Sites of Importance for Nature Conservation Report



Crews Hill and Chase Park, Enfield 14th September 2023

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Section 1: Introduction

Introduction

- 1.1. This report has been prepared by Tyler Grange Group Ltd on behalf of the Enfield London Borough Council. This report sets out the findings of three UK Habitat Classification surveys carried out at three Sites of Importance for Nature Conservation (SINCs) within the borough of Enfield, which are as follows:
 - Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC;
 - Crews Hill Golf Course Borough Grade I SINC; and
 - Glasgow Stud Borough Grade I SINC.
- 1.2. The boundaries and locations of these SINCs are set out in this report in **Sections 2, 3,** and **4** respectively.

Context

1.3. This report has been prepared as an analysis of three SINCs which lie within two areas under consideration for allocation in the draft local plan; hereafter known as "Crews Hill and Chase Park" as part of the new Enfield Local Plan. The indicative boundaries for both Crews Hill (see **Figure 1.1** below) and Chase Park (in red) as well as the SINCs within there boundary that are part of this assessment (in blue) are provided below.



Figure 1.1 – Indicative redline boundary of Crews Hill placemaking area with SINC boundaries



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Figure 1.2 – Indicative redline boundary of Chase Park placemaking area with SINC boundary

1.4. Both Crews Hill and Chase Park make up part of the Draft Local Planning Policy, specifically 'Strategic Policy SP PL9: Crews Hill' and 'Strategic Policy SP PL10: Chase Park'

Purpose

- 1.5. This report describes:
 - The habitats present within each of the three SINCs;
 - A comparison between the habitats identified during UK Habitat Classification survey by Tyler Grange Group Ltd and those detailed in each SINC citation; and
 - The potential impacts of any development on each SINC boundary.
- 1.6. This assessment and the terminology used are consistent with the Guidelines for Preliminary Ecological Appraisal¹. and the Guidelines for Ecological Impact Assessment². A full methodology is set out in Section 2 below.

Quality Control

1.7. All ecologists at Tyler Grange Group Limited are members of CIEEM or are working towards membership and act under the direction of members, and abide by the Institute's Code of Professional Conduct³.

³ CIEEM (2022) Code of Professional Conduct, CIEEM, Winchester



¹ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

² CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

Section 2: Methodology

Desktop Review

- A1.1. A desk-based study was conducted whereby records of designated sites, protected and priority habitats. The aim of the data search is to collate existing ecological records for the site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.
- A1.2. The following resources were consulted/contacted:
 - Multi-Agency Geographic Information for the countryside (MAGIC) website⁴;
 - Enfield London Borough Council website⁵;
 - Joint Nature Conservation Committee (JNCC) website⁶;
 - Natural England (NE) designated sites website⁷;
 - Ordnance Survey mapping; and
 - Google Maps, including aerial photography.

Documents Review

- 2.2. A package of documents were provided by Enfield London Borough Council as part of this assessment. These were reviewed for relevant information to local biodiversity and each SINC, these include:
 - SINC citation for Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC, Crews Hill Golf Course Borough Grade I SINC and Glasgow Stud Borough Grade I SINC;
 - Enfield's Blue and Green Strategy (2021-2031)⁸; and
 - Review of Sites of Importance for Nature Conservation An Addendum to the Enfield Blue and Green Strategy, Land Use Consultants (LUC) 2021⁹

⁹ LUC. (2021). Review of Sites of Importance for Nature Conservation An Addendum to the Enfiled Blue and Green Strategy



⁴ https://magic.defra.gov.uk/ [Accessed 10/08/2023]

⁵ https://www.enfield.gov.uk/ [Accessed 10/08/2023]

⁶ http://jncc.defra.gov.uk/ProtectedSites/ [Accessed 10/08/2023]

⁷ https://designatedsites.naturalengland.org.uk/ [Accessed 10/08/2023]

⁸ Enfield Council. (2021). Enfield's Blue and Green Strategy (2021-2031)

UK Habitat Classification Survey Methodology

- 2.3. The UK Habitat Classification (UKHabs) surveys were all carried out by Mari Jones BSc (Hons) MSc, a suitably experienced ecologist and qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM). on the following dates:
 - 19th July 2023 for Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC;
 - 1st August 2023 for Crews Hill Golf Course Borough Grade I SINC; and
 - 16th August 2023 for Glasgow Stud Borough Grade I SINC.
- 2.4. The methods used during the walkover survey broadly followed methods used in an 'extended' Phase I habitat survey¹⁰ and entailed recording the main plant species and classifying and mapping habitat types with reference to the habitat definitions provided by the UK Habitat Classification Working Group¹¹. In addition, where useful the DAFOR scale¹² was used to record frequency of plant species, as follows:
 - Dominant 51-100%;
 - Abundant 31-50%;
 - Frequent 16-30%;
 - Occasional 6-15%; and
 - Rare 1-5%.
- 2.5. Where access allowed, habitats directly adjacent to the SINCs were also considered in order to assess the SINCs within the wider landscape and to provide information with which to assess possible impacts within the context of the site boundary.
- 2.6. Note that complete access to all areas was not possible for Crews Hill Golf Course and Glasgow Stud SINCs, this is denoted within plans **15773/P16** and **15773/P18** respectively.

Evaluation

- A1.3. The evaluation of habitats and species is defined in accordance with published guidance¹³. The scale of importance of each ecological feature is assigned within a defined geographical context, namely international and European, national, regional, county, and local. Below these are features considered to be of negligible importance.
- A1.4. Consideration will also be given to legally protected or controlled species which are 'important features' in the context of this assessment, for which mitigation measures are required to ensure legal compliance, regardless of their

¹¹UKHab Ltd. (2023). UK Habitat Classification V2.0

¹³ CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.



¹⁰ Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough.

¹² BSBI Recording the British and Irish flora 2010-2020 Annex 1: Guidance on sampling approaches <u>https://bsbi.org/wp-content/uploads/dlm_uploads/Sampling_Guidance - Annex 1 v4 April 2011.pdf</u> [Accessed 18/07/2023]

geographic scale of importance. Thus, it is possible for a feature of negligible ecological importance to be legally protected and hence require mitigation.

A1.5. Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as Sites of Species Scientific Interest (SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Impact Assessment

A1.6. The assessment of impacts identifies impacts and their effects as a result of the proposed development on important ecological features. This includes consideration of impacts at all relevant stages of the development, including construction and operation/occupation [include decommissioning and restoration, if relevant – it won't be for most projects]. The assessment includes reference to legislation and policy, and supplementary planning guidance where relevant.

Application of Mitigation Hierarchy

- A1.7. Application of the mitigation hierarchy is fundamental to the ecological impact assessment process. This requires consideration of the following measures, in order of priority, for all potential impacts, to determine the most appropriate mitigation, compensation and enhancement strategy for the project. This is taken into account within **Section 3** of this report and set out below:
 - Avoidance measures to avoid harm to ecological features (set out in 'Design Evolution', Section 3);
 - Mitigation measures to avoid or minimise potential impacts as part of the design or guaranteed by planning controls;
 - Compensation measures required to offset significant residual negative effects following avoidance and mitigation; and
 - Enhancement measures over and above requirements for avoidance, mitigation and compensation to provide biodiversity net gain.

Limitations and Assumptions

2.7. As indicated on plans **15773/P18** and **15773/P20** access was limited to one area of Crews Hill Golf Course SINC and one are of Glasgow Stud SINC. The limiting access to these small areas is not considered a significant limitation to the conclusions drawn in this report.



Section 3: SINC Background and Criteria

SINCs are non-statutory designated sites within the Greater London Authority. The London Plan identifies three 3.1. tiers of SINCs which dictates their level of importance within Greater London. Each type of SINC and there definitions are detailed in Table 3.1.

Table 3.1: SINC grades and descriptions	INC grades and description	d d	and	grades	SINC	3.1:	Table
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SINC Grade	Description
Metropolitan	Sites of Metropolitan Importance for Nature Conservation are those sites which contain the best examples of London's habitats, sites which contain particularly rare species, rare assemblages of species or important populations of species, or sites which are of particular significance within otherwise heavily built-up areas of London. They are of the highest priority for protection. The identification and protection of Metropolitan Sites is necessary, not only to support a significant proportion of London's wildlife, but also to provide opportunities for people to have contact with the natural environment. Sites of Metropolitan Importance include not only the best examples of each habitat type, but also areas which are outstanding because of their assemblage of habitats. A small number of sites are selected which are of particular significance within heavily built up areas of London. Although these are of lesser intrinsic quality than those sites selected as the best examples of habitats on a London-wide basis they are outstanding oases and provide the opportunity for enjoyment of nature in extensive built environments. Should one of these sites be lost or damaged, something would be lost which exists in a very few other places in London. Management of these sites should as a first priority seek to maintain and enhance their interest but use by the public for education and passive recreation should be encouraged unless these are inconsistent with nature conservation.
Borough (Grade I and II)	These are sites which are important on a borough perspective in the same way as the Metropolitan sites are important to the whole of London. Although sites of similar quality may be found elsewhere in London, damage to these sites would mean a significant loss to the borough. As with Metropolitan sites, while protection is important, management of borough sites should usually allow and encourage their enjoyment by people and their use for education In defining Sites of Borough Importance, the search is not confined rigidly to borough boundaries; these are used for convenience of defining areas substantially smaller than the whole of Greater London, and the needs of neighbouring boroughs should be taken into account. In the same way as for Sites of Metropolitan Importance, parts of some boroughs are more heavily built-up, and some borough sites are chosen there as oases providing the opportunity for enjoyment of nature in extensive built environments.
Local	A Site of Local Importance is one which is, or may be, of particular value to people nearby (such as residents or schools). These sites may already be used for nature study or be run by management committees mainly composed of local people. Where a Site of Metropolitan or Borough Importance may be so enjoyed it acts as a Local site, but



further sites are given this designation in recognition of their role. This local
importance means that these sites also deserve protection in planning.
Local sites are particularly important in areas otherwise deficient in nearby wildlife
sites. To aid the choice of these further local sites, AoD are identified. Further Local
sites are chosen as the best available to alleviate this deficiency; such sites need not
lie in the AoD but should be as near to it as possible. Where no such sites are available,
opportunities should be taken to provide them by habitat enhancement or creation,
by negotiating access and management agreements, or by direct acquisition. Only
those sites that provide a significant contribution to the ecology of an area are
identified.

3.2. The criteria for selecting and assessing the level of importance of a SINC are set out in the 'London Environment Strategy, Appendix 5¹⁴', this has been extracted and detailed in **Table 3.2** below.

Assessment Criteria	Guidance
Representation	The best examples of each major habitat type are selected. These include typical urban habitats such as abandoned land colonised by nature. Where a habitat is not extensive in the search area it will be appropriate to conserve all or most of it, whereas where it is more extensive a smaller percentage will be conserved.
Habitat rarity	The presence of a rare habitat makes a site important, because the loss of, or damage to, only a few sites threatens the survival of the habitat in the search area.
Species rarity	The presence of a rare species makes the site important in a way that parallels rare habitat.
Habitat richness	Protecting a site with a rich selection of habitat types not only conserves those habitats, but also the wide range of organisms that live within them and the species that require more than one habitat type for their survival. Rich sites also afford more opportunities for enjoyment and educational use.
Species richness	Generally, sites that are species rich are preferred, as this permits the conservation of a correspondingly large number of species. (However, some habitats such as reed beds, heaths and acid woodlands, are intrinsically relatively species poor.)
Size	Large sites are generally more important than small sites. They may allow for species with special area requirements. Larger sites may be less vulnerable to small scale disturbance, as recovery is sometimes possible from the undisturbed remainder. They

Table 3.2: SINC Assessment Criteria and Guidance

¹⁴ https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/london-environment-strategy



	are more able to withstand visitors. Size is also related to the richness of habitat and species.
Important populations of species	Some sites are important because they hold a large proportion of the population of a species for the search area.
Ancient character	Some sites have valuable ecological characteristics derived from long periods of traditional management, or even continuity in time to woodlands and wetlands that occupied before agriculture. Ancient woodlands, old parkland trees and traditionally managed grasslands tend to have typical species that are rare elsewhere. These habitats deserve protection also because of the ease with which they are damaged by changes in management.
Recreatability	The more difficult it is to recreate a sites habitat the more important it is to retain it. (Ponds can be created from scratch within a few years – whereas woodlands take decades.) Certain habitats cannot be recreated because of practical reasons such as land availability and cost.
Typical urban character	Features such as canals, walls, bridges, railway sidings colonised by nature often have a juxtaposition of artificial and wild features. Some of these habitats are particularly rich in species / have rare species / communities. Particular physical or chemical substrates may allow rare species to thrive. They may also have particular visual qualities.
Cultural and historic character	Sites such as historic gardens with semi-wild areas, garden suburbs, churchyards which have reverted to the wild may have a unique blend of cultural and natural history.
Geographic position	This criterion is operated using search areas and areas of deficiency.
Access	An important consideration – especially in areas where there are limited opportunities for large urban populations to enjoy the natural world. Some access is desirable to all but the most sensitive sites, but direct physical access to all parts of a site may not be desirable.
Use	The current use of the site, relating to how the site is used by people e.g. education, research, or quiet enjoyment of nature.
Potential	Where a site can be enhanced given modest changes in management practices gives it value. Opportunity exists where a site is likely to become available for nature conservation use, or where there is local enthusiasm.
Aesthetic Appeal	Factors which contribute to the enjoyment of the experience of visiting a site – seclusion/views/variety of landscape etc.



