</i>	Ryegrass	A
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Trifolium repens</i>	White Clover	F
<i>Poa annua</i>	Annual Meadow-grass	F
<i>Plantago lanceolata</i>	Ribwort Plantain	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Taraxacum officinale agg.</i>	Dandelion	O
<i>Plantago major</i>	Greater Plantain	O
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	O
<i>Prunella vulgaris</i>	Selfheal	O
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Hypochaeris radicata</i>	Common Cat's-ear	R
<i>Cerastium fontanum</i>	Common Mouse-ear	R
<i>Cirsium palustre</i>	Marsh Thistle	R
D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare		

Target Note:	TN19	
Habitat:	Unimproved neutral grassland	
Species List:		
Scientific Name	Common Name	Frequency
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	F
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	F
<i>Potentilla anserina</i>	Silverweed	F
<i>Trifolium pratense</i>	Red Clover	F
<i>Cynosurus cristatus</i>	Crested Dog's-tail	F
<i>Trifolium repens</i>	White Clover	F
<i>Ranunculus acris</i>	Meadow Buttercup	F
<i>Rumex crispus</i>	Curled Dock	O
<i>Centaurea nigra</i>	Knapweed	O
<i>Carex flacca</i>	Glaucous Sedge	O
<i>Angelica sylvestris</i>	Wild Angelica	O
<i>Lathyrus pratensis</i>	Meadow Vetchling	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Holcus lanatus</i>	Yorkshire-fog	O
<i>Phleum pratense</i>	Timothy	O
<i>Cerastium fontanum</i>	Common Mouse-ear	O
<i>Festuca rubra</i>	Red Fescue	O
<i>Alopecurus pratensis</i>	Meadow Foxtail	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Bellis perennis</i>	Daisy	O
<i>Lolium perenne</i>	Ryegrass	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Rumex acetosa</i>	Common Sorrel	O
<i>Achillea millefolium</i>	Yarrow	O
<i>Ranunculus repens</i>	Creeping Buttercup	O
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Poa annua</i>	Annual Meadow-grass	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Prunella vulgaris</i>	Selfheal	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Hypochaeris radicata</i>	Common Cat's-ear	R
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed	R
<i>Plantago major</i>	Greater Plantain	R
<i>Juncus conglomeratus</i>	Compact Rush	R
<i>Rumex obtusifolius</i>	Broad-leaved Dock	R
<i>Crataegus monogyna</i>	Hawthorn	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Trisetum flavescens</i>	Golden Oat-grass	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Equisetum arvense</i>	Field Horsetail	R
<i>Vicia sepium</i>	Bush Vetch	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN20	
Habitat:	Species-poor intact hedge	
Species List:		
Scientific Name	Common Name	Frequency
<i>Crataegus monogyna</i>	Hawthorn	D
<i>Arrhenatherum elatius</i>	False Oat-grass	A
<i>Lolium perenne</i>	Ryegrass	A
<i>Dactylis glomerata</i>	Cock's-foot	A
<i>Galium aparine</i>	Cleavers	F
<i>Urtica dioica</i>	Nettle	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Sambucus nigra</i>	Elder	F
<i>Cirsium vulgare</i>	Spear Thistle	O

<i>Myosotis sp.</i>	Forget-me-not species	O
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Rosa canina agg.</i>	Dog Rose	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Solanum dulcamara</i>	Bittersweet	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Ligustrum vulgare</i>	Wild Privet	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Rumex sanguineus</i>	Wood Dock	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Target Note:	TN21	
Habitat:	Semi-natural broadleaved woodland, plantation	
Species List:		
Scientific Name	Common Name	Frequency
<i>Fagus sylvatica</i>	Beech	D
<i>Acer pseudoplatanus</i>	Sycamore	A
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	F
<i>Ilex aquifolium</i>	Holly	F
<i>Quercus petraea</i>	Sessile Oak	F
<i>Hedera helix</i>	Ivy	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Ulmus glabra</i>	Wych Elm	F
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Mercurialis perennis</i>	Dog's Mercury	O
<i>Rhododendron ponticum</i>	Rhododendron	O
<i>Betula pendula</i>	Silver Birch	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Geum urbanum</i>	Wood Avens	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Elymus caninus</i>	Bearded Couch	O
<i>Rubus idaeus</i>	Raspberry	O
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	O
<i>Hieracium sp.</i>	Hawkweed species	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Urtica dioica</i>	Nettle	O
<i>Sambucus nigra</i>	Elder	O
<i>Taxus baccata</i>	Yew	R

D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

Management Issues:

The south-western wooded parts of the site are used for game-bird management and the agricultural north-western areas are still farmed.

