OAKLANDS FARM SOLAR PARK

Applicant: Oaklands Farm Solar Ltd

Environmental Statement
Appendix 6.12 – Biodiversity Net Gain Report
January 2024
Document Ref: EN010122/APP/6.1/Appx 6.12
Revision: -

Planning Act 2008
Infrastructure Planning (Application: Prescribed Forms and Procedure) Regulations 2009 - 5(2)(a)

Oaklands Farm Solar Park - Environmental Statement Volume 3

Appendix 6.12: Biodiversity Net Gain Report

Final report
Prepared by LUC
January 2024

Oaklands Farm Solar Limited

Oaklands Farm Solar Park
Technical Appendix 6.12: Biodiversity Net Gain Assessment

Project Number
11477

Version	Status	Prepared	Checked	Approved	Date
1.	Draft Report	H. Gillon R. Warwick Haller	D. Green	D. Green	25.04.2023
2.	Draft Report – updated in line with revised scheme design.	H. Gillon R. Warwick Haller	R. Turner	E. Moseley	28.11.2023
3.	Version 2 – following client comments	H. Gillon	D. Green	D. Green	19.01.2024
4.	Version 3 – following second round of comments	H. Gillon	D. Green	D. Green	24.01.2024

Bristol
Cardiff
Edinburgh
Glasgow
London
Manchester
Sheffield

landuse.co.uk

Land Use Consultants Ltd
Registered in England
Registered number 2549296
Registered office:
250 Waterloo Road
London SE1 8RD

100% recycled paper

Contents

Chapter 1
Introduction

Terms of Reference

1.1 In April 2021, LUC was appointed by Oaklands Solar Farm Limited to provide ecological support to inform an application to construct and operate Oaklands Farm Solar Park, a proposed solar photovoltaic (PV) electricity generating facility, hereafter referred to as 'the Proposed Development'.

1.2 This report forms a Technical Appendix, which has informed an Ecological Impact Assessment (EcIA) and will form part of the Environmental Statement (ES), in support of an application for a Development Consent Order (DCO) for the Proposed Development. Assessment of impacts, mitigation requirements and enhancement measures will be provided as part of the ES Chapter and are not detailed within this report.

This report relates to the Park Farm, Fairfield Farm, Oaklands Farm, and Drakelow Power Station, hereafter referred to as 'the Site' (see Figure 1.3 Areas of the Site).

1.3 This report has been prepared for the exclusivity of Oaklands Farm Solar Limited. No part of this report should be considered as legal advice.

Site Description

1.4 The Site boundary is located to the east of Walton-on-Trent in South Derbyshire (OS Central Grid Reference: SK 23456 17577). The Site boundary comprises land within Oaklands Farm, Park Farm and Fairfield Farm land-holdings, which are currently used for arable cropping and grazing, and Drakelow National Grid Substation in the north.

1.5 The wider area comprised a mosaic of agricultural and pastoral land and woodland with Rosliston Forestry Centre located to the east and the River Trent and to the west of the Site boundary.

1.6 The majority of the Site, which is located within the Oaklands Farm, Park Farm and Fairfield Farm landholdings, is comprised of species-poor and agriculturally improved pasture to maximise the productivity of cattle and sheep grazing. Grazing pressures, including trampling, erosion and physical damage by livestock has severely degraded many of the internal site hedgerows, which are typically defunct and characterised by a species-poor assemblage and open, straggly growth form. A small section of the Site in the north is located within Drakelow Power Station. This area of land is comprised of woodland, grassland, scrub and ruderal mosaic, bare ground and a pond. Areas of increased ecological value within the Site relate primarily to woodlands and an unnamed watercourse.

Project Description

1.7 The Proposed Development comprises a proposed solar farm with an associated Battery Energy Storage System. It would have a generating capacity of over 50MW and would be situated on 191 hectares of land at Oaklands Farm to the south-east of Walton-on-Trent and to the west of Rosliston in south Derbyshire. The solar farm itself, comprising photovoltaic panel arrays, a central electricity substation and Battery Energy Storage System together with access, landscaping and other works would be located on 135 hectares of agricultural land currently in use for arable production and grazing. A high voltage underground electricity cable would then run through land at Fairfield Farm and Park Farm to the north to connect the solar farm to the national grid via an electricity substation located at the former Drakelow Power Station which sits south of Burton-upon-Trent.

Purpose of Assessment

1.8 Overarching National Policy Statement (NPS) for Energy Infrastructure (EN-1)[1] states that energy nationally significant infrastructure projects (NSIPs) should **'seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity where possible'**.

[1] Department for Energy Security and Net Zero (2023) Draft Overarching National Policy Statement for Energy (EN-1). Available at: https://assets.publishing.service.gov.uk/media/655dc190d03a8d001207fe33/overarching-nps-for-energy-en1.pdf [Accessed 16/01/24]

1.9 In accordance with the National Planning Policy Framework (NPPF) proposals should seek to demonstrate Biodiversity Net Gain (BNG). The NPPF[2] paragraph 185(b) states plans should **'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'**.