3.3. A summary of the three SINCs which form the subject of this report is provided in **Table 3.3** below. The table presents each SINC's assessment criteria based on citations provided by LUC and recommendations. Full SINC citations are provided in **Appendices 2-4** respectively.

SINC Name	SINC category	Habitats Present	SINC Criteria Matched	Recommendations made by LUC
		Fiesent	citations	
Royal Enfield Rifles Site and Woodland at Vicarage Farm	Borough Grade I	Broadleaved woodland, wet woodland, semi- improved neutral grassland, running water	Representation Habitat Rarity Habitat Richness Species Richness Size Ancient Character Recreatability Cultural or Historic Character Geographic Position Access Use Potential Aesthetic Appeal	No change in grade recommended
Crews Hill Golf Course	Borough Grade I	Acid grassland, running water, scrub, wet woodland/carr	Representation Habitat Rarity Species Rarity Habitat Richness Species Richness Size Ancient Character Recreatability Cultural or Historic Character Geographic Position Access Use Potential Aesthetic Appeal	Recommend upgrade to Metropolitan SINC due to rare example of relict acid grassland being identified on-site
Glasgow Stud	Borough Grade I	Broadleaved woodland, semi- improved neutral grassland, ponds, running water	Habitat Rarity Habitat Richness Size Ancient Character Recreatability Cultural or Historic Character Geographic Position Use Potential	No change in grade recommended

 Table 3.3: SINC details based on the SINC citations provided by LUC.



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Section 4: Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC

Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC lies north of Enfield Road A110, approximate postcode EN2 7EU, central OS Grid Reference TQ 30799 97146. See Figure 4.1 for the indicative boundary. 4.1.



Figure 43.1: Indicative boundary of Royal Enfield Rifles Site and Woodland at Vicarage Farm SINC shown by a red line.

Habitats

The habitats recorded during the UK Habitat Classification survey within each field within Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC are detailed in Table 4.1 below. The field numbers and locations of habitats are 4.2. shown on the Royal Enfield Rifles Site and Woodlands at Vicarage Farm SINC Habitats Features Plan 15773/P16.

Habitats Feature	Key UK Habitat				
	Classification habitats	Summary of UK Habitat Classification Survey findings	Comparison to SINC Criteria	CIEEM Geographical Scale of Reference	Phot
	and codes recorded				
Field 1	Primary code(s): Neutral grassland g3 Secondary code(s): Scattered scrub 10	A field with a footpath running through it, well-used by dog walkers. Along the footpath, plants such as pineapple weed <i>Matricaria</i> <i>discoidea</i> , perennial rye grass <i>Lolium perenne</i> , and knotgrass <i>Polygonum aviculare</i> were abundant. The rest of the field showed no signs of damage from public access, and was managed by infrequent mowing – sward was relatively uniform at 20cm at the time of survey. The species composition of the grassland indicated semi-improved neutral soils, species such as Yorkshire fog <i>Holcus lanatus</i> , false oat- grass <i>Arrhenatherum elatius</i> , creeping bent grass <i>Agrostis stolonifera</i> , Timothy grass <i>Phleum pratense</i> , white clover <i>Trifolium repens</i> , grass vetchling <i>Lathyrus nissolia</i> , creeping thistle <i>Cirsium arvense</i> , and smooth tare <i>Vicia tetrasperma</i> . One mature (likely veteran) pedunculate oak <i>Quercus robur</i> tree was present in the west of the field, and willow <i>Salix</i> sp. saplings establishing in some areas to the south	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation). However, the site was found to be managed differently than described on the citation, being grazed by horses at the time of survey.	Local Ecological Importance	

Table 4.1: Habitats at the Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC





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Mixed scrub with tall ruderal	<u>Primary code(s):</u> Mixed scrub h3h <u>Secondary code(s):</u> Ruderal or ephemeral 81	The southern boundary of Field 1 was largely unmanaged, creating a strip of scattered scrub with tall ruderal vegetation. False oat grass was the most frequent grass, with bristly ox-tongue <i>Helminthotheca echioides</i> , great willowherb <i>Epilobium hirsutum</i> , bramble <i>Rubus fruticosus</i> agg., and snowberry <i>Symphoricarpos albus</i> dominant in different areas. Some hawthorn <i>Crataegus monogyna</i> deadwood was also present.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Local Ecological Importance
Hedgerow H1	Primary code(s): Native hedgerow h2a Secondary code(s): Hedgerow with trees 11 Tall forbs 16 Ditch 50 Habitat of Principle Importance (HoPI) ¹⁵	The hedgerow along the western boundary of field 1. The trees were mature/veteran pedunculate oak trees, infrequent along the length of the hedge. The shrub layer was mostly comprised of blackthorn <i>Prunus spinosa</i> , with some bramble, hornbeam <i>Carpinus betulus</i> , damson <i>Prunus domestica</i> , and hawthorn. One midland hawthorn <i>Crataegus laevigata</i> plant was found. The ground layer had sterile brome <i>Bromus sterilis</i> , couch grass <i>Elymus repens</i> , greater willowherb, hogweed <i>Heracleum sphondylium</i> , and cock's foot <i>Dactylis glomerata</i> . The shrub layer was dense to the south, and became more patchy under the shade of trees to the north.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Borough Ecological Importance
Merryhills brook	<u>Primary code(s):</u> Rivers (priority habitat) r2a <u>Secondary code(s):</u> Freshwater – natural 47 HoPI	A small, shallow brook, approximately 1-2 foot wide, running through a strip of wet woodland. Given its size and the shallow depth of water observed, it is likely to dry out during prolonged periods of dry weather.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	County Ecological Importance

¹⁵ As set out in Section 41 of The Natural Environment and Rural Communities Act 2006





Wet woodland W1: Merryhills brook	Primary code(s): Wet woodland w1d HoPI	A woodland belt which lies alongside Merryhills brook. This habitat appears to be largely unmanaged, with a very dense shrub layer of bramble, hemlock <i>Conium maculatum</i> , hogweed, bittersweet <i>Solanum dulcamara</i> , and common hawthorn. White willow <i>Salix alba</i> , other willow species, and pedunculate oaks made up the canopy. Given habitat connectivity, it's possible this woodland contains giant hogweed <i>Heracleum mantegazzianum</i> as the wet woodland along Salmon's brook (described below) does; however the vegetation was dense and the river bank could not be viewed for most of the length of the brook.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	County Ecological Importance
Line of trees	<u>Primary code(s):</u> Woodland and forest w <u>Secondary code(s):</u> Line of trees 33	A line of trees between an access track and horse paddocks. The row of trees had large gaps, with species such as sweet pea <i>Lathyrus</i> <i>odoratus</i> , privet <i>Ligustrum vulgare</i> , common ivy <i>Hedera helix</i> , and bramble at ground level. Tree species included ash <i>Fraxinus excelsior</i> and field maple <i>Acer campestre</i> .	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Borough Ecological Importance
Field 2	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Scattered scrub 10	This field appeared to have previously been in use as a horse paddock, though at the time of the survey the vegetation had grown to such a length that it was clear that it had not been grazed in a while. Aside from grasses such as false oat grass and Timothy grass, forbs included ruderal species such as ragwort <i>Senecio jacobaea</i> , broad-leaved dock <i>Rumex obtusifolius</i> , and greater burdock <i>Arctium lappa</i> . Some buddleia <i>Buddleia davidii</i> plants were found along the southern boundary of this field.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation). However, the site was found to be managed differently than described on the citation, being grazed by horses at the time of survey.	Local Ecological Importance





Field 3	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Scattered scrub 10	A second field in the same area as Field 2 also appeared to have previously been in use as a horse paddock. Very similar to Field 2, but this field had a greater proportion of grass cover, largely false oat grass with some perennial rye grass, Timothy grass, and Yorkshire fog.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation). However, the site was found to be managed differently than described on the citation, being grazed by horses at the time of survey.	Local Ecological Importance
Field 4	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Scattered scrub 10	A field characterized by active grazing, (one male shire horse was using the field at the time of the survey) and a footpath. The footpath was relatively well-trodden, as were some pathways of shorter grass presumably cause by horse grazing, with greater plantain <i>Plantago</i> <i>major</i> and perennial rye grass dominant here. Taller swards were dominated by false oat grass, with dove's foot crane's bill <i>Geranium</i> <i>molle</i> , meadow buttercup <i>Ranunculus acris</i> , creeping bent, meadow foxtail <i>Alopecurus pratensis</i> , and lesser stitchwort <i>Stellaria graminea</i> . Patches of scrub were recorded, comprising hawthorn, bramble, dog rose <i>Rosa canina</i> , and common ivy. This habitat showed some signs of nutrient enrichment, with some stands of common nettle <i>Urtica dioica</i> and occasional white clover, yarrow <i>Achillea millefolium</i> , and cleavers <i>Galium aparine</i> .	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation). However, the site was found to be managed differently than described on the citation, being grazed by horses at the time of survey.	Local Ecological Importance
Hedgerow H2	<u>Primary code(s):</u> Native hedgerow h2a <u>Secondary code(s):</u> Hedgerow with trees 11 Tall forbs 16 HoPI	To the west and south of Field 4. A dense hedgerow of blackthorn, damson, and dog rose. Ground flora included meadow vetchling <i>Lathyrus pratensis</i> , common sorrel <i>Rumex acetosa</i> , and cleavers. Mature trees were pedunculate oak. Lack of management has lead to scrub encroaching on the grassland, and a hedgerow with a variable uniform width.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Borough Ecological Importance





Mixed scrub M1	<u>Primary code(s):</u> Mixed scrub h3h <u>Secondary code(s):</u> Ruderal or ephemeral 81 Scattered trees 33 Vacant or derelict land 82	A large area of neglected land, with a mixture of immature trees, scrub, and tall ruderal throughout. This habitat was very variable, some areas were dominated by bracken <i>Pteridium aquilinum</i> (as indicated on the plan reference 15773/P16), . Some areas were dominated by nettle, some by bramble, and some were dominated by large stands of hemlock <i>Conium maculatum</i> . A small stand of Japanese knotweed <i>Reynoutria japonica</i> was also present (denoted by target note on plan reference 15773/P16). Other plants present included immature sycamore <i>Acer pseudoplatanus</i> , ash, alder <i>Alnus glutinosa</i> , white deadnettle <i>Lamium album</i> , common comfrey <i>Symphytum officinale</i> , hedge bindweed <i>Calystegia sepium</i> , and sterile brome. It appeared as though this area may have been previously developed. Hardstanding was visible in some areas, as were the remnants of walls of buildings. Some management could control the more dominating stands of hemlock, however with a continued lack of management, this habitat type would be likely to become woodland over time.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Local Ecological Importance
Salmon's brook	<u>Primary code(s):</u> Rivers (priority habitat) r2a <u>Secondary code(s):</u> Freshwater – natural 47 HoPI	A slow-flowing brook over pebbles. This brook was approximately one metre wide on average, and was dry in places. It appears as though, in wetter weather/winter, this brook would be too deep/wide to cross without a bridge. Water was clear where present.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	County Ecological Importance
Wet woodland W2: Salmon's brook	<u>Primary code(s):</u> Wet woodland w1d HoPl	A woodland encompassing Salmon's brook. As this brook is larger than Merryhills brook, there is more space under the canopy. Ground flora in the shade included false brome <i>Brachypodium sylvaticum</i> , common ivy, and garlic mustard <i>Alliaria petiolata</i> ; where light penetrated the canopy more bramble, nettle, and greater willowherb were present. The canopy was made up of hawthorn, pedunculate oak, crack willow <i>Salix × fragilis</i> , and other willow species. The woodland edge had stands of creeping thistle and common nettle with an abundance of butterfly species using the flower resource. Giant hogweed <i>Heracleum mantegazzianum</i> was present under the canopy, along the edge of the river. This was found in all areas where the river bank could be accessed, therefore it is assumed to be present along the length of Salmon's brook. At the time of survey, giant hogweed was not considered to dominate the vegetation although, given the nature of this species, it may do so in future.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	County Ecological Importance





Hedgerow with trees H3	<u>Primary code(s):</u> Native hedgerow h2a <u>Secondary code(s):</u> Hedgerow with trees 11 Tall forbs 16 Ditch 50 HoPI	A hedge connecting the wet woodland along Salmon's brook with the deciduous woodland to the east. Very similar to H2 in composition and structure – very dense with mature trees and variable width.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Borough Ecological Importance
Lowland mixed deciduous woodland W1	Primary code(s): Lowland mixed deciduous woodland w1f <u>Secondary code(s):</u> Semi-natural woodland 30 HoPl	A woodland to the east of the SINC, atop a hill. The shrub layer was dominated by cherry laurel <i>Prunus laurocerasus</i> in all accessible areas. To the west, where the path starts, a significant level of vegetation clearance has taken plane, including felling several trees. This area leads to a wide path/woodland ride, where light could reach the woodland floor and broad-leaved enchanter's nightshade <i>Circaea</i> <i>lutetiana</i> , herb Robert <i>Geranium robertianum</i> , Virginia creeper <i>Parthenocissus quinquefolia</i> (a Schedule 9 INNS), wood avens <i>Geum</i> <i>urbanum</i> , winter heliotrope <i>Petasites pyrenaicus</i> , and non-native box species. Mature trees included horse chestnut <i>Aesculus</i> <i>hippocastanum</i> , pedunculate oak, hawthorn, ash, holm oak <i>Quercus</i> <i>ilex</i> , yew, and lime <i>Tilia</i> sp. Other shrubs present included hawthorn, elder <i>Sambucus nigra</i> , bramble; however almost all the shrub layer was either cherry laurel or common ivy. This habitat has a lot of potential with diverse assemblage of mature trees, but a lack of management has lead the shrub layer to be dominated by cherry laurel. Removal of this species (as well as Virginia creeper and other non-natives) would allow native species to reestablish.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	County Ecological Importance
Neutral grassland / Field 5	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Scattered scrub 10	Patches of grassland within areas of woodland. The species composition was almost identical to Field 1, with false oat grass once again dominant, though these grasslands were yet to be mown this year. In addition, greater bird's foot trefoil <i>Lotus pedunculatus</i> was frequent in the sward.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Local Ecological Importance