The footpath system appears to be well maintained with various timber bridges and steps kept in very good order. This will need to continue for them to remain passable.

Recent work has also been carried out in the north-eastern corner, where new lagoons have been defined and the land around graded and seeded.

The areas of mature and developing woodland are generally in a good state, quite natural-looking and diverse, although some woodland management will become necessary to retain and enhance ecological diversity. Control of scrub and tree growth will also be necessary to protect both grassland and water habitats.

Diversity:

During 2010 fieldwork, 149 plants species were recorded from the parts of the site visited. Amongst them were eight species indicative of ancient woodland habitat in South Yorkshire. The site is species-rich and also has great structural diversity in a wide range of different habitats. It is very close to the Wentworth Castle estate and is likely to share in its rich fauna.

Naturalness:

The Lowe Wood part of this complex site appears to be long undisturbed and is an ancient woodland site. Other areas, however, have been dramatically disrupted by past coal mining, with two collieries and much tipping of mine waste.

Older woodland also occurs along streams defining parts of the site's boundaries, most of which are still flowing in their natural courses. The course of House Carr Dike as it runs through the north-eastern part of the site appears to be the most modified.

Younger woodland is still spreading over areas disturbed by mining, illustrating how natural processes can heal damaged areas.

Rare or Exceptional Features:

The main points of ecological interest are the old woodlands and their intimate association with a wide range of other habitats, including stream courses, standing water, neutral grassland, acid grassland, marshy grassland amongst others.

Fragility:

Some of the surviving areas of grassland are at risk of being subsumed by spreading scrub/woodland cover. Within areas of woodland, some dead remains of heather can be seen illustrating where heath-grassland has been shaded out in the past.

An ecological management plan would identify all areas at risk and pose solutions to maintaining maximum diversity on site

There is the possibility of contaminants affecting local streams from surrounding agricultural areas. Fly-tipping is a potential problem, particularly for the watercourses and ponds.

Typicalness:

This would appear to be a typical example of abandoned colliery sites that are partially left to nature and partially restored. The substrate would appear not to be as acidic as many colliery spoils and this site benefits from the proximity of ancient woodland sites which provides native species for colonising areas that had been made bare in the past.

Recorded History & Cultural Associations:

The industrial past of this site could provide a significant educational resource, with two collieries and a system of abandoned mineral lines, there is likely be a wealth of local records available.

The wooded parts of the site may well have provided charcoal for local metal working prior to the industrial revolution, as well as providing oak bark and galls for the important tanning industries in nearby Dodworth.

Connectivity within the Landscape:

The site is very well connected to large tracts of the local agricultural landscape that lies to the west of the M1 motorway.

There are wooded strips along stream courses and disused railway banks as well as a fairly intact system of field hedges with many mature trees.

There are good wildlife corridors leading to the west, south and east, with weaker links to the north where Dodworth lies not very far distant.

Value for appreciation of Nature and Learning:

This site is diverse and has many natural processes to observe, from the spread of scrub/woodland to the development of grassland swards and establishment of wetland vegetation.

Only parts of the site are available or suitable for bring school parties or allowing public access. Site ownership is quite complex and different land-owners will have different views on access to their property.

There is no interpretation on site, but it does have very good footpath connectivity with public paths allowing access and views into most parts of the site.