1.10 There is currently no specific requirement for BNG within the current South Derbyshire Local Plan, with Policy BNE3 supporting development that "delivers net gains in biodiversity"[3].

1.11 This assessment has examined baseline ecological information and current landscape proposals to identify the current BNG provision, any risk in achieving BNG and identify further actions required to secure BNG through the proposals.

1.12 Whilst the process of BNG does consider the Site's value to locally relevant protected species and nearby Designated Sites, potential impacts and planning requirements for these ecological receptors have been considered separately within **Chapter 6 Ecology** in the Environmental Statement and associated technical appendices.

1.13 BNG data should be considered part of the iterative process of calculation and design alteration. This report provides an BNG feasibility assessment for design as of November 2023, shown in **Figures 5.6.1a-f** within **ES Volume 3 Appendix 5.6: Outline Landscape Ecological Management Plan,** therefore should not be considered valid for any subsequent design revisions,

[2] Ministry of Housing, Communities and Local Government (2023). *National Planning Policy Framework*. Available at: https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf (Accessed 16/01/24).

[3] South Derbyshire District Council (2016). South Derbyshire Local Plan Part 1. Available at: https://www.southderbyshire.gov.uk/our-services/planning-and-building-control/planning/planning-policy/local-plan/adopted-local-pla (Accessed 03 May 2022).

Chapter 2
Methodology

Defra Biodiversity Metric 3.1

2.1 Calculations have been carried out in cognisance of Biodiversity Net Gain: Good Practice Principles for Development guidance[4]. Full calculations were undertaken through the Defra Biodiversity Metric 3.1[5,6] and associated condition sheets. Crucially, the process of BNG has been adopted to inform design, resulting in iterative calculation and design alteration to maximise the ecological potential of the Site.

2.2 The Metric 3.1 has been used for the assessment rather than the most recent Metric 4.0[7,8] or Statutory Metric[9] due to surveys and BNG condition assessments being conducted using the Metric 3.1, and being completed prior to the release of the Metric 4.0 and the Statutory Metric. This is in accordance with advice from Natural England at the time of the assessments, for the continuation of use of previous metrics for a project duration, prior to the adoption of mandatory

---

[4] Baker J., Hoskins R. and Butterworth T. (2019). *Biodiversity Net Gain. Good practice principles for development: A practical guide*. Ciria, London.

[5] Panks S., White N., Newsome A., Nash M., Potter J., Heydon M., Mayhew E., Alvarez M., Russell T., Cashon C., Goddard F., Scott S.J., Heaver M., Scott S.H., Treweek J., Butcher B. and Stone D. (2022). *The Biodiversity Metric 3.1: Auditing and accounting for biodiversity value - User Guide* (21st April 2022). Natural England, York.

[6] Panks S., White N., Newsome A., Nash M., Potter J., Heydon M., Mayhew E., Alvarez M., Russell T., Cashon C., Goddard F., Scott S.J., Heaver M., Scott S.H., Treweek J., Butcher B. and Stone D. (2022). *The Biodiversity Metric 3.1: Auditing and accounting for biodiversity value – Technical Supplement* (21st April 2022). Natural England, York.

[7] Natural England (March 2023) *The Biodiversity Metric 4.0: User Guide.* Available at: http://publications.naturalengland.org.uk/publication/6049804846366720.

[8] Natural England (March 2023) *The Biodiversity Metric 4.0: User Guide – Technical Annex 2*. Available at: http://publications.naturalengland.org.uk/publication/6049804846366720.

[9] Natural England (November 2023) *The Statutory Biodiversity Metric: User Guide (draft).* Available at https://assets.publishing.service.gov.uk/media/65673fee750074000d1dee31/The_Statutory_Biodiversity_Metric_-_Draft_User_Guide.pdf

BNG[10,11]. The User Guide[9] relating to use of the Statutory Metric is in draft form at the time of writing, and further guidance is still to be released to inform the conversion of assessments carried out under previous versions of the Metric to the Statutory Metric[12].

2.3 For Nationally Significant Infrastructure Projects (NSIPs) like the Proposed Development, mandatory BNG is proposed from November 2025. The Statutory Metric is "statutory" in the context of being made pursuant to provisions of the Town and Country Planning Act 1990 which relate to planning applications. Provisions in Schedule 2A of the Planning Act 2008 regarding the metric to be used for BNG calculations in relation to NSIPs are not yet in force. Government guidance is clear that use of the Statutory Metric will only be required for NSIPs from November 2025[12]. As such there is no legal requirement to use the Statutory Metric prior to this for NSIP projects.

2.4 Given the above, the Applicant's use of Metric 3.1 is therefore considered to be an appropriate and proportionate approach to the assessment of BNG in relation to the Proposed Development.