Mixed scrub M2	<u>Primary code(s):</u> Mixed scrub h3h <u>Secondary code(s):</u> Scattered trees 33	Largely inaccessible due to how dense the vegetation was. Young trees appeared to be present, thought the scrub was dominated by bramble, goat willow <i>Salix caprea</i> , and common nettle.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	Local Ecological Importance
Lowland mixed deciduous woodland W2	Primary code(s): Lowland mixed deciduous woodland w1f <u>Secondary code(s):</u> Semi-natural woodland 30 HoPI	Also largely inaccessible during the UK Habitat Classification survey due to dense vegetation/watercourse, this habitat was formed of mature woodland which had an undefined boundary with the mixed scrub described above. Whilst buildings are visible on OS basemaps, these were largely inaccessible due to dense vegetation and it is not known if they are present or still standing. A varied habitat, some areas were stands of veteran/mature pedunculate oaks, and some areas had excellent edge habitat with mixed scrub and neutral grassland. Virginia creeper was present near to the track, and male fern <i>Dryopteris filix-mas</i> was found along the footpath.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 2 for full citation).	County Ecological Importance





Section 5: Crews Hill Golf Course Borough Grade I SINC

- Crews Hill Golf Course Borough Grade I SINC lies south of Cattlegate Road, Enfield EN2 8AZ, central OS Grid Reference TQ 30803 99738. See Figure 5.1 for the indicative boundary. 5.1.
- It should be noted that the majority of the land is private and as such the previous LUC survey which informed the SINC citation (see **Appendix 3** for full citation) was limited to public rights of way. The extent of this limitation is not detailed in the SINC 5.2. update. Almost complete access was available for the UK Habitat Classification survey completed by Tyler Grange Group Limited on 1st August, with only a small section of woodland to the west, as denoted on plan **15773/P18** not being accessible.



Figure 5.1: Indicative boundary of Crews Hill Golf Course SINC

Habitats

5.3. The habitats recorded during the UK Habitat Classification survey within each field within Crews Hill Golf Course Borough Grade I SINC are detailed in Table 5.1 below. . The field numbers and locations of habitats are shown on the Crews Hill Golf Course SINC Habitats Features Plan 15773/P18.

Habitats Feature	Key UK Habitat Classification habitats and codes recorded	Description	Comparison to SINC Criteria	CIEEM Geographical Scale of Reference	Photo
Lowland mixed deciduous woodland Scattered trees	Primary code(s): Lowland mixed deciduous woodland w1f Secondary code(s): Semi-natural woodland 30 Scattered trees 32 HoPI	Canopy made up primarily of pedunculate oaks, with oak processionary moth <i>Thaumetopoea processionea</i> frequent in both mature and immature trees. Areas of planted younger trees included field maple and silver birch <i>Betula pendula</i> . The shrub layer included hawthorn (likely veteran), elder, and holly <i>llex aquifolium</i> . The ground layer was dominated by bramble, nettle, and common ivy. Many areas had piles of vegetation cuttings from the management of the golf course, which resulted in patches of nutrient enrichment. Deadwood appeared to be largely retained on site within areas of woodland. Some areas showed less signs of nutrient enrichment and had more diverse ground flora, including lords-and-ladies <i>Arum maculatum</i> , hedge woundwort <i>Stachys sylvatica</i> , male fern <i>Dryopteris filix-mas</i> , wood avens, herb Robert, and ground ivy <i>Glechoma hederacea</i> .	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	County Ecological Importance	

Table 5.1: Habitats at Crews Hill Golf Course Borough Grade I SINC.



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		 Woodland along the railway was dominated by hawthorn rather than oaks. Some patches of woodland has no shrub layer, and ground flora was that of the neutral grassland below. These areas were primarily where trees separated areas of the golf course. Many of these areas had gorse <i>Ulex europaeus</i> scrub growing along the woodland edge, indicating possible acid soils beneath. Whilst woodland to the west was not accessible, here bracken (which 			
Neutral grassland	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Scattered scrub 10	 prefers acid soils) and hemlock dominated the woodland edge. The majority of the site was classified as neutral grassland. However it is of note that the high levels of grassland management on site may have suppressed the species diversity, and all areas of neutral grassland recorded may have the potential to become lowland dry acid grassland with altered management regimes. Soil sampling and a full NVC survey is recommended to determine the potential for enhancement of this habitat type. For example, the presence of gorse <i>Ulex</i> sp. scrub in places, as well as the abundance of common bent <i>Agrostis capillaris</i> and creeping softgrass <i>Holcus mollis</i>, indicates that underlying soils are acidic, with the added nutrients from heavy management causing this habitat to currently be categorised as "neutral" (acid soils are characterised by low nutrients) grassland. Frequent species includes false oat grass, Yorkshire fog, sorrel, couch grass, selfheal <i>Prunella vulgaris</i>, and ragwort. Rhodedendron <i>Rhododendron ponticum</i> was planted in these areas. Areas receiving more frequent use/footfall by golfers showed signs of being less dry and less nutrient poor, with white clover, perennial rye grass, common mouse ear <i>Cerastium fontanum</i>, and creeping buttercup <i>Ranunculus repens</i> present. Sward heigh varied according to management. 	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	Borough Ecological Importance	
Acid grassland	Primary code(s): Other lowland dry acid grassland g1a6 Gorse scrub h3e HoPI	Free-draining areas of this SINC showing little-to-no nutrient enrichment invariably had a species assemblage indicating lowland dry acid grassland. Common bent and sheep sorrel <i>Rumex acetosella</i> was abundant, as was a grass species considered likely to be early hair-grass <i>Aira praecox</i> (though it was too late in the season to identify definitively). Other species present included creeping soft-grass (particularly at the woodland edges), haircap moss <i>Polytrichum sp</i> , and tormentil <i>Potentilla erecta</i> .	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	County Ecological Importance	





Wet woodland	<u>Primary code(s):</u> Wet woodland w1d HoPl	Largely similar to the previously described woodland, however the woodland along the Turkey Brook also had various willow species, pendulous sedge <i>Carex pendula</i> , and greater stitchwort <i>Stellaria</i> <i>holostea</i> .	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	County Ecological Importance	
Turkey Brook	Primary code(s): Rivers (priority habitat) r2a Secondary code(s): Freshwater – natural 47 HoPl	A winding brook that was only a few centimetres deep at the time of survey, however given the depth of the banks may be as deep as 1 metre and wide as 2 metres after heavy prolonged wet weather. Water was clear and fairly fast flowing, and the bottom of the channel was pebbled. Where the brook ran through grassland, the marginal vegetation was diverse with many flowering plants. Several Invertebrates species were observed during the survey, including invertebrates such as common darter <i>Sympetrum striolatum</i> , small copper <i>Lycaena phlaeas</i> , gatekeeper <i>Pyronia tithonus</i> , and beautiful demoiselle <i>Calopteryx virgo</i> . Marginal vegetation included marsh woundwort <i>Stachys palustris</i> , fool's watercress <i>Helosciadium nodiflorum</i> , common bistort <i>Bistorta officinalis</i> , yellow iris <i>Iris pseudacorus</i> , wild angelica <i>Angelica sylvestris</i> , water mint <i>Mentha aquatica</i> , silverweed <i>Potentilla anserina</i> , and greater birds foot trefoil <i>Lotus pedunculatus</i> . Although there were signs of nutrient enrichment in the woodlands where vegetation cuttings were disposed of, the stream showed no such signs.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	County Ecological Importance	
Ditches	<u>Primary code(s):</u> Rivers and lakes r <u>Secondary code(s):</u> Ditch 50	Ditches which were not wet at the time of survey, but which clearly flow into the Turkey brook after wet weather. Species present included broadleaved enchanter's nightshade <i>Circaea lutetiana</i> , soft rush <i>Juncus</i> <i>effusus</i> , and meadow vetchling.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	Borough Ecological Importance	





Bunkers	<u>Primary code(s):</u> Artificial unvegetated - unsealed surface u1c	Artificially created and maintained areas of sand used as golf bunkers. Anecdotal evidence from representatives of the golf course suggested that these areas are maintained on average once per week. This habitat type is possibly used by miner bees as detailed in the SINC citation. However, this habitat type is regularly managed (the sand is raked) and no evidence of miner bees was observed during the survey. An invertebrate survey would provide more conclusive information on the presence/likely absence of miner bees in this habitat.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	Local Ecological Importance
Modified grassland / golf green	<u>Primary code(s):</u> Modified grassland g4	The golf "green", which was heavily managed and appeared to be entirely comprised of a single species of grass (not identified as it was not flowering).	No mentioned within the SINC citation (see Appendix 3 for full citation) but is not considered to contribute to the overall function of the SINC due to its low ecological value.	Negligible Ecological Importance
Buildings and hardstanding	<u>Primary code(s):</u> Developed land; sealed surface	Buildings and hardstanding of negligible ecological value.	No mentioned within the SINC citation (see Appendix 3 for full citation) but is not considered to contribute to the overall function of the SINC due to its low ecological value.	Negligible Ecological Importance
Hedgerow with trees	Primary code(s): Native hedgerow h2a Secondary code(s): Hedgerow with trees 11 HoPI	Where the site borders adjacent properties, a hedgerow dominated by English elm <i>Ulmus procera</i> , hawthorn and blackthorn was recorded, with mature pedunculate oaks frequent. As with the woodland and scatted trees, oak processionary moth was observed in the oak trees.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	Borough Ecological Importance





Line of hornbeam trees	<u>Primary code(s):</u> Woodland and forest w <u>Secondary code(s):</u> Line of trees 33	A line of hornbeam trees, likely veteran, which intersected the site, likely a relic from previous land use. Even within the areas of woodland, the hornbeam trees created a distinct linear feature. The public footpath runs along this line of trees.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 3 for full citation).	Borough Ecological Importance	
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Section 6: Glasgow Stud Borough Grade I SINC

- Glasgow Stud Borough I grade SINC lies either side of Burntfarm Ride, Enfield, approximate postcode EN2 9DY, central OS Grid Reference TL 31606 00443. See Figure 6.1 for the indicative boundary. 6.1.
- It should be noted that the majority of the land is private and as such the previous LUC survey was limited to public rights of way (see Appendix 4), the extent of this limitation is not detailed in the SINC update. Almost complete access was available for 6.2. the UK Habitat Classification survey completed by Tyler Grange Group Limited on 16th August, with only two small fields to the south, as denoted on plan 15773/P20 not being accessible.



Figure 6.1: Indicative boundary of Glasgow Stud Borough Grade I SINC

Habitats

6.3. The habitats recorded during the UK Habitat Classification survey within each field within Glasgow Stud Borough Grade I SINC are detailed in Table 6.1 below. The field numbers and locations of habitats are shown on the Glasgow Stud SINC Habitats Features Plan 15773/P20.

Habitats Feature	Key UK Habitat Classification habitats and	Description	Comparison to SINC Criteria	CIEEM Geographical Scale of Reference	Photog
Field 1	Primary code(s): Neutral grassland g3 Secondary code(s): Scattered rushes 14	The most biodiverse grassland within this SINC was observed within Field 1. It appeared to be recently or currently grazed by sheep, although the appearance of the sward in the northernmost field suggests grazing has not occurred for some weeks. The sward was 1 m in height on average, with patches of meadow vetchling and tufted vetch <i>Vicia cracca</i> providing a nectar source for invertebrates. The most abundant grass was false oat grass, with fescue <i>Festuca</i> sp., meadow foxtail, cock's foot, and Timothy also frequent. White clover and perennial rye grass was rare in the sward, indicating the soil is not enriched.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Local Ecological Importance	

Table 6.1: Habitats at Glasgow Stud Borough I grade SINC.