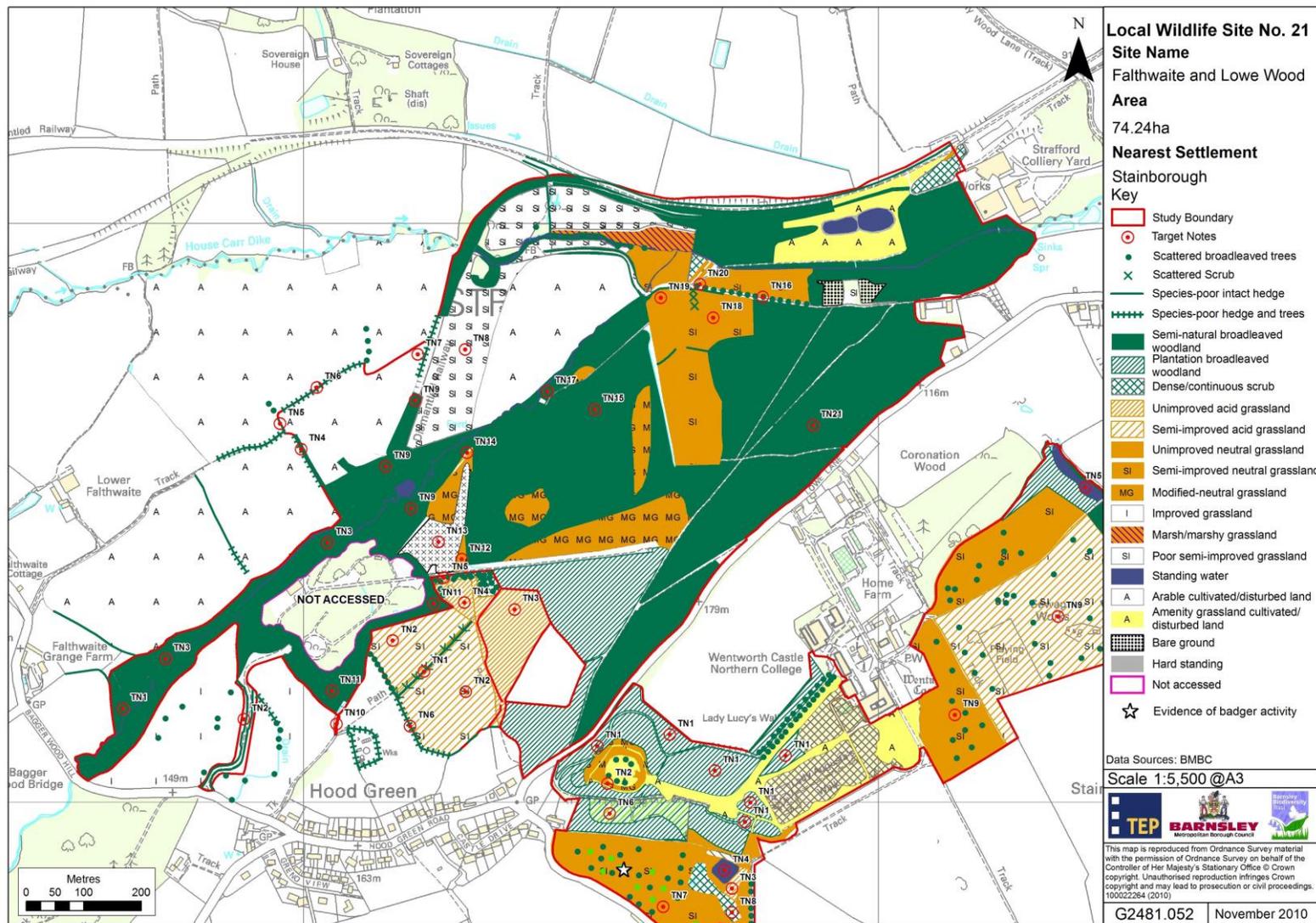
The Trans-Pennine Trail runs along the northern site boundary and local footpaths link well with this as well as to local settlements such as Hood Green, Silkstone and Dodworth.

Recommendations:

This site appears on the Natural England Ancient Woodland Inventory (AWI) it also contains eight ancient woodland indicator species. It is on this basis that is satisfies the site selection criteria.

Action:

Retain the area as a Local Wildlife Site.