2.5 The metric approach is the established method for calculating BNG and provides a quantitative approach to losses and gains resulting from development or land management changes. The metric approach compares the pre-development baseline against the project proposals, accounting for any habitat loses, gains, impacts and enhancements.

---

[10] Planning Advisory Service (16 October 2023) *Biodiversity Net Gain FAQs – Frequently Asked Questions,* in response to "Should the use of the metric be explicitly required in Local Plan policy?" Available at: https://www.local.gov.uk/pas/topics/environment/biodiversity-net-gain-local-authorities/biodiversity-net-gain-faqs#biodiversity-metric [accessed 8 January 2024]. This page was updated 22 January 2024 with the guidance superseded for the onset of mandatory BNG, and as such is no longer available.

[11] The principle of maintaining the use of one metric through project duration for consistency was also referred to within Section 10 of the Biodiversity Metric 3.1 User Guide as below:
Panks S., White N., Newsome A., Nash M., Potter J., Heydon M., Mayhew E., Alvarez M., Russell T., Cashon C., Goddard F., Scott S.J., Heaver M., Scott S.H., Treweek J., Butcher B. and Stone D. (2022). *The Biodiversity Metric 3.1: Auditing and accounting for biodiversity value - User Guide* (21st April 2022). Natural England, York.

[12] GOV.UK (15 December 2023) *Calculate biodiversity value using the biodiversity metric.* Available at: https://www.gov.uk/guidance/biodiversity-metric-calculate-the-biodiversity-net-gain-of-a-project-or-development [accessed 8 January 2024].

2.6 BNG is being delivered within the red line boundary, as shown in the Phase 1 Plans (**Appendix A**) and the landscape proposals (**Appendix B**)**.** It is important to note that due to the size of the Site, proposals have been split into numerous figures for the landscape strategy, and as such both cannot be included within the Defra 3.1 Metric 'Start' tab for 'On-site post intervention map'. The entire Site and red line boundary has however, been shown within the 'On-site baseline map', and the entirety of the Site accounted for within the BNG metric and unit delivery.

2.7 In addition, a River Condition Assessment has been carried out, (**ES Volume 3 Appendix 6.13: River Condition Assessment**), and should be read in conjunction with this BNG report.

2.8 Whilst the Defra Biodiversity Metric 3.1 is the default approach to calculating BNG, it should not be considered a complete tool in assessing BNG and therefore professional judgement has been used where appropriate. Where professional judgement has been used, this is outlined in the text and additional references, where required, are provided.

2.9 The BNG assessment has been carried out by Holly Gillon MSci (Hons), a Qualifying Member of CIEEM, and Quality control and approval was provided by Rebecca Turner BSc (Hons) MSc ACIEEM, an Associate Ecologist, David Green BSc (Hons) MCIEEM, an Associate Director, and Ella Moseley BSc (Hons) FCIWEM, C.WEM, CEnv, FRGS, CGEOG, FLS, an Associate Director.

Baseline Habitat Assessment

2.10 The Site was subject to Extended Phase 1 Habitat Surveys which included detailed mapping of habitats within the Site as follows:

- **Oaklands Farm** – undertaken on 6th, 7th, 11th May and 16th June 2020 by Arcus[13].
- **Park Farm** - undertaken on 21st April 2021 by Rebecca Turner BSc (Hons) MSc ACIEEM and Tom Hicks BSc ACIEEM. Weather conditions during the survey were dry, cloudy and mild.

[13] ES Volume 3, Appendix 6.3: Arcus, (2020), Preliminary Ecological Appraisal: Oaklands Solar Farm and Grid Connection Route

- **Grid Cable Route** – undertaken on 26th April 2022 by Tom Hicks and Rosalind Warwick-Haller BSc (Hons), MSc, a Qualifying Member of CIEEM. Weather conditions during the survey were dry, cloudy and mild. This included areas within Fairfield Farm landholdings.

2.11 The following updated verification walkover survey was completed in 2023, including condition checks of previous mapping, an updated River Condition Assessment, and mapping of additional areas included due to design alterations:

- **Oaklands Farm, Park Farm and Land between Park Farm and Oaklands (also known as Fairfield Farm)** – undertaken on 30th March 2023 by Associate Ecologist Rebecca Turner ACIEEM, and supported by Rosalind Warwick-Haller and Holly Gillon, both Qualifying Members of CIEEM. Weather conditions during the survey were cloudy and mild with intermittent showers.

Updated Baseline Mapping

2.12 Due to the time passed between the Arcus assessments and Phase 1 mapping (**ES Volume 3, Appendix 6.3: Preliminary Ecological Appraisal,** Arcus 2020), and the LUC assessments (**ES Volume 3, Appendix 6.5: Phase 1 Habitat Survey Report**, LUC 2023), an updated Phase 1 Habitats Plan was produced, and used as the baseline for BNG. This updated figure is presented in **Appendix A** and comprises updates to the Arcus mapping of Oaklands Farm, as well as the 2021, 2022 and 2023 LUC mapping of Park Farm and Drakelow Powerstation.