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Hedgerow H1	<u>Primary code(s):</u> Native hedgerow h2a <u>Secondary code(s):</u> Hedgerow with trees 11 Tall forbs 16 HoPI	Native, species-rich hedgerow with trees. Several veteran oak trees, including one half fallen pedunculate oak with knopper gall wasps <i>Andricus quercuscalicis</i> affecting the acorns. Other trees present included sessile oak <i>Quercus petraea</i> , goat willow, lime, and the shrub layer included blackthorn, hawthorn, field maple, dog rose, English elm. Some grazing lines were visible on the trees.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Borough Ecological Importance
Bramble scrub	<u>Primary code(s):</u> Bramble scrub h3d	The very northwestern section of the site, adjacent to the first field, where a lack of management has led to growth of approximately 2 m tall bramble-dominated scrub. Occasional blackthorn and dog rose saplings grow through.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Local Ecological Importance
Field 2	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Scattered scrub 10 Scattered dwarf shrubs 13 Tall forbs 16	East of the above bramble scrub, this area was unmanaged, but the adjacent bramble scrub was not yet dominant. The neutral grassland present had an abundance of tall ruderal species such as creeping thistle and ragwort, with saplings of blackthorn and hawthorn. Sward was tall and tussocky, and grassland species were largely the same as the first field.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Local Ecological Importance





Hedgerow H2	Hedgerow, not intact, between sheep fields <u>Primary code(s):</u> Native hedgerow h2a <u>Secondary code(s):</u> Hedgerow with trees 11 HoPI	This hedgerow is appeared to be damaged from grazing, due to soil compaction at its base, the lack of delicate forbs at ground level, and grazing of young shoots, and is not stock proof. Soil underneath is enriched, with perennial rye grass, white clover, wall barley <i>Hordeum</i> <i>murinum</i> , chickweed <i>Stellaria media</i> , greater plantain forming the ground layer. The hedge itself had mostly blackthorn, English elm, and hawthorn, mature trees were infrequent, usually turkey oak <i>Quercus</i> <i>cerris</i> or pedunculate oak.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Borough Ecological Importance
Hedgerow H3	Hedgerow between sheep fields without trees <u>Primary code(s):</u> Native hedgerow h2a HoPI	This hedgerow was found to be intact and stock proof. This hedgerow contained no trees and formed the boundary of the sheep-grazed fields (Field 3). As above, the ground appeared to be nutrient enriched, due to abundance of white clover, chickweed, common nettle, and perennial rye grass and there is grazing damage, but this hedgerow is dense and intact and therefore stock proof. Species composition was found to be largely the same as hedgerow H2 above, dominated by blackthorn and hawthorn.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Borough Ecological Importance
Field 3	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Scattered scrub 10 Scattered dwarf shrubs 13 Tall forbs 16	Neutral grassland with tall ruderal, scattered scrub, and scattered trees (none veteran). It was fenced off from the sheep-grazed field, so likely the same habitat but with no grazing/limited management. Closer to the pond, likely yellow iris and other pond plants were present. Virginia creeper was encroaching along the southern boundary, where this species has been planted in a residential garden.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Local Ecological Importance
Pond	<u>Primary code(s):</u> Rivers and lakes r <u>Secondary code(s):</u> Ponds (priority habitat) 40 HoPI	Was not closely surveyed/viewed due to safety – substantial tall ruderal/marginal vegetation, scrub, and trees around the pond which obscured the view. Has been created/managed for residential properties on the opposite side of the road.	Does not match the description within the SINC citation (see Appendix 4 for full citation). The pond likely contributes to the mosaic of habitats present within the site.	Local Ecological Importance





Line of trees	<u>Primary code(s):</u> Woodland and forest w <u>Secondary code(s):</u> Line of trees 33	A line of young ash trees, all immature, likely planted for screening purposes for the adjacent residential property. Shrub layer is as the above neutral grassland, with some Virginia creeper encroaching from the residential property.	Loosely fits criteria of the SINC as set out in the SINC citation (see Appendix 4 for full citation) but does not list the invasive species present.	Borough Ecological Importance	
Hedgerow H4	Hedgerow with trees, ditch along the main road Primary code(s): Native hedgerow h2a Secondary code(s): Hedgerow with trees 11 Tall forbs 16 Ditch 50 HoPI	The hedgerow along the central road. Very dense, tall/wide, intact, with an associated ditch – ditch appears to be seasonally wet, only slightly damp at the time of survey. Typical hedgerow species, including hawthorn, blackthorn, hornbeam, English elm, with pedunculate oak trees. Horse chestnut trees all had had leaf-miner moth <i>Cameraria</i> <i>ohridella</i> . Diverse ruderal/ground flora, likely due to the ditch, including rosebay willowherb <i>Chamaenerion angustifolium</i> , honeysuckle <i>Lonicera</i> <i>periclymenum</i> , dog's mercury <i>Mercurialis perennis</i> , broad leaved dock, cock's foot, and false oat grass.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Borough Ecological Importance	
Hedgerow H5	<u>Primary code(s):</u> Native hedgerow h2a <u>Secondary code(s):</u> Scattered scrub 10 Hedgerow with trees 11 Tall forbs 16 HoPI	Trees were observed within the hedgerow which were mature (possibly veteran), but the hedge itself was not stock-proof. Livestock were not grazing at the time of survey. Trees included lime and cherry plum <i>Prunus cerasifera</i> . Shrubs included blackthorn, bramble, hawthorn, English elm. A lack of management has created an ecotone here, with scrub encroaching the grassland. An abundance of nettles was recorded within the ground flora, indicative of nutrient enrichment.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation).	Borough Ecological Importance	





Modified grassland	<u>Primary code(s):</u> Modified grassland g4	Apparently in the ownership of the adjacent property. A maintained lawn, appearing to be used for recreational or sports purposes (recreational equipment footballs and goal posts present during survey). Sward is closely mown, with white clover, perennial rye grass, dandelion.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation). Low distinctiveness habitat would not contribute significantly to SINC designation.	Negligible Ecological Importance
Fields 5	<u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Tall forbs 16	Grassland which shows signs of being mown and grazed previously as the tips of taller ruderal plants showed evidence of having been cut by machine with a clean edge. Wool observed in boundary fences suggested potential grazing. Overall less diverse than Fields 1-3, but with a sward longer than the fields that were being grazed at the time of survey. Species present included cock's foot, hard rush <i>Juncus inflexus</i> , hogweed, and creeping cinquefoil <i>Potentilla reptans</i> .	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation). Low distinctiveness habitat would not contribute significantly to SINC designation.	Local Ecological Importance
Cuffley Brook	<u>Primary code(s):</u> Rivers (priority habitat) <u>Secondary code(s):</u> Freshwater – natural 47 HoPI	 This brook appeared to be formed of a shallow stream, 1.5-2 m wide. It may dry out on occasion, with water levels low at the time of survey. A pebbled riverbed was visible above the waterline in places. Banks were natural, with the exception of concrete reinforcement where small bridges have been built. Himalayan balsam <i>Impatiens glandulifera</i> was abundant throughout, and there were possible signs of signal crayfish <i>Pacifastacus leniusculus</i> within the woodland component of stream, in the form of burrows and layers of bankside soil erosion. Flora included various willow species, pendulous sedge, alder, nettle, rosebay willowherb, water mint, and bramble on riverbanks. 	Does not match the description within the SINC citation (see Appendix 4 for full citation). Cuffley Brook contributes to the wildlife corridor running through the site and is directly connect to habitats outside of the SINC to the north and south.	County Ecological Importance





Ditch	<u>Primary code(s):</u> Rivers and lakes r <u>Secondary code(s):</u> Ditch 50	A ditch with running water, which flows into Cuffley brook Horsetail (<i>Equisetum sp</i> .) dominant with pendulous sedge throughout.	Does not match the description within the SINC citation (see Appendix 4 for full citation). Does not likely contribute to the overall function of the SINC.	Local Ecological Importance	
Neutral grassland with tall ruderal	Primary code(s): Neutral grassland g3 Secondary code(s): Scattered scrub 10 Tall forbs 16 Ruderal or ephemeral 81	Patches and strips of land throughout the site which, whilst falling into the category of neutral grassland, had a notable abundance of early successional, ruderal species as defined under secondary code 81. There was a variation in sward structure, some places patchy with bare ground, some with tall ephemeral species, but all were forb-dominated. Species present included oxeye daisy Leucanthemum vulgare, creeping thistle, goat's rue <i>Galega officinalis</i> , and greater plantain.	Does not match the description within the SINC citation (see Appendix 4 for full citation), Likely as it was not accessible from public rights of way. Low distinctiveness habitat would not contribute significantly to SINC designation.	Local Ecological Importance	
Neutral grassland – formerly arable	Former arable, neutral grassland (possibly Herb-rich ley) <u>Primary code(s):</u> Neutral grassland g3 <u>Secondary code(s):</u> Tall forbs 16	The main large field to the eastern border of the site. This land appeared to be formerly arable, though it was unclear how long it had been fallow . The sward was dominated by broadleaved willowherb <i>Epilobium</i> <i>montanum</i> , perennial rye grass, and redshank <i>Persicaria maculosa</i> . Occasional patches of goat's rue, wild liquorice <i>Astragalus glycyphyllos</i> , creeping thistle, and meadow vetchling provided flower forage. This has been categorised as "neutral grassland" as part of the UKHabs survey, as it does not fit definitions of cropland in the UK Habitat Classification manual (where cropland includes temporary leys), but does match the definition of neutral grassland. It was therefore neutral grassland at the time of survey, though conditions indicate it used to be cropland. A 5 metre margin around the field have been former arable field margin, as this area was dominated by grasses such as perennial rye, cock's foot, and false oat grass. Information on previous use of this land, as well as how long it has not been managed as cropland, would clarify the UKHab definition of this habitat.	Does not match the description within the SINC citation (see Appendix 4 for full citation). Likely as it was not accessible from public rights of way. Low distinctiveness habitat would not contribute significantly to SINC designation.	Local Ecological Importance	





Lowland mixed deciduous woodland W1	Woodland parcel (centre east, with woodland pond) <u>Primary code(s):</u> Lowland mixed deciduous woodland w1f <u>Secondary code(s):</u> Semi-natural woodland 30 HoPl	A mature pedunculate oak woodland, surrounding a pond. Some mature oaks appeared to be a continuation of the hedgerow habitat described below. This entire habitat was difficult to view, as it was surrounded by a bramble-covered barbed wire fence. The pond appeared to be covered by duckweed <i>Lemnoideae</i> sp., with an unidentified umbellifer species growing on the pond edge. Standing deadwood was abundant in the woodland. Ground flora such as white clover, perennial ry grass, and common nettle indicated nutrient enrichment, and the parcel of woodland seemed entirely unmanaged.	Loosely fits criteria of the SINC as set out in the SINC citation (see Appendix 4 for full citation) but does not list the veteran trees present	County Ecological Importance
Hedgerow H6	<u>Primary code(s):</u> Native hedgerow h2a <u>Secondary code(s):</u> Hedgerow with trees 11 HoPI	The hedgerow surrounding the formerly arable field in the east of site. Species present included hawthorn, English elm, blackthorn, elder, field maple, dog rose, ash, and pedunculate oak. Many of these oaks had excellent standing deadwood, and/or were veteran. Hedgerow appeared recently managed, and was large, dense, and intact. However, flora indicating nutrient enrichment were present – such as common nettle, white clover, and perennial rye grass – likely due to fertiliser from the former arable land.	Loosely fits criteria of the SINC as set out in the SINC citation (see Appendix 4 for full citation) but does not list the veteran trees present	Borough Ecological Importance
Lowland mixed deciduous woodland W2	Woodland by the M25 <u>Primary code(s):</u> Lowland mixed deciduous woodland w1f <u>Secondary code(s):</u> Semi-natural woodland 30 HoPl	The woodland parcel within the northeastern corner of site. Only the western half of this woodland could be surveyed, as beyond this there was an inaccessible area of dense, tall bramble forming an understorey to the woodland. Veteran oak trees were present around the western edge of the woodland, likely also a continuation of the hedgerow habitat described above. Grasses such as false brome and hairy brome <i>Bromus ramosus</i> were present at ground level, as was ground ivy. Other than the presence of bramble throughout, the woodland understorey was limited in species diversity. Trees, aside from the oaks, included wych elm <i>Ulmus glabra</i> and ash.	Loosely fits criteria of the SINC as set out in the SINC citation (see Appendix 4 for full citation) but does not list the veteran trees present	County Ecological Importance





Wet woodland	<u>Primary code(s):</u> Wet woodland w1d HoPl	The woodland along Cuffley brook. Although this woodland, in places, is a lot wider than the brook, the abundance of alder and pendulous sedge throughout indicates this entire woodland can be considered wet woodland. Also present was goat willow and white willow <i>Salix alba</i> . The woodland appeared largely unmanaged, but nevertheless had a complex structure with young saplings, immature trees, and mature/veteran trees. Standing deadwood was abundant. Large stands of Himalayan balsam were present and in some places, completely covering the ground layer. Occasional buddleia plants also present, as were herb Robert and wood avens.	Does not match the description within the SINC citation (see Appendix 4 for full citation). Likely as it was not accessible from public rights of way. Wet woodland contributes to the wildlife corridor running through the site and is directly connect to habitats outside of the SINC to the north and south.	County Ecological Importance	
Field 6	<u>Primary code(s):</u> Neutral grassland g3	Relatively species poor neutral grassland. Abundant species included perennial rye grass, cock's foot, red clover <i>Trifolium pratense</i> , and hogweed. Likely mown, not grazed, for soft landscaping/amenity use, located out the back of a commercial building.	Considered to meet the SINC criteria as set out on the SINC citation (see Appendix 4 for full citation). Low distinctiveness habitat would not contribute significantly to SINC designation.	Local Ecological Importance	





Section 7: Discussion of Results

7.1. The below sets out the a comparison between the SINC designations, citations and surveys results, and discusses the accuracy of the SINC descriptions and citations; potential enhancements to the SINC and key impacts the development within or directly adjacent to each SINC

Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC

Comparison to SINC Criteria and Previous Survey

- 7.2. The UK Habitat Classification survey completed by Tyler Grange Group Ltd found that the habitats within the SINC met the criteria for SINC designation, as set out within the citation (see **Appendix 2** for full citation) and thus it can be concluded that the reasons for designation set out in the SINC citation are valid against the criteria and that the SINC is of Borough Grade I importance.
- 7.3. Two main differences between the description within the SINC citation and the results of the UK Habitat Classification survey were:
 - The presence of invasive species throughout the SINC; and
 - The management regime of the site being grazed as appose mowing.
- 7.4. It is not considered that these differences affect the capability of the SINC to meet the SINC criteria and therefore these differences are not considered to alter the conclusions drawn by LUC in the SINC citation.