Appendix C Statutory Biodiversity Metric Excel Spreadsheet (to be supplied separately)

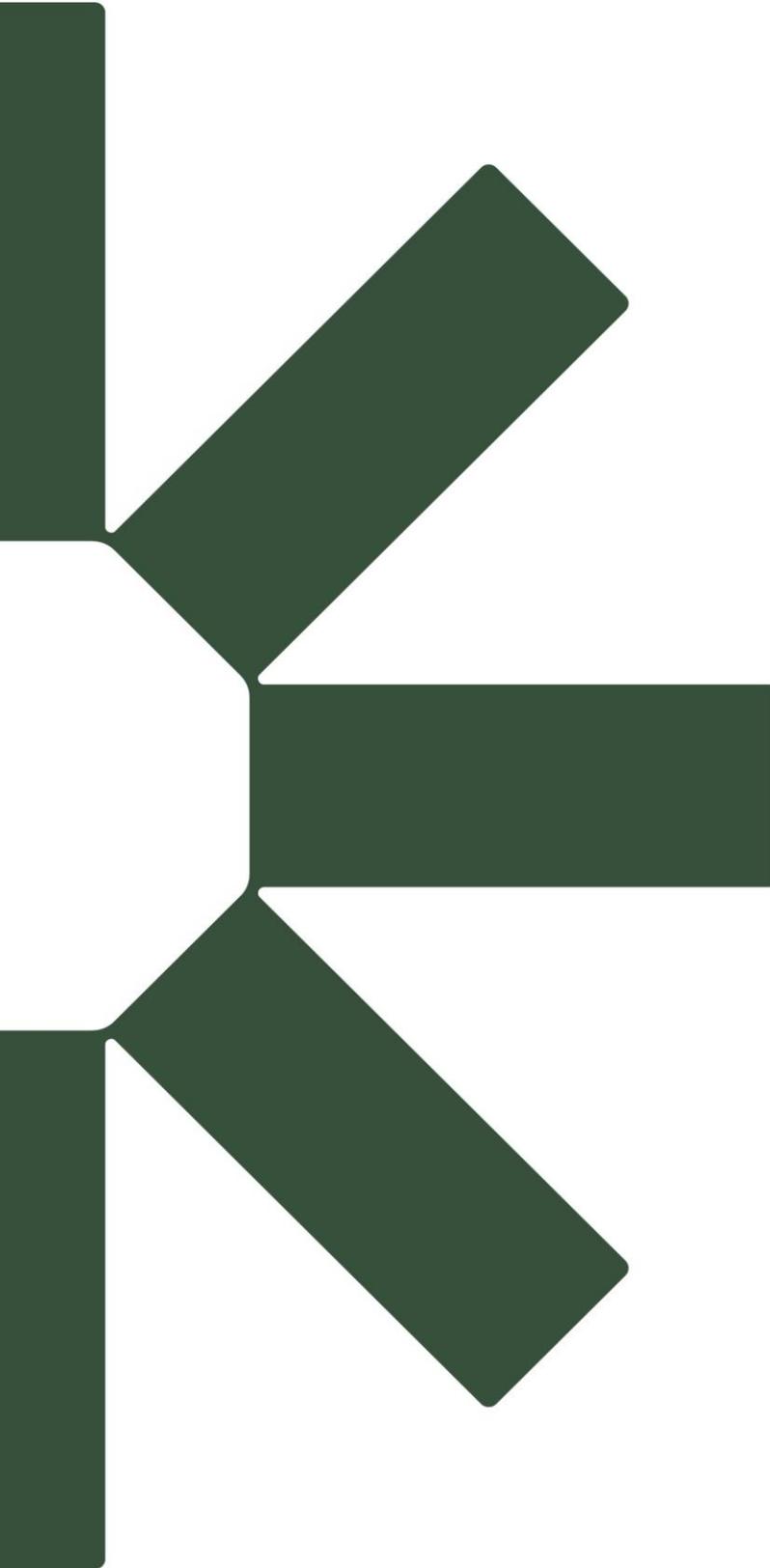
Ecology Addendum Report

Dodworth Green Lane, Dodworth

Newett Homes Ltd

SLR Project No.: 424.065401.00001

18 November 2024



Making Sustainability Happen