Terrestrial Habitats

2.13 To calculate the ecological baseline unit for the Site the following data and assessments were collated:

- Phase 1 Habitat classifications were converted to UK Habitat Classification Habitat types through the DEFRA Metric 3.1 conversion tool and assigned a pre-set distinctiveness value, indicative of the inherent ‘value’ of these habitats.
- The area (hectares) of each habitat and length of linear habitats (km) within the application boundary was calculated from Phase 1 Habitat mapping using ESRI ArcMap. The Extended

Phase 1 Habitat Maps, including BNG parcels for habitat and linear features are presented in **Appendix A.**

- Habitats were subject to a dedicated 'condition assessment[14] on 26th and 27th April 2022. Surveys were led by Tom Hicks with support from suitably experienced ecologists. Weather conditions during the survey were dry, cloudy and mild. The 'condition' of the habitat is considered a measure of habitat quality and measures the 'working-order' against the optimal potential of habitat type. Assessment criteria cover broad habitat types therefore further clarification is provided and professional judgement used to assign condition where appropriate.
- Each habitat was subject to a Strategic Significance assessment based on its position within the landscape, this includes consideration of local plans, Supplementary Planning Documents and Guidance and local partnership publications to identify local priorities for targeting biodiversity.
- Baseline inputs (as detailed above) were entered into the DEFRA 3.1 Metric to calculate baseline 'biodiversity units' for the Site.

Strategic Significance

2.14 The Site is located within The National Forest[15] which seeks contributions from developers (planting and/or financial) to achieve its objectives of landscape scale forestry restoration after an extensive history of deforestation in the are due to coal mining. This includes identifying areas for woodland creation and tree planting to provide greater ecological connectivity within the landscape and increase the functionality of existing woodland.

2.15 The National Forest Company leads the creation of The National Forest. Established in April 1995, it is a charity and Non-Profit Institution within the Public Sector, sponsored by the Department for Environment, Food and Rural Affairs (Defra).

[14] Natural England (2021). B*iodiversity metric 3.1: Auditing and accounting for biodiversity – Technical Supplement.* Natural England, York.

[15] The National Forest boundary is available at: https://maps.south-derbyshire.gov.uk/ (Accessed 05 May 2022).

2.16 Due to this and local policy, the strategic significance of all woodland habitats and Urban Trees on Site were set to 'High, Within areas formally identified in local strategy'. The remaining habitats were set to 'Medium, Location ecologically desirable but not in local strategy', with the exception of Developed land; sealed surface which was set at Low.

2.17 The streams are tributaries of the River Trent and within the Trent Valley, this area comes under the Local Plan Policy INF7 B, and thus must contribute to delivering landscape scale change through habitat enhancements. Due to this, the strategic significance of the linear habitats on Site was set to High, within area formally identified in local strategy'.

Proposed Development

2.18 The same process was repeated for the Proposed Development, as detailed below:

- The loss of baseline habitats (both polygon and linear data) was calculated by overlaying the footprint of the Proposed Development onto the Phase 1 Habitat mapping using ESRI ArcMap. Using this method, the area of loss to each habitat block was determined.
- The Proposed Development was reviewed to identify habitats created, retained and enhanced. Proposed habitats were subject to condition, and strategic significance assessments.
- Where a new habitat or existing habitat has been created or enhanced, additional consideration has been given towards the time taken for habitats to establish and reach target condition (temporal multiplier) and the difficulty of habitat re-creation (difficulty multiplier). Both temporal and difficulty multipliers were pre-assigned within the metric.
- For areas where cable-laying is proposed, primarily poor semi-improved grassland and arable habitats, this has been considered as a 'temporary loss' and as such treated as retained within this metric. This is in accordance with the user guidance of the 3.1 metric[14], due to the restoration of the habitat to its original state and no further development proposed after the cable has been laid.

2.19 Collated data and assessments were entered into the Defra Biodiversity Metric 3.1 to calculate a biodiversity unit score for the proposal.

Data Summary and Discussion

2.20 The DEFRA 3.1 Metric presents a detailed summary of the resultant biodiversity unit change, separated by habitat type.

2.21 For terrestrial habitats, a single biodiversity unit change has been provided (i.e., the overall total). However, caution has been applied when interpreting this number. It is important to note that the process of BNG should consider habitat types in isolation, and any unit losses or grains should be considered in detail on a like-for-like basis for each habitat group / priority habitat type.

2.22 The discussion also considers the wider context of the planning application, surrounding landscape and socio-economic values of the Proposed Development as well as considering how the development contributes towards nature conservation priorities at the local, regional and national levels. This approach is guided by Principles 6 and 9 of Biodiversity Net Gain Good Practice Principles[4].