Opportunities for Enhancement

- 7.5. A opportunities and constraints for the SINC are presented in **Royal Enfield Rifles Site and Woodland at Vicarage Farm SINC Opportunities and Constraints Plan 15773/P17**. The existing conditions of habitats within the SINC present several opportunities to enhance the SINC and improve it function as a wildlife corridor. Some such opportunities are stated in the SINC citation, including:
 - Implementation of a mowing regime;
 - Meadow creation;
 - Active tree management;
 - Creation of tree loggeries
 - Wildlife-friendly planting; and
 - Wetland creation.
- 7.6. Three additional enhancement opportunities identified during the UK Habitat Classification survey, include;
 - Relaxation of the grazing regime to develop the grassland sward;
 - Removal of all built-from within the SINC and replacement with habitats of greater ecological value; and



- Implementation of a management regime to removal and control invasive species within the SINC.
- 7.7. The above recommendations would create a greater diversity of species within the SINC, increasing opportunities for protected and priority species and enhancing the condition of the habitats. This as a whole would increase the function of the SINC as a wildlife corridor.

Crews Hill Golf Course Borough Grade I SINC

Comparison to SINC Criteria and Previous Survey

- 7.8. The habitats present within the SINC largely matches the descriptions present within the citation. Based on the species composition present across the site, the presence of rare relict ridge and furrow acid grassland, size and connection to the wider landscape it can be concluded that the reasons for designation as set out in the SINC citation are valid and the SINC is of Borough Grade I Importance.
- 7.9. Furthermore, given the presence of acid grassland indicators within areas of neutral grassland and small areas of acid grassland, a habitat type which is rare in London, the conclusions drawn regarding the recommended upgrade to a Metropolitan SINC (see **Appendix 3** for full citation) can also be considered valid.

Opportunities for Enhancement

- 7.10. A opportunities and constraints for the SINC are presented in **Crews Hill Golf Course SINC Opportunities and Constraints Plan 15773/P19**. The existing conditions of the habitats within the SINC present several opportunities to enhance the SINC and also to improve it function as a wildlife corridor. Some are stated in the SINC citation which include;
 - Active tree management; and
 - Wetland creation.
- 7.11. Additional enhancement opportunities, include;
 - Removal of rhododendron, restoration and habitat creation in areas of removed habitats;
 - Creation of ecotone habitats between areas of woodland and grassland;
 - Additional management of the grassland habitats to increase sward structure, abundance of acid grassland species and general species diversity.
- 7.12. The above recommendations would create a greater diversity of species within the SINC, increasing opportunities for protected and priority species and enhancing the condition of the habitats. This as a whole would increase the function of the SINC as a wildlife corridor.



Glasgow Stud Borough Grade I SINC

Comparison to SINC Criteria and Previous Survey

- 7.13. The grassland habitat and hedgerows present on-site largely fit the criteria present in the SINC citation (see **Appendix 4** for full citation). However, the importance and present of Cuffley Brook, associated wet woodland and veteran trees were not included, nor was the presence of invasive species within the habitats on-site. As such, based on the species composition present across the site, size of the SINC and connection to the wider landscape it can be concluded that the reasons for designation as set out in the SINC citation are valid, though a full survey should be undertaken to properly evaluate and update the citation and the SINC is of Borough Grade I Importance.
- 7.14. There are several discrepancies between the SINC citation and the results of the UK Habitat Classification survey, likely due to the limited access from the initial survey, these are as follows:
 - Cuffley Brook and wet woodland through the centre of the site;
 - The presence of invasive species throughout the SINC;
 - Presence of veteran trees within the woodland and tree lines; and
 - The management regime for the grassland field to diversify the species present and create more sward structure.
- 7.15. It is not considered that these discrepancies significantly affect the conclusions drawn by LUC but do have some bearing on potential importance of various habitats across the SINC and potential opportunities for enhancement.

Opportunities for Enhancement

- 7.16. A opportunities and constraints for the SINC are presented in **Glasgow Stud SINC Opportunities and Constraints Plan 15773/P21**. The existing conditions of the SINC present several opportunities to enhance the SINC and improve it function as a wildlife corridor. Some are stated in the SINC citation which include;
 - Meadow creation;
 - Active tree management; and
 - Wetland creation.
- 7.17. Additional enhancement opportunities, include;
 - Additional woodland and tree planting;
 - Creation of ecotone between woodland and grassland habitats; and
 - Enhancement of grassland habitats through a management plan to create a more diverse sward.
- 7.18. The above recommendations would create a greater diversity of species within the SINC, increasing opportunities for protected and priority species and enhancing the condition of the habitats. This as a whole would increase the function of the SINC as a wildlife corridor.



Potential Impacts from Development

- 7.19. Development within or adjacent to a SINC can have long-term adverse impacts on the habitats and species present if not appropriately mitigated for. This can include direct impacts from construction within the SINC itself, impacts from construction activity or impacts from operational activities such as recreational pressures, air and light pollution, among others.
- 7.20. The mitigation hierarchy should be followed when considering the potential for development within areas of SINC. Therefore direct loss of habits as a result of direct development within the SINC, should be avoided where possible as per the London Plan Policy G6: Biodiversity and Access to nature (see extract quoted below) and Enfield Borough Council Planning Policy DMD 78 Nature Conservation (see extract quoted below)

"Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:

- avoid damaging the significant ecological features of the site
- minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
- deliver off-site compensation of better biodiversity value."

"Development that has a direct or indirect negative impact upon important ecological assets will only be permitted where the harm cannot reasonably be avoided and it has been demonstrated that appropriate mitigation can address the harm caused. Mitigation will be secured through planning obligations or planning conditions.

Major development on sites located within areas of deficiency must maximise opportunities to improve access to nature. This policy should be read in conjunction with Core Strategy Policy 36."

7.21. Furthermore, the draft strategic policies, prepared by Enfield London Borough Council as part of the development of the new local plan, states the follow:

"Metropolitan, Borough and local

5. Development affecting the integrity of a Site of Importance for Nature Conservation (as shown on the Policies Map), priority habitats/species, non-designated sites or features of biodiversity interest (directly or indirectly) will only be supported where:

a. the mitigation hierarchy has been applied in line with the London Plan to offset the loss of habitats and species;

b. it will protect, restore, enhance and provide appropriate buffers around wildlife and geological features as well as links to the wider ecological network; and

c. the benefits of the proposed development would clearly outweigh the adverse impact on the biodiversity and geodiversity value of the site"



- 7.22. Where any unavoidable losses of habitats within SINCs must occur, adverse impacts should be minimised by restricting development to areas of the lowest ecological value. Any losses should be fully mitigated for through enhancement of existing habitats or habitat creation within the SINC itself. As a last resort, where every effort has been made to compensate for losses within the SINC, compensation could be sought off-site on adjacent or nearby land. Biodiversity net gain calculations should be undertaken to aid in quantifying appropriate compensation.
- 7.23. Furthermore, any necessary development within a SINC, should avoid detrimental impacts on the function of the SINC as a whole and the SINC's ability to function as a wildlife corridor through habitat linkages to the wider landscape.
- 7.24. All developments should achieve a minimum of 10% biodiversity net gain, in compliance with the Environment Act 2021, considered likely to be mandated from November 2023.
- 7.25. All SINCs have the potential to support protected and priority species and would need to be subject to detailed survey for such species followed by recommendations by an ecologist for any avoidance, mitigation or licensing measures. The scope of this assessment did not extent to scoping for protected species and no assessment of potential for protected species has been produced to date, as of the writing of this report.
- 7.26. Potential adverse impacts as a results of any construction activities such as potential increases in air pollution and increases in recreational pressure should be fully assessed once details of proposals are known. A full impact assessment as a results of potential pollution from construction activities maybe required. Mitigation maybe could be implemented in the form of a Construction Environment Management Plan (CEMP) which would detail sensitive working methods should also be employed throughout site works. However, further mitigation maybe required to be based on a full impact assessment of potential pollutants (run-off, air quality etc) on habitats.
- 7.27. Any development within or directly adjacent to the SINC should include a sensitive lighting strategy to minimise light spill on retained habitats and a visitor management plan, or similar, to control and mitigate for recreational pressure on the SINC. This mitigation strategy should be designed as per the most recent guidance on sensitive lighting for bats and other species. At the time of writing this report the most recent guidance is GN08/23¹⁶.
- 7.28. Given the size of Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC it is unlikely that any development within this SINC could be suitability mitigated or compensated within other areas of the SINC. However due to the size and nature of the habitats present within, following the above principles and pending further full assessment of impacts development may be possible within Crews Hill Golf Course Borough Grade I SINC and Glasgow Stud Borough Grade I SINC.

¹⁶ Institution of Light Professionals, Bat Conservation Trust. (2023). Bat and Artificial Lighting at Night, Guidance Note 08/23.



Section 8: Conclusions

- 8.1. Based on the results of the UK Habitat Classification surveys and desktop review completed by Tyler Grange Group Ltd, it is concluded that LUCs assessment of the importance of SINCs are accurate, based on the criteria set out in each citation. Therefore each SINC is considered to be correctly categorised as being of Borough Grade I importance at the time of writing.
- 8.2. Development of the proposed draft spatial framework at Chase Park and Crews Hill offer an opportunity to enhance each SINC, improving their respective conditions and functions as non-statutory designated sites.
- 8.3. The mitigation hierarchy should be followed and development on SINCs should be avoided in the first instance. It is recommended that detailed assessment of site selection is completed and alternative sites of lower ecological value are selected where possible. Where development is considered unavoidable, this should focus on areas of lowest ecological value and it should be ensured that sufficient compensation can be made to offset any habitat losses within the SINCs.
- 8.4. In principle development could be development could be undertaken within Crews Hill Golf Course Borough Grade I SINC and Glasgow Stud Borough Grade I SINC, provided that the mitigation hierarchy is followed and that any development does not impact the function of the SINC or result in the degeneration of the habits and species populations present within the respective SINCs. Given the size of Royal Enfield Rifles Site and Woodland at Vicarage Farm Borough Grade I SINC it is unlikely any suitable compensation and mitigation could be implemented to mitigate for losses within the SINC from development.
- 8.5. Impacts from any future proposed development should be fully assessed by a suitably qualified ecologist and proposals should include suitable mitigation and compensation for any impacts to SINC. Any future development should be compliant with Greater London planning policy, the Enfield London Borough Council Local Plan, Environment Act 2021 and the NPPF.



Appendix 1: Legislation and Planning Policy

Legislation

- A1.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
 - The Environment Act 2021;
 - The Wildlife and Countryside Act (WCA) 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2017 (as amended);
 - The Countryside and Rights of Way (CRoW) Act 2000;
 - The Natural Environment and Rural Communities Act (NERC) 2006; and
 - The Hedgerows Regulations 1997.
- A1.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2017 (as amended).
- A1.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4. The CRoW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

Environment Act 2021: Upcoming Town and Country Planning Act

- A1.5. The Environment Act gained Royal Assent in November 2022. Whilst the premise of BNG has been around prior to this, the Assent of the Act sets the Framework for future legislation to be changed. This will be in the form of the Town and Country Planning Act (TaCPA), specifically Schedule 14 of the TaCPA, which will make Biodiversity Net Gain a condition of planning (not a planning condition). The target 'gain' is currently set at 10% but the Secretary of State has the ability to change this.
- A1.6. The timescales for changes to the wording of the TaCPA are that it will be legally mandated and enforceable from November 2023.



Natural Office of the Deputy Prime Minister (ODPM) Circular 06/2005: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System

- A1.7. ODPM Circular 06/05 was prepared to accompany PPS9, however continues to be valid, and material in the consideration of planning applications since PPS9's replacement by the NPPF.
- A1.8. ODPM Circular 06/05 provides guidance on applying legislation in relation to nature conservation and planning in England. Part I considers the legal protection and conservation of internationally designated sites (namely candidate Special Areas of Conservation (cSACs), SACs, potential Special Protection Areas (pSPAs), SPAs and Ramsar sites) and Part II considers the legal protection and conservation of nationally designated sites, namely Sites of Special Scientific Interest (SSSIs).
- A1.9. Part III considers the protection of habitats and species outside of designated areas (particularly UK Biodiversity Action Plan species and habitats, which it states are capable of being a material consideration in the preparation of local development documents and the making of planning decisions.
- A1.10. Part IV considers species protected by law and states that the presence of a protected species is a material consideration in the consideration of a development proposal that, if carried out, would be likely to result in harm to the species or its habitat and that it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted.

National Planning Policy

National Planning Policy Framework (NPPF), July 2021

- A1.11. The National Planning Policy Framework (NPPF) was updated in July 2021 and sets out the Government's planning policies for England and how these should be applied. It replaces the National Planning Policy Framework published in July 2019.
- A1.12. Paragraph 11 states that:

"Plans and decisions should apply a presumption in favour of sustainable development."

- A1.13. Section 15 of the NPPF (paragraphs 174 to 182) considers the conservation and enhancement of the natural environment including habitats and biodiversity (paragraphs 179-182)
- A1.14. Paragraph 174 states that planning and decisions should contribute to and enhance the natural and local environment by:
 - *"protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
 - recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and



- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"
- A1.15. Paragraph 175 states that plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- A1.16. Paragraph 179 states that in order to protect and enhance biodiversity and geodiversity, plans should:
 - "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."
- A1.17. When determining planning applications, Paragraph 180 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:
 - "if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
 - development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
 - development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate."
- A1.18. As stated in paragraph 181 the following should be given the same protection as habitats sites:
 - "potential Special Protection Areas and possible Special Areas of Conservation;
 - listed or proposed Ramsar sites; and
 - sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites."