Limitations

2.23 The assessment has been completed based upon the Landscape Strategy Plans (**Figures 5.1a-f** in **ES Volume 3, Appendix 5.6: Outline Landscape Ecological Management Plan)**, included within **Appendix B** of this report. It is important to note that due to the size of the Site, proposals have been split into numerous figures for the landscape strategy, and as such both cannot be included within the Defra 3.1 Metric 'Start' tab for 'On-site post intervention map'. The entire Site and red line boundary has however, been shown within the 'On-site baseline map', and the entirety of the Site accounted for within the BNG metric and delivery.

2.24 The exact density of scattered trees planting proposed within the Landscape Strategy, is yet to be determined. Detailed landscape plans including planting densities, will be provided post consent. As such, for the purpose of this assessment, it was assumed a minimum number of trees would be planted as shown on the Landscape Strategy Plan. As the scattered trees are accounted for as urban trees, which is in addition to the habitats present below, any minor variation in the finalised delivery of number of trees is not expected to notably alter the BNG result for habitat units.

Chapter 3
Biodiversity Net Gain Calculations

Baseline Assessment Inputs

All Habitats

3.1 The Site lies within The National Forest[15]. Therefore, Strategic Significance was fixed at High (formally identified in local strategy) for all woodland habitats and Urban Trees. The remaining habits were set at Medium (Location ecologically desirable but not in local strategy), with the exception of Developed land; sealed surface which was set at Low.

Area Habitats

3.2 **Table 3.1** provides a summary of the baseline assessment inputs for area habitats. Full condition assessment proformas are provided within **Appendix D.**

3.3 Polygon references are shown within **Figure 6.12.1 BNG Reference Points, Appendix C** of this report, with field reference numbers shown separately within **Figures 1.4a and 1.4b: Field Numbers**, within **ES Volume 2**.

Table 3.1: Summary of Baseline Assessment Inputs for Area Habitats

Polygon / Field reference	Area (Ha)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14, GL16,	82.41	B4 Improved grassland	Modified grassland	**Poor**	**D.1**

Polygon / Field reference	Area (Ha)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
GL20, GL23, GL22, GL24, GL25, GL26, GL27, O1, O3, O22, O23					
GL17, GL18, GL31, GL21, GL29, GL32	3.80	J2.2 Neutral semi-improved grassland	Other neutral grassland	**Poor**	**D.2**
GMH6	0.04	C3.1 Other tall herb and fern (ruderal) A3.2 Coniferous scattered trees	Other neutral grassland	**Poor**	**D.3**
GL19, GL28	5.17	B6 Poor semi-improved grassland	Modified grassland	**Poor**	**D.4**
GL34	0.10	B6 Poor semi-improved grassland	Modified grassland	**Poor**	**D.5**

Polygon / Field reference	Area (Ha)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
GMH5	0.03	B5 Marshy grassland	Other neutral grassland	**Moderate**	**D.6**
GMH4[16]	0.38	C3.1 Other tall herb and fern (ruderal)	Other neutral grassland	**Poor**	**D.7**
S5 S13, S10	0.56	A2.1 Dense scrub	Mixed scrub	**Moderate**	**D.8**
S16	0.54	A2.1 Dense scrub	Bramble scrub	**N/A**	**D.9**
S8	0.11	A2.1 Dense scrub	Mixed scrub	**Good**	**D.10**
S9, S15	0.08	A2.1 Dense scrub	Mixed scrub	**Poor**	**D.11**
S11	0.07	A2.2 Scrub (scattered)	Mixed scrub	**Poor**	**D.12**
W7	0.17	A1.1 Semi-natural broadleaved woodland	Other woodland; broadleaved	**Poor**	**D.13**
W3, W4 W5, W6, W8	2.00	A1.1 Semi-natural broadleaved woodland	Other woodland; broadleaved	**Moderate**	**D.14**
P3 (Pond) P6 (Pond)	0.08	G1 Standing water	Ponds (non-priority habitat)	**Moderate**	**D.15**

[16] Classification updated by LUC from most recent 2022 survey

Polygon / Field reference	Area (Ha)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
P4 (Pond) P5 (Pond)	0.03	G1 Standing water	Ponds (non-priority habitat)	**Poor**	**D.16**
U2, U4	0.51	J4 Bare ground	Vacant / derelict land / bare ground	**Poor**	**D.17**
U3	0.50	J4 Bare ground	Vacant / derelict land / bare ground	**Moderate**	**D.18**
F3, O4, O6, O7, O8, O11, O13, O14, O15, O16, O17	91.14	Arable	Cropland – Non-cereal crops	**N/A**	**D.19**
N/A[17]	4.59	Hard standing Buildings	Developed land, sealed surface	**N/A**	**D.20**
Arcus: T1, T2, T3, T9, T29	0.38	Broadleaved scattered trees	Urban tree	**Moderate**	**D.21**
Arcus: T24, T26, T30	0.18	Broadleaved scattered trees	Urban tree	**Moderate**	**D.22**

[17] No reference available due to no condition assessment needed. Polygons can be found on the Phase 1 Habitat Plan in Appendix B.

Polygon / Field reference	Area (Ha)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
LUC: T39, T58					
G44	0.22	Coniferous scattered trees	Urban tree	**Moderate**	**D.23**

Hedgerow Habitats

3.4 Table 3.2 provides a summary of the baseline assessment inputs for linear habitats. Full condition assessment proformas are provided within **Appendix D.**

Table 3.2: Summary of Baseline Assessment Inputs for Hedgerow Habitats

Line / Reference	Length (km)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
G5, G7, G8, G1, G2, G3, G4	0.53	Tree Line	Line of Trees	**Moderate**	**D.24**
H28, H48	0.16	J2.1.2 Intact hedge (species-poor)	Native Hedgerow	**Good**	**D.25**
H25, G66	0.104	J2.1.2 Intact hedge (species-poor) G1 Standing water	Native Hedgerow (ditch accounted for in river units)	**Good**	**D.26**
H1, H2	0.42	J2.1.2 Intact hedge (species-poor)	Native Hedgerow	**Poor**	**D.27**

Line / Reference	Length (km)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
H3, H42 west	0.22	J2.1.2 Intact hedge (species-poor)	Native Hedgerow	**Moderate**	**D.28**
H66, H84, H72	0.42	J2.2.2 Defunct hedge (species-poor)	Native Hedgerow	**Good**	**D.29**
No ref[18], H62a, H61, H59, H68, H69, H71, H70, H74, H47, H41 north, H53, H57	2.63	J2.1.1 Intact hedge (species-rich)	Native Species Rich Hedgerow	**Good**	**D.30**
H45, H46, H47, H51, H50 north	0.74	J2.1.1 Intact hedge (species-rich)	Native Species Rich Hedgerow	**Moderate**	**D.31**
H87, H43 south, H56	0.76	J2.2.1 Defunct hedge (species-rich)	Native Species Rich Hedgerow	**Moderate**	**D.32**
H73	0.32	J2.3.1 Hedge with trees (native species-rich)	Native Species Rich Hedgerow with trees	**Poor**	**D.33**

[18] This was identified as hedge with trees on Arcus Phase 1 map, but an updated condition assessment was undertaken for intact species-rich hedgerow. No reference was available on the TRR Plan due to distance from proposed impacts so is referred to as 'No ref' within this assessment and figures.

Line / Reference	Length (km)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
H62, H63, H60, H59, H82, H81, H88 south, H89 south, H32, H29, H30, H31, H36, G36	2.74	J2.3.1 Hedge with trees (native species-rich)	Native Species Rich Hedgerow with trees	**Good**	**D.34**
H86[19],H75, H76, H44 east, H34, H33	1.18	J2.3.1 Hedge with trees (native species-rich)	Native Species Rich Hedgerow with trees	**Moderate**	**D.35**
H44 west	0.38	J2.2.1 Defunct hedge (species-rich)	Native Species Rich Hedgerow	**Good**	**D.36**
H47	0.23	J2.1.1 Intact hedge (species-rich) G1 Standing water	Native Species Rich Hedgerow – Associated with bank or ditch	**Moderate**	**D.37**
H77, H38, H78[20], H42	0.40	J2.3.1 Hedge with trees (native species-rich)	Native Species Rich Hedgerow with trees –	**Good**	**D.38**

[19] H86 was identified as intact species rich hedgerow on Arcus Phase 1 map but an updated condition assessment was undertaken for species rich hedge with trees.

[20] Not mapped by Arcus so no JNCC Ph1 Classification available. Feature noted and assessed by LUC during condition assessments.

Line / Reference	Length (km)	JNCC Phase 1 Classification	UKHAB Classification	Condition	Proforma Table
east[20], G49[20]		G1 Standing water	Associated with bank or ditch		
H79, H36a	0.68	Not assessed by Arcus[20]	Native Hedgerow with trees	**Moderate**	**D.49**
H89, G65, G54, G55, H64, H65, H80, H37, H33	1.59	J2.3.1 Hedge with trees (native species-rich)	Native Species Rich Hedgerow with trees	**Good**	**D.40**
H49, H41 south, H50 south, G48	0.51	Not assessed by Arcus	Line of Trees	**Moderate**	**D.41**
H43 west, G46	0.57	Not assessed by Arcus	Native Hedgerow with trees	**Poor**	**D.42**

River Habitats

3.5 Table 3.3 provides a summary of the baseline assessment inputs for river habitats. Full condition assessment proformas are provided within **Appendix D.**

Table 3.3: Summary of Baseline Assessment Inputs for River Habitats

Line / Reference	Length (km)	JNCC Phase 1 Classification	UKHABS Classification	Condition	Proforma Table
D6	0.07	G1 Standing water	Ditches	**Poor**	**D.43**

Line / Reference	Length (km)	JNCC Phase 1 Classification	UKHABS Classification	Condition	Proforma Table
D7	0.48	G1 Standing water	Ditches	**Poor**	**D.44**
D12	0.15	G1 Standing water	Ditches	**Poor**	**D.45**
D17	0.13	G2 Standing water	Ditches	**Poor**	**D.46**
Sub-reach A, B, E	0.80	G2 Running water	Other rivers and streams	**Moderate**	**D.47**
Sub-reach Y – Z	0.48	G2 Running water	Other rivers and streams	**Moderate**	**D.47**
Sub-reach D	0.04	G2 Running water	Other rivers and streams	**Fairly Good**	**D.47**

Proposal Assessment Inputs

3.6 Full calculations taken directly from the Defra 3.1 metric are provided in **Appendix F**. Results are outlined and discussed in detail below.