A1.19. Paragraph 182 states that "the presumption in favour of sustainable development does not apply where the planned project is likely to have a significant effect on a habitat site (alone or in combination with other plans or projects) unless an appropriate assessment has concluded the plan or project will not adversely affect the integrity of the habitats site."

Local Planning Policy

The London Plan, The Spatial Development Strategy for Greater London, March 2021

- A1.20. Policies relating to ecology and nature conservation can be found in Chapter 8: Green Infrastructure and Natural Environment, which are summarised as follows:
- A1.21. Policy G1: Green Infrastructure

"London's network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.

Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way as part of a network consistent with Part A.

Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:

- identify key green infrastructure assets, their function and their potential function
- *identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.*

Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network should prepare green infrastructure strategies that integrate objectives relating to open space provision, biodiversity conservation, flood management, health and wellbeing, sport and recreation."

A1.22. Policy G5: Urban Greening

"Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.

Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2, but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development (excluding B2 and B8 uses).

Existing green cover retained on site should count towards developments meeting the interim target scores set out in (B) based on the factors set out in Table 8.2."



A1.23. Policy G6: Biodiversity and Access to nature

"Sites of Importance for Nature Conservation (SINCs) should be protected.

Boroughs, in developing Development Plans, should:

- use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks.
- identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them.
- support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans.
- seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context.
- ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.

Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:

- avoid damaging the significant ecological features of the site
- minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site
- deliver off-site compensation of better biodiversity value. '

D Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.

Proposals which reduce deficiencies in access to nature should be considered positively"

A1.24. Policy G7: Trees and woodlands

"London's urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London's urban forest – the area of London under the canopy of trees.

In their Development Plans, boroughs should:

- protect 'veteran' trees and ancient woodland where these are not already part of a protected site
- *identify opportunities for tree planting in strategic locations.*



Development proposals should ensure that, wherever possible, existing trees of value are retained. If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy."

The Enfield Plan Core Strategy 2010 - 2015¹⁷

A1.25. Core Policy 36 Biodiversity

"The Council will seek to protect, enhance, restore or add to biodiversity interests within the Borough, including parks, playing fields and other sports spaces, green corridors, waterways, sites, habitats and species identified at a European, national, London or local level as being of importance for nature conservation by:

Continuing to protect, restore, and enhance sites, habitats and species identified for their biodiversity importance at the national, London, or borough level. The Development Management Document will set out criteria to assess development proposals that are likely to have an adverse ecological impact;

Requiring improvements to biodiversity provision, with priority given to areas of deficiency identified in the Enfield Open Space Study and proposals which assist in achieving Biodiversity Action Plan objectives;

Reviewing the schedule of Sites of Importance for Nature Conservation in light of the findings of GLA survey of the Borough and other appropriate evidence, in order to set out a hierarchy of locally important sites in the Development Management Document; and

Preparing a Local Biodiversity Action Plan to set out the Borough's actions and objectives with regard to biodiversity, and to contribute towards the UK and London Biodiversity Action Plan targets and objectives."

Improving Enfield Development Management Plan: Adopted November 2014¹⁸

A1.26. DMD76 Wildlife Corridors

"Development on sites that include or a but a wildlife corridor will only be permitted if the proposal protects and enhances the corridor.

This policy should be read in conjunction with Core Strategy Policy 36."

A1.27. DMD 78 Nature Conservation

"Development that has a direct or indirect negative impact upon important ecological assets will only be permitted where the harm cannot reasonably be avoided and it has been demonstrated that appropriate mitigation can address the harm caused. Mitigation will be secured through planning obligations or planning conditions.

Major development on sites located within areas of deficiency must maximise opportunities to improve access to nature. This policy should be read in conjunction with Core Strategy Policy 36."

¹⁸https://www.enfield.gov.uk/services/planning/adopted-plans#development-management-document-2014



¹⁷https://www.enfield.gov.uk/services/planning/adopted-plans#core-strategy-2010

Enfield Local Plan Main issue and preferred approaches: June 2021¹⁹

A1.28. Draft Strategic Policy BG1 Enfield's blue and green infrastructure network

"1. Proposals will be expected to contribute to the creation of a more integrated, multifunctional and accessible blue and green infrastructure network and address deficiencies in quantity, quality and access across the Borough. This will be achieved through:

a. protecting and enhancing areas of Green Belt and Metropolitan Open Land to maintain their function, quality and openness;

b. ensuring development protects and enhances significant ecological features, achieves biodiversity net gain and maximises opportunities for urban greening through appropriate landscaping schemes and the planting of street trees;

c. reviewing Sites of Importance for Nature Conservation (SINCs) and areas of biodiversity deficiency every five years to ensure development contributes as appropriate to the borough's nature recovery network;

d. improving the quality, character, value and accessibility of existing publicly accessible open spaces and water spaces across the Borough, in line with the priorities of the Blue and Green Strategy;

e. maximising green grid links to enhance access through walking, cycling and public transport to key destination points (e.g. town centres), community facilities and publicly accessible open spaces, especially along rivers and waterways;

f. protecting, improving and enhancing access to blue spaces and the wider water environment and improving relationship with the river and naturalising the riverbank through the removal of hard engineered walls and culverts and introducing new habitats to the river corridor;

g. protecting and enhancing existing residential moorings located on the River Lee;

h. maximising opportunities to create and increase publicly accessible open space and outdoor sports (including playing pitches and ancillary sporting facilities) with a range of sizes across a range of users, particularly in locations which experience the highest level of deficiency within the Borough;

i. protecting and enhancing the Borough's habitat and wildlife resources, including linking green spaces with identified wildlife corridors, protecting and enhancing species and habitats identified in the Blue and Green Infrastructure Audit and London Biodiversity Action Plan or updated equivalent, and creating new nesting and roosting sites; and j. supporting community food growing through development and building new partnerships with social enterprise and voluntary organisations that aspire to designate important local open spaces as local green spaces.

2. Future blue-green interventions will be prioritised in the following locations (as shown on the key diagram) through: a. creation of a continuous 'green-loop' –

a walking and cycling route extending from the open countryside, via the river valleys, into the main urban area and onto the Lee Valley Regional Park and Enfield Chase;

b. provision of world-class sport villages at Enfield Playing Fields, Hotspur Way and Firs Farm;

¹⁹https://www.enfield.gov.uk/services/planning/adopted-plans#development-management-document-2014



c. expansion of routes into the Lee Valley Regional Park alongside open spaces and river corridors;

d. naturalisation and catchment restoration of Salmons Brook, Turkey Brook and Pymmes Park through natural flood management e. creation of a new publicly accessible landscape (Enfield Chase – London National Park City) comprising new woodland, open space and extensive rewilding;

f. new continuous and publicly accessible linear parks (including Brooks Park and Edmonton Marshes) across strategic development sites;

g. grey-to-green corridors: Public realm improvements along main routes (e.g. A10, A406 and A101) and at key stations and town centre gateways, such as sustainable drainage systems (e.g. rain gardens, buffer strips and wildflower verges), civic squares and water features;

h. new crossings/bridges over the A10, A406 and Lee Valley line to overcome eastwest severance;

i. sensitive restoration and enhancements of registered historic parks and gardens (Trent Park, Grovelands Park, Myddelton House Gardens and Broomfield Park) and associated visitor attractions; and

j. revitalisation of open spaces and leisure/recreational activities at Banbury Reservoir, Picketts Lock, Hotspur Way, Ponders End and Whitewebbs Park."

A1.29. Draft Strategic Policy BG2 Protecting nature conservation sites

"1. Development will be expected to protect, maintain and enhance the biodiversity and geodiversity value of the borough's international, national and local wildlife and geological sites in line with the following principles.

International

2. Development will not be permitted where it would adversely affect (directly or indirectly) the integrity of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), unless it meets the requirements set out in the regulations11. Where such potential exists, applicants should seek advice from Natural England to determine whether a habitat regulations assessment would be required as part of the planning application. The assessment will need to demonstrate that the development will not adversely impact on the integrity of a SPA or SAC.

3. Development involving over 100 new homes within 6km of the boundary of the Epping Forest SAC (known as the "zone of influence' as shown on the Policies Map) will need to secure appropriate mitigation and avoidance measures in the form of strategic alternative nature green space (SANG) to offset any potential effects arising from increased recreational pressure and air pollution on the Epping Forest SSAC (either 'alone' or 'in combination' with other relevant plans and proposals) in consultation with Natural England, Epping Forest Conservators and other relevant bodies.

National

4. Development will not be permitted where it would adversely affect (directly or indirectly) the integrity of Covert Way Local Nature Reserves, William Girling Reservoir and Chingford Reservoirs Site of Special Scientific Interest (SSSI), as shown on the Policies Map). Exceptions will only be made where the benefits of the development would clearly outweigh the impacts on the special conservation features of the site and appropriate measures are provided to mitigate and/or compensate harmful impacts.



Metropolitan, Borough and local

5. Development affecting the integrity of a Site of Importance for Nature Conservation (as shown on the Policies Map), priority habitats/species, non-designated sites or features of biodiversity interest (directly or indirectly) will only be supported where: a. the mitigation hierarchy has been applied in line with the London Plan to offset the loss of habitats and species; b. it will protect, restore, enhance and provide appropriate buffers around wildlife and geological features as well as links to the wider ecological network; and c. the benefits of the proposed development would clearly outweigh the adverse impact on the biodiversity and geodiversity value of the site."

A1.30. Draft Strategic Policy BG3 Biodiversity net gain, rewilding and offsetting

"1. All development proposals shall be considered in light of the mitigation hierarchy (avoid, mitigate and compensate) to protect most valuable ecological features of the site and minimise harm to nature. Measures will also be sought to increase or improve biodiversity through the restoration and re-creation of priority habitats and ecological networks and the protection and recovery of protected wildlife populations, especially where there are gaps across existing corridors.

2. Applicants must submit an action plan setting out how biodiversity will be improved as a result of the development to offset the loss or degradation of natural habitat on site (using the DEFRA metric model). The action plan will need to provide evidence of how the development will achieve a minimum of 10% net gain, including habitat creation, preferably on site.

3. Where the 10% minimum requirement cannot be met on site, or would be better served elsewhere, adequate offsite compensation provision must be provided to an equivalent of better standard to offset the loss of habitats arising from the proposed development. Provision will be directed towards projects that contribute to Enfield's nature recovery network and other biodiversity and landscape-scale conservation priorities, particularly within the following locations:

a. Areas of nature deficiency (e.g. Enfield Chase and Chingford Reservoirs);

b. Riparian corridors; and

c. Bug life B-line (as shown on Figure 6:3)."



Appendix 2: Royal Enfield Rifles Site and Woodland at

Vicarage Farm SINC Citation



Crews Hill and Chase Park, Enfield Sites of Importance for Nature Conservation Report

Royal Enfield Rifles Site and Woodland at Vicarage Farm



Survey

Surveyor RG	Date	01/07/2020		Weather	Windy	
Level of Use Low		Management	Frequently	y		
Additional Comments: N/A						
London BAP Priority Habitats	on site:					
Arable Field Margins	Low	land Dry Acid Gr	assland	Wood Pas	ture Parkland	Lowland Meadows
Open Mosaic Habitats	✔ Low	land Mixed Decid	duous	Veteran Tr	ees	✓ Wet Woodland
Traditional Orchards	Low	land Beech and `	Yew	Reedbeds	✓ Rivers	Hedgerows

Habitat Survey Description

The site is comprised of a wide range of habitats including broadleaved and wet woodland, running waterbodies, dense scrub, semi-improved neutral grassland, hedgerows and tall ruderal. In the south-west, the semi-improved grassland was bordered by dense scrub and tall ruderal comprised of bramble, common nettle, williowherb, creeping thistle and ragwort. The grasses were of a longer sward length along the edges suggesting that a relaxed mowing regime was in effect. Broadleaved woodland had established along the Merryhills Brook where remnant hedgerows once were. In the southwest, woodland enclosed the Merryhills Brook which had characteristics of a wet woodland. It was comprised predominantly of willow with ash and hawthorn also recorded. Ground flora was comprised predominantly of common nettle. Veteran trees were present. Hedgerows with trees were recordeded across the site, and were predominantly comprised of blackthorn and hawthorn, with oak and hornbeam also recorded. Dry ditches were observed in the south-west along the perimeter of the semi-improved grassland. along western hedgerow. Hornbeam, hawthorn and oak alsompresent. In the east, semi-improved grassland and bramble scrub mosaic was present, which has likely to begin to encroach the grassland due to a lack of frequent graing. The eastern woodland was comprised of silver birch, oak and ash, with a shrub layer comprised of hawthorn, blackthorn, and damson. The broadleaved woodland in the north-east was of a similar species composition to the eastern woodland, but was observed to support ancient woodland indicators including dogs mercury and ferns

Roval Enfield Rifles Site and Woodland at Vicarage Farm

Threats and Disturbances			
Redevelopment	Invasives	Erosion	Vandalism
✓ Dog Fouling	✓ Flytipping	✓ Litter	
Comments N/A			
Opportunities on Site			
✓ Mowing Regime	✓ Meadow Creation	✓ Wetland Creation	Tree Planting
Education	✓ Active Tree Managment	✓ Loggery	✓ Wildlife Friendly Planting

Comments

It is recommended that woodland management measures in the south-western and eastern woodland are implemented such as selective felling to allow shrub and ground floral layer to establish.