Retained Area Habitats

3.7 The area habitats retained within the Site are summarised in **Table 3.4**.

Table 3.4: Retained Area Habitats

Habitat Type	Baseline Area (ha)	Retained Area (ha)	% Retained
Modified grassland	87.68	18.99	22.00
Other neutral grassland	4.25	0.31	8.00
Mixed scrub	0.82	0.81	98.46
Bramble scrub	0.54	0.46	85.19
Other woodland; broadleaved	2.17	1.45	66.82
Ponds (Non-priority habitat)	0.11	0.11	100.00
Vacant / derelict land / bare ground	1.01	0.49	48.51
Non-cereal crops	91.14	0.66	0.72
Developed land; sealed surface	4.59	4.54	98.91
Urban trees	0.78	0.78	100.00

3.8 The northern section of Site that comprises the Park Farm, Fairfield Farm and Drakelow landholdings, is not proposed for solar development, with the majority of habitats retained and small areas lost to the creation of access tracks running north to south to the main Oaklands complex. This includes the retention of higher value areas of woodland, ponds, scrub and neutral grassland as well as a small area of cropland and large areas of modified grassland.

3.9 Within the southern Oaklands section, existing areas of woodland, scrub and ponds will be retained, with the majority of the landholding developed for solar use. The scheme has been sensitively designed to allow the retention of urban trees within the solar fields.

Retained Hedgerow Habitats

3.10 The hedgerow habitats retained within the Site are summarised in **Table 3.5**.

Table 3.5: Retained Hedgerow Habitats

Hedgerow Type	Baseline Length (km)	Retained Length (km)	% Retained
Line of Trees	1.04	1.04	100
Native hedgerow	1.33	1.12	84
Native species rich hedgerow	4.52	3.40	75
Native species rich hedgerow with trees	5.83	4.88	84
Native species rich hedgerow – associated with bank or ditch	0.23	0.23	100
Native species rich hedgerow with trees – associated with bank or ditch	0.40	0.40	100
Native hedgerow with trees	1.25	0.10	8

3.11 The majority of hedgerows on Site will be retained, with sections of H41 north, and H50 north removed for visibility splays. Additional short sections of hedgerows across the Site are to be removed for widening gateways and for the installation of temporary or permanent access tracks and cabling. Further detail on hedgerow removal is provided within **ES Volume 3, Appendix 6.14: Arboricultural Survey Report.** To avoid double counting, sections of hedgerow to be enhanced are not counted as 'retained' within this table, and instead detailed within **Table 3.10** Enhanced Hedgerow Habitats. Many hedgerows on Site will be enhanced through the use of infill planting and management practices, as detailed in **Table 3.11** and the **Landscape**

Strategy Plan within **Appendix B** of this report **(**also see **ES Volume 3, Appendix 5.6: Outline Landscape Ecological Management Plan, Figures 5.1a-f).**

Retained River Habitats

3.12 The river habitats retained within the Site are summarised in **Table 3.6**.

Table 3.6: Retained River Habitats

Watercourse Type	Baseline Length (km)	Retained Length (km)	% Retained
Ditches – standing water	0.83	0.22	26.51
Other River and Streams	1.32	1.32	100

3.13 The majority of River Habitats on Site will be retained as part of the Proposed Development. Several remaining ditches will be enhanced as part of the development, with a new wet ditch created in the north-west of Oaklands. To avoid double counting, the proposed enhanced ditches have not been included within the retained table above and are instead detailed within **Table 3.12**. Additionally, three sub-reaches of the river within the north of Oaklands will be enhanced through management and planting. River and ditch enhancements are detailed within **Table 3.12** and shown on the Landscape Strategy Plan **(ES Volume 3, Appendix 5.6: Outline Landscape Ecological Management Plan, Figures 5.1a-f,** shown in **Appendix B** of this report**).**

Created Area Habitats

3.14 Area habitats created on-site are detailed within **Table 3.7**.

Table 3.7: Created Area Habitats

Habitat Type	Created Area (ha)
Developed land; sealed surface	6.45
Other woodland; broadleaved	5.51
Mixed scrub	0.71
Other neutral grassland	109.88
Urban tree	3.48

3.15 Access tracks and compound infrastructure will be created as part of the Proposed Development and comprise developed land; sealed surface habitat.