Interest Features

	Amphibian		Higner Plant	Eungi
✓ Bird	Bryophyte	✓ Mammal	Lichen	 Invertebrates

Explain the importance of the site for these features

N/A

SINC Survey Criteria

Representation

The site supported a rich diversity of habitats including priority habitats including deciduous and wet woodland, hedgerows, running waterbody and veteran trees. The site remains the same as previously recorded.

Habitat Rarity

The site supports a variety of priority habitats including deciduous and wet woodland, hegerows, running waterbodies and veteran trees. These habitats sould be retained wherever feasible given the importance of these habitats at the borough scale.

Species Rarity

This criterion does not apply to this site.

Habitat Richness

The site supported a wide variety of habitats which have established themselves due to the longevity of the site and the access restrictions that were likely to be imposed on it previously. This is due to the majority of the site being utilised as a former military camp during the Second World War. The site supports a variety of priority listed habitats such as deciduous and wet woodland, hedgerows, running water and veteran trees.

Species Richness

The site supported a wide range of species as recorded previously.

Size

The site is of 25.2 hectares. The site is located within central Enfield and is bound by arable fields and hedgerows to the west north and partially in the east. The site is part of a wider network of similar habitats, and offers unique habitats within the borough. Therefore it is considered to be of key importance at a strategic level.

Important Populations of Species

This criterion is not applicable to this site.

Ancient Character

The site supports veteran trees which are a priority habitat within the borough, and should be retained wherever feasible given their importance.

Recreatability

The site supports priority listed habitats for the borough including deciduous and wet woodland, hedgerows, running water and veteran trees. Given the rarity of these habitats, and the unique circumstances that allowed these habitats to develop and

Roval Enfield Rifles Site and Woodland at Vicarage Farm

establish themselves, it is considered that these habitats are irreplaceable if they were to be lost.

Typical Urban Character

This criterion is not applicable to this site.

Cultural or Historic Character

The site has historic character for the fact that it was utilised by a former military base during the Second World War.

Geographic Position

The site is located within central Enfield, and is fundamentally connected to other SINCs in the west such as Trent Park Golf course through a network of similar habitats. This site is of key importance to local residents given the range of habitats and historic culture associated with it, and it is important at a strategic level as it forms part of a wildlife corridor which extends north into more rural settings.

Access

Parts of the site were accessible through PROWs.

Use

The site is utilised by locals for relaxation, exercise and to engage with nature. Although not apparent during the survey, there is a possibility that the site could be utilised by local historic groups given the historic use of the site.

Potential

Given the size of the site and habitats present, there is potential to increase the ecological value of the existing habitats such as the woodland copses and Merryhills Brook/Salmon's Brook through ecological enhancements and appropriate management measures, but also to create new habitats such as wetland creation or meadow creation to increase the sites suitability to offer more opportunities to local wildlife. Additionally the existing semi-improved grassland could be sown with wildflower friendly seeds to encourage the succession into hay meadow or lowland acidic grassland.

Aesthetic Appeal

The site is of key importance as it allows the local residents to engage with nature and be exposed to habitats that they may not normally experience in other local greenspaces such as wet woodland. Additionally, given the historical aspect of the site, it may attract historians to the site to reflect on the sites military use.

Geodiversity Interest

This criterion does not apply to this site.

Conclusions

SINC Recommendations

No change to SINC

Comments

The site was comprised of a wide variety of habitats which offer numerous opportunities for a range of protected or notable species. The site also forms part of a key strategic wildlife corridor. The site should maintain its Borough SINC grade.

Appendix 3: Crews Hill Golf Course SINC Citation



Crews Hill and Chase Park, Enfield Sites of Importance for Nature Conservation Report

Crews Hill Golf Course

Site information

Information in this section of the proforma was pre-populated using GIS data (*). The remaining sections of the form were completed during the site survey.

Site ID *	19	SINC ID EnB04	SINC Name	* Cre	ws Hill Golf C	ourse			
Grid Ref *	TQ30761	99650	Grade *	Bor	ough		Area (Ha) *	47.36	
Previous Accordent	ess as NC	Public access footpaths only	on LUC Su Access	irvey S	No change		Ownership	Private	
Summary of Habitats	Summary of Acid grassland, running water, scrub, wet woodland/carr Habitats								
Land Use G	olf course					Lies withir	the B-Line co	orridor: *	res
Other designation	ations with	nin 30m of SINC							
SSSI within 3	0m of the	SINC * No SSS	SI within 30m of S	INC.					
LNR within 30	m of the \$	SINC * No LNF	R within 30m of SI	NC.					
AWI within 30	m of the S	SINC * No AW	l within 30m of SI	NC.					
Priority Habita	at* D	eciduous woodlaı	nd;						

Will this site contribute to Areas of Deficiency in Access to Nature? Yes

(This was informed by GIGL's Principles of Measuring Areas of Deficiency in Access to Nature)

Summary

Crews Hill Golf Course is situated in the north of the borough of Enfield. The site is bound by arable and pasture fields with a railway corridor recorded to the east.



Crews Hill Golf Course

Survey

Surveyor RT	Date 29/06/202	20	Weather	Windy	
Level of Use High	Manager	ment Regular	У		
Additional Comments: N	I/A				
London BAP Priority Habita	ts on site:				
Arable Field Margins	Lowland Dry A	Acid Grassland	✓ Wood Pas	ture Parkland	Lowland Meadows
Open Mosaic Habitats	 Lowland Mixe 	d Deciduous	Veteran Tr	ees	✓ Wet Woodland
Traditional Orchards	Lowland Beec	h and Yew	Reedbeds	Rivers	✓ Hedgerows
Habitat Survey Description					
The site is comprised of a mo broadleaved and wet woodlan grassland was noted to suppo oak.	saic of habitats, inclu ad adjacent to Turkey orts species, such as	uding semi-impro / Brook, which ru tormentil, sheep	oved grassland w ins from north to o sorrel and chicl	vith areas of reli south in the we kweed whilst the	ct acid grassland, semi-natura est, and hedgerow. The e woodland was dominated by
Threats and Disturbances					
Redevelopment	 Invasives 		Erosion		Vandalism
Dog Fouling	Flytipping		Litter		
Comments The site is known to have oak	processionary moth	, which has pote	ntial to affect oa	k trees that are	present on site.
Opportunities on Site					
Mowing Regime	Meadow Cr	eation	✓ Wetland Creation	eation	Tree Planting
Education	✓ Active Tree	Managment	Loggery		Wildlife Friendly Planting
Comments N/A					
Interest Features					
✓ Fish Arr	nphibian	✓ Reptile] Higher Plant	🔲 Fungi
✓ Bird	vophyte	Mammal		Lichen	✓ Invertebrates
Explain the importance of the	ne site for these fea	tures			

Mining bees present in bunkers.

SINC Survey Criteria

Representation

The site supports some of the best examples of relict acid grassland in the borough. In addition to this, the site supports deciduous woodland, which is listed as a priority habitat in the priority habitat inventory.

Habitat Rarity

The site supports relict acid grassland habitat and deciduous woodland habitat, which is a priority habitat listed on the priority habitat inventory.

Species Rarity

The site supported species including tormentil, sheep sorrel, heath bedstraw, gorse and broom. In addition to this, there have been previous records of burnet-saxifrage being present on site, which is a London rarity.

Crews Hill Golf Course

Habitat Richness

The site supports a range of habitat types, including semi-improved grassland with areas of relict acid grassland, semi-natural broadleaved woodland, wet woodland, river and hedgerow. The varied habitats on site provide a wide range of opportunities for species to forage, shelter and commute.

Species Richness

Acid grassland habitat is typically considered to be species poor. However, this habitat should be considered of distinct value given the condition and species present.

Size

The site is 47.36ha. This is of notable size and is considered to provide an important site as it forms part of a wider area of designated sites and is adjoined to the Crews Hill to Bowes Park Railsides, a strategic ecological corridor, which spans the length of the borough.

Important Populations of Species

This criterion is not applicable to the site.

Ancient Character

The site was noted to have areas of ridge and furrow, which is an old farming technique used during the Middle Ages. The presence of this feature indicates the ancient character of the site.

Recreatability

The habitats present in the site, include the relict acid grassland, river and semi-natural and wet woodland habitat, have been formed over many years and influenced by the historical use of the land. This habitat would therefore be difficult to recreate and should be retained wherever possible.

Typical Urban Character

This criterion is not applicable to the site.

Cultural or Historic Character

The site supports ridge and furrow, which indicates the historical use of the site.

Geographic Position

The site is located in the north of the borough of Enfield. The site forms part of a network of designated habitats of metropolitan and borough grade quality, which are of key significance to the London and the borough. In addition to this, the site is adjoined to the Crews Hill to Bowes Park Borough SINC, which spans the length of the borough and is of key importance as a strategic ecological corridor. This site is therefore of key importance in supporting surrounding designations and ensuring continued connectivity and resilience to changes from factors, such as development and climate change in the north of the borough.

Access

There is public access to the site via a public footpath, which runs through the north of the site. The rest of the site is only accessible to members and visitors to the golf club.

Use

The site is used as a golf course.

Potential

There is potential to enhance and create wetland habitats within the site to create additional opportunities for species reliant on waterbodies. In addition to this, it is recommended that the trees are subject to active tree management, including the treatment and management of the oak processionary moth.

Aesthetic Appeal

The site is appealing for members and visitors using the golf course, as well as the public using the public footpaths in the area and want to access nature.

Geodiversity Interest

This criterion is not applicable to the site.

Conclusions

SINC Recommendations

Proposed upgrade and extension

Comments

The site supports relict acid grassland habitat, which is irreplaceable and considered to be one of the best examples in the borough. The site is considered of metropolitan quality and should be upgraded.

Appendix 4: Glasgow Stud SINC Citation



Crews Hill and Chase Park, Enfield Sites of Importance for Nature Conservation Report

Site information

Information in this section of the proforma was pre-populated using GIS data (*). The remaining sections of the form were completed during the site survey.

Site ID *	23	SINC ID EnB08	SINC Name *	Glasgow Stud		
Grid Ref *	TL31708	300396	Grade *	Borough	Area (Ha) *	44.08
Previous Acc detailed in SI	ess as NC	Access on public footpaths only	LUC Surv Access	vey No change	Ownership	Private

Summary of Broadleaved woodland, semi-improved neutral grassland, ponds, running water Habitats

Land Use Farmland

Lies within the B-Line corridor: * No

Other designations within 30m of SINC

SSSI within 30m of the SINC * No SSSI within 30m of SINC.

LNR within 30m of the SINC * No LNR within 30m of SINC.

AWI within 30m of the SINC * No AWI within 30m of SINC.

Priority Habitat * Deciduous woodland;

Will this site contribute to Areas of Deficiency in Access to Nature? No

(This was informed by GIGL's Principles of Measuring Areas of Deficiency in Access to Nature)

Summary

Glasgow Stud is comprised of a series of fields and woodland, which lies in the north of the borough of Enfield. As the site could only be viewed from a private road/footpath running through the centre of the site, there were restricted views/access to some areas of the site.



Glasgow Stud

Survey

Surveyor RT	Date	29/06/2020	Weather	Grey			
Level of Use Low		Management R	egularly				
Additional Comments	: The grassla site.	nd was managed by	v grazing livestock, inc	uding sheep in	the southernmost field of the		
London BAP Priority I	Habitats on site:						
Arable Field Mar	gins 🔲 Low	land Dry Acid Grass	and 🔲 Wood Pas	sture Parkland	✓ Lowland Meadows		
Open Mosaic Ha	bitats 🗹 Low	land Mixed Deciduo	us 🔲 Veteran T	rees	Wet Woodland		
Traditional Orcha	ards 📃 Low	land Beech and Ye	w 🔲 Reedbeds	Rivers	Hedgerows		
Habitat Survey Descri	ption						
The site is formed of se hedgerows, semi-natur	The site is formed of semi-improved grassland, which is primarily grazed by horse and sheep, surrounded by a network of mature hedgerows, semi-natural broadleaved woodland in the east and a pond in the west, which was dominated by vegetation.						
Threats and Disturbar	nces						
Redevelopment	Inv	asives	Erosion		Vandalism		
Dog Fouling	Ely	/tipping	✓ Litter				
Comments Low levels of litter were	e recorded in the s	site.					
Opportunities on Site							
Mowing Regime	✓ M	eadow Creation	✓ Wetland Cr	eation	Tree Planting		
Education		ctive Tree Managme	ent 🔲 Loggery		Wildlife Friendly Planting		
Comments N/A							
Interest Features							
Fish	 Amphibian 	✓ Rep	ile	Higher Plant	Fungi		
✓ Bird	Bryophyte	✓ Man	imal	Lichen	✓ Invertebrates		
-							

Explain the importance of the site for these features $\ensuremath{\mathsf{N/A}}$

SINC Survey Criteria

Representation

This criterion is not applicable to the site.

Habitat Rarity

The site supports deciduous woodland habitat, which is listed on the priority habitat inventory.

Species Rarity

No rare species were recorded in the site during the survey. However, it should be noted that access was restricted to public footpaths.

Habitat Richness

The supports a range of habitats, which are typically found in a countryside setting. This includes semi-improved grassland, hedgerows, semi-natural broadleaved woodland and a pond.

Species Richness

This criterion is not applicable to the site.

Size

The site is 44.08ha, which is of notable size and which contributes to the network of designated sites present in the north of the site.

Important Populations of Species

This criterion is not applicable to the site.

Ancient Character

There are signs of mature and veteran trees in the woodland in the east of the site, which may have potential to be of ancient character.