3.16 As enhancement and to provide screening for the development, areas of woodland understorey will be created in areas around the Site boundary within Oaklands. The woodland understorey will be of Moderate condition, as detailed in **Appendix D,** and will comprise of native species planting as detailed in the Landscape Strategy Plan **(ES Volume 3 Appendix 5.6: Outline Landscape Ecological Management Plan, Figures 5.1a-f)**. Woodland understory planting will consist mainly of hazel *Corylus avellana* and hawthorn *Crataegus monogyna* with larger trees of mainly field maple *Acer campestre* and holly *Ilex aquifolium.* In addition to some blackthorn *Prunus spinosa*, purging blackthorn *Rhamnus cathartica* and grey willow *Salix cinerea*. As well as large trees of some crab apple *Malus sylvestris*, aspen *Populus tremula* and rowan *Sorbus aucuparia*. In addition to the woodland understorey, areas of mixed scrub will be created to increase habitat connectivity across the Site and to the wider landscape. The scrub will comprise a similar species mix to the woodland, with hazel and hawthorn being a large component.

3.17 Beneath the solar arrays, Other Neutral Grassland will be created through the use of a species rich meadow seed mix and management practices detailed in the Outline Landscape and Ecological Management Plan (LEMP) (**ES Volume 3, Appendix 5.6: Outline Landscape Ecological Management Plan**).

3.18 In accordance with the objectives of the National Forest to increase woodland cover and tree planting, areas of scattered trees are proposed within fields P1 and O3 (see **Figure 1.4a and 1.4b: Field Numbers, ES Volume 2**), with enhanced species rich neutral grassland beneath. The proposed condition proforma of these urban trees is set at Poor and detailed within **Appendix E**, with species consisting mainly of pedunculate oak, field maple, and holly with some crab apple, aspen, rowan and small leaved lime. As the density of scattered trees if yet to be finalised, the number of trees is taken form the **Landscape Strategy Plan (Appendix B)**, and the Urban Tree Helper in the 3.1 Metric used to calculate created area, using a condition of Poor and a size of Medium.

Created Hedgerow Habitats

3.19 Hedgerow created on-site are detailed within **Table 3.8**.

Table 3.8: Created Hedgerow

Hedgerow Type	Created Length (km)
Native species rich hedgerow	2.86

3.20 Sections of Native species rich hedgerow are to be created within the Oaklands section to provide enhancement, mitigation for glint and glare, and screening of the development. New hedgerow planting to comprise mainly of hawthorn with some hazel, holly, field maple, blackthorn and purging blackthorn.

3.21 Hedgerow is to be created along the proposed Permissive Right of Way, that lies within fields O3, O6, and O9, in the south of Oaklands Farm. In addition, hedgerow will be created along the northern boundary of proposed planting within the O3, and at several points around the Oaklands Farm Site boundary in field O1, for greater screening and habitat connectivity. Additional hedgerow is proposed along the farmers track along O4, and to the north of Coton Road within O4, to increase visual screening. Within field O2 to the south of Coton Road, hedgerow is proposed against the fence line and set back from the road for visual screening. Hedgerow is proposed to consist of 'Native species rich hedgerow' of Good condition, as detailed

in **Appendix E**. Hedgerow will comprise mainly pedunculate oak, field maple and small leaved lime with occasional crab apple, aspen and rowan.

Created River Habitats

3.22 River habitats to be created on-site are detailed within **Table 3.9**.

Table 3.9: Created River Habitats

River Type	Created Length (km)
Ditches	0.23

3.23 A wet ditch is proposed to be created along the southern boundary of field O18 to improve the connectivity of the existing ditch network. It is conservatively proposed to be of poor condition, due to the anticipated failing of criteria 4, 5 and 7 due to the likely damage from construction and shading from the adjacent planting area.

Enhanced Area Habitats

3.24 The proposed on-site area habitats enhancements are detailed within **Table 3.10**.

Table 3.10: Enhanced Area Habitats

Baseline Habitat Type	Proposed Enhancement	Area (ha)
Modified grassland – poor condition	Other neutral grassland – moderate condition	38.78
Other neutral grassland – poor condition	Other neutral grassland – moderate condition	3.17

3.25 Existing modified and neutral grassland on Site is to be enhanced to moderate condition neutral grassland and managed as species rich grassland through the use of a meadow grassland seed mix such as EM2 Standard General Purpose Meadow Mix and maintained through management practices as detailed in the LEMP (**ES Appendix 5.6: Outline Landscape Ecological Management Plan**).

Enhanced Hedgerow Habitats

3.26 The proposed on-site hedgerow habitats enhancements are detailed within **Table 3.11**.

Table 3.11: Enhanced Hedgerow Habitats

Baseline Habitat Type	Proposed Enhancement	Length (km)
Native hedgerow – Moderate condition	Native hedgerow – Good condition	0.12
Native hedgerow – Good condition	Native species rich hedgerow – Good condition (Distinctiveness movement Low – Medium