Recreatability

The semi-improved grassland and pond can be easily recreated whilst it would be more difficult to recreate the network of mature hedgerows and semi-natural broadleaved woodland.

Typical Urban Character

This criterion is not applicable to the site.

Cultural or Historic Character

This criterion is not applicable to the site.

Geographic Position

The site is located in the north of the borough immediately next to the M25. The site forms part of a wider network of designated sites with similar habitat types, including Whitewebbs Wood Metropolitan SINC and Forty Hall Park and Estate Metropolitan SINC and is likely to act as a buffer between the M25 and surrounding habitats with high ecological value.

Access

There is no public access to the majority of the site. Access is limited to a single private road/public footpath, which runs through the centre of the site.

Use

The site is primarily used for farming purposes, including animal grazing.

Potential

There is potential for the site to be further enhanced through wetland and meadow creation and management and from active tree management of the hedgerows and woodland to maintain the structural and species diversity of these habitats.

Aesthetic Appeal

This criterion is not applicable to the site.

Geodiversity Interest

This criterion is not applicable to the site.

Conclusions

SINC Recommendations

No change to SINC

Comments

The site supports habitats which are of considered of Borough Grade quality and the site should remain as a Borough Grade SINC.

Plans:

Plan 1: Royal Enfield Rifles Site and Woodland at Vicarage Farm SINC Habitat Features Plan 15773/P16

Plan 2: Royal Enfield Rifles Site and Woodland at Vicarage Farm SINC Opportunities and Constraints Plan 15773/P17

Plan 3: Crews Hill Golf Course SINC Habitat Features Plan 15773/P18

Plan 4: Crews Hill Golf Course SINC Opportunities and Constraints Plan 15773/P19

Plan 5: Glasgow Stud SINC Habitat Features Plan 15773/P20

Plan 6: Glasgow Stud SINC Opportunities and Constraints Plan 15773/P21



Crews Hill and Chase Park, Enfield Sites of Importance for Nature Conservation Report



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Leg	lend
	SINC site boundary
•	Target Notes
Hab	itats
	Developed land; sealed surface: buildings
	Developed land; sealed surface: hardstanding
	Lowland mixed deciduous woodland
	Mixed scrub
\bigotimes	Mixed scrub with tall ruderal
	Neutral grassland
	Wet woodland
	Footpath
	Line of trees
	Native species rich hedgerow with trees

River: Merryhills brook

River: Salmon's brook



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The SINC is designated for its importance as part of the wider green/blue ecological network running through Enfield. It contains several habitats including wet woodland, lowland mixed deciduous woodland (a Habitat of Principle Importance (HoPI) under the Natural Environment and Rural Communities Act 2006), neutral grassland, hedgerows (a HoPI), and two brooks (known as Salmons brook and Merryhills brook) . Following an Extended Phase I habitat survey completed by Tyler Grange on 27th July 2023, the entire SINC is considered to match the SINC citation description, although it should be noted the SINC is mown as stated in the citation. The SINC is considered to meet the criteria set out by Land Use Consultants (LUC) for a Borough grade SINC.

While the SINC was noted to contain some areas which appeared to be degraded and of a poor ecological condition due to lack of management, the SINC as a whole does is likely to serve a key function as a green corridor. Should any development be required within the SINC, it should be confined to the south-west fields of neutral grassland and scrub. These areas were noted to be of relatively poor ecological condition due to the extensive horse grazing. However, given the quantum of grassland habitat present within the rest of the SINC, it is considered unlikely that loss of the south-westernmost field could be offset by implementing habitat enhancements to the other areas of grassland in the SINC, particularly from a biodiversity net gain perspective. As such, off-site compensation may be required if the south-west field is built upon.

Merryhills and Salmon's brooks, their associated floodplains and areas of wet woodland identified within the site should be appropriately buffered, retained and enhanced as part of the proposals to maintain the integrity of the SINC and maintain the brooks as wildlife corridors connected to the wider landscape. This aligns with the enhancement opportunities identified in the SINC citation.



Areas of lowland deciduous woodland HoPI within the SINC should be retained, buffered (by at least 10 m) and enhanced as part of any development in order protect and retain these habitats.

Retained areas of SINC should be managed primarily for biodiversity value with only limited pubic access, via footpaths permitted. However as recreational pressure is a major contributing factor in the degradation of public spaces, access to retained areas by the public and new residents would negatively impact the condition of the SINC. It is considered that retaining the majority of the SINC to the south would be likely to maintain the overall integrity and function of the SINC and that the SINC would continue to pass the SINC criteria. Furthermore, habitat fragmentation would be avoided, allowing faunal species to commute between the SINC and the wider landscape.

A biodiversity net gain metric has not been completed as part of this assessment and will be required if the proposed development is brought forward as part of a planning application, as specified by the Environment Act 2021, once enforced in secondary legislation which is anticipated in November 2023.

Legend				
	SINC site boundary			
•	Target Notes			
Habitats				
	Developed land; sealed surface: buildings			
	Developed land; sealed surface: hardstanding			
	Lowland mixed deciduous woodland			
	Mixed scrub			
\bigotimes	Mixed scrub with tall ruderal			
	Neutral grassland			
	Wet woodland			
	Footpath			
•••	Line of trees			
	Native species rich hedgerow with trees			
	River: Merryhills brook			

River: Salmon's brook



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Lege	nd					
s	INC site boundary					
Habitats						
N	No access					
ЖЖ А	cid grassland					
A	Artificial unvegetated, unsealed surface					
Ν	leutral grassland					
L	owland mixed deciduous woodland					
Μ	Modified grassland					
D	Developed land; sealed surface (buildings)					
V	Vegetated garden					
D	Developed land; sealed surface (hardstanding)					
V	Wet woodland					
—— R	River: Turkey Brook					
S	easonally wet ditch					
•••• N	lative species hedgerow with trees					
•••• L	ine of trees (hornbeam) with footpath					
• G	orse scrub					
• S	cattered trees (approximate)					
A	reas of heavy management (golf course)					
Ň	0 100 200 300 m					
Project	Crews Hill					
Drawing Title	Crews Hill Golf Course SINC Habitat Features Plan					
Scale	As Shown (Approximate)					
Drawing No.	15773/P18					
Date	September 2023					
Checked	I MJ/CC/AP					
	Tyler Grange					

The SINC is designated for its mosaic of neutral grassland, scattered trees, lowland deciduous woodland (Habitat of Principle Importance), tree lines, wet woodlands and a brook (known as Turkey Brook). Following an Extended Phase I habitat survey by Tyler Grange on 1st August 2023, the entire SINC is considered to match the SINC citation description. The SINC does meet the criteria set out by LUC for a Borough grade SINC . The previous work undertaken in The SINC is understood to be heavily managed and used for recreational activities (primarily golf), with the modified and neutral grassland habitat in particular subject to heavy management such as close-mowing and regular use, limiting its ecological value.

Therefore, the management of the site has created a range of habitat types and structure that have potential to support a range of fauna and flora species.

In order to maintain the integrity of the SINC, any future provision for development should ensure that the existing habitat mosaic can be maintained. Any future development should focus on areas of the lowest ecological value and ensure the function of the SINC is maintained. Compensation for any habitat lost should be provided by enhancing existing habitats within the SINC and creating new high-quality habitat types as close to the SINC as possible. Opportunities exist to retain and enhance areas of the SINC and provide off-site provision of habitats to compensate for losses to development.

Turkey Brook, its associated floodplain and areas of wetland should be appropriately buffered, retained and enhanced as part of the proposals to maintain the integrity of the SINC and maintain this as a wildlife corridor connected to the wider landscape. This aligns with the enhancement opportunities identified in the SINC citation.

Aside from areas of modified grassland, all grassland on-site has indicators of acid grassland, with some acid grassland being present in areas of lower management. Evident Aside from areas of modified grassland, all grassland on-site was found to contain species indicative of acid grassland, with an area of acid grassland being present in the south of the SINC, in areas subject to less intensive management. Evidence of historic management (ridge and furrows), presence of some acid grassland and indicator species in other areas indicate this is relic acid grassland. Soil sampling should be undertaken to confirm this and to indicate whether the grassland has the potential, if managed correctly to be enhanced to acid grassland. Conditions of the grassland range from moderate to good condition with areas of heavy management being of moderate condition. Given the quantum of habitat within the SINC, it is considered likely that losses of grassland habitat to development could be compensated for with enhancement of other areas of retained grassland habitat and restoration to acid grassland (subject to further assessment including soil sampling and biodiversity net gain assessment.

A biodiversity net gain metric has not been completed as part of this assessment and will be required if the proposed development is brought forward as part of a planning application, as specified by the Environment Act 2021, once enforced in secondary legislation which is anticipated in November 2023.

It is recommended that the SINC be retained and enhanced as far as possible as part of any potential development. Should development be required within the SINC, the northern areas of the site are considered to be of lowest ecological value given areas of built form which offer little to no biodiversity value, relatively high levels of disturbance and the presence of heavily-managed grassland within this area. Therefore, habitat loss in these areas is likely to be preferable to habitat loss in the wider SINC where development is required. Such losses are likely compensable within the quantum of the SINC by enhancing the condition of retained habitats (subject to soil sampling and biodiversity net gain assessment).



Areas of lowland deciduous woodland within the SINC should be retained, buffered (at least 10 m) and enhanced as part of any development in order protect and retained them.



Retained areas of SINC should be managed for biodiversity with some limited pubic access, via footpaths. However as recreational pressure is a major contributing factor in the degradation of public spaces, access to retained areas by the public and new residents. It is considered that as a retaining the majority of the SINC to the south is likely to maintain the overall integrity and function of the SINC and that the SINC would continue to pass the SINC criteria. Furthermore, habitat fragmentation would be avoided, allowing faunal species to commute between the SINC and the wider landscape.

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D

Drawing No.

Date

Checked

15773/P19

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September 2023

Tyler Grange

Legend							
	SINC site boundary						
	Area o	of lowest ec	ological value	9			
Habitats							
	No ac	cess					
	Acid g	rassland					
	Artific	ial unvegeta	ated, unseale	d surface			
	Neutral grassland						
	Lowland mixed deciduous woodland						
	Modified grassland						
	Developed land; sealed surface (buildings)						
	Vegetated garden						
	Developed land; sealed surface (hardstanding)						
	Wet woodland						
_	River: Turkey Brook						
	Seasonally wet ditch						
	Native	e species he	dgerow with	trees			
	Line of trees (hornbeam) with footpath						
•	Gorse scrub						
•	 Scattered trees (approximate) 						
	Areas of heavy management (golf course)						
			-				
ſ	N a	J	100	200	300 m		
			1				
Pi	roject	Crews Hill					
rawing	ı Title	Crews Hill Plan	Golf Course	SINC Ops ar	าd Cons		
	Scale	As Shown	(Approximat	te)			

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Legend



Date September 2023

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The SINC is designated for its importance as part of the wider green/blue ecological network running through Enfield. It contains several habitats including wet woodland, lowland mixed deciduous woodland (a Habitat of Principle Importance (HoPI) under the Natural Environment and Rural Communities Act 2006), neutral grassland, hedgerows (a HoPI), treelines, and one brook (known as Cuffley brook) . Following an Extended Phase I habitat survey completed by Tyler Grange on 16th August 2023, the entire SINC is considered to match the SINC citation description. The SINC is considered to meet the criteria set out by Land Use Consultants (LUC) for a Borough grade SINC.

While the SINC was noted to contain some areas which appeared to be degraded and of a poor ecological condition due to lack of management, the SINC as a whole does is likely to serve a key function as a green corridor. Should any development be required within the SINC, it should be confined to the west and east fields. These areas were noted to be of relatively poor ecological condition due to the extensive grazing. Therefore, habitat loss in these areas is likely to be preferable to habitat loss in the wider SINC where development is required. Such losses are likely compensable within the quantum of the SINC by enhancing the condition of retained habitats (subject to soil sampling and biodiversity net gain assessment). Any development in these areas should seek to retain and protect existing hedgerows (HoPI) and treeslines which are often commuting corridors for a range of biodiversity.

buffered (by at least 10 m) and enhanced as part of any development in order protect and retain these habitats. The parcels of priority deciduous woodland along the north site boundary offer an opportunity to enhance and widen the existing buffer planting adjacent to the M25 to the north with additional in the SINC citation. Field 2 Field 1 W2 Field 5 Field 5 Field 5 Field W1 Field 6 Field 5

A biodiversity net gain metric has not been completed as part of this assessment and will be required if the proposed development is brought forward as part of a planning application, as specified by the Environment Act 2021, once enforced in secondary legislation which is anticipated in November 2023.

Development offers opportunities to create a biodiverse network of habitats across the site, minimising island effects and contributing to achieving biodiversity net gains. Design principles could include retaining and enhancing higher value habitats such as watercourses, hedgerows and woodland, native planting and creation of linear habitat corridors connecting habitats within the site to priority woodland habitat.

Cuffley brook, their associated floodplains and areas of wet woodland identified within the site should be appropriately buffered, retained and enhanced as part of the proposals to maintain the integrity of the SINC and maintain the brooks as wildlife corridors connected to the wider landscape. This aligns with the enhancement opportunities identified in the SINC citation.

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Areas of lowland deciduous woodland HoPI within the SINC should be retained, woodland habitat creation, in line with the enhancement opportunities identified

Legend





Project	Crews Hill
Drawing Title	Glasgow Stud SINC Ops and Cons Plan
Scale	As Shown (Approximate)
Drawing No.	15773/P21
Date	September 2023
Checked	MJ/CC/AP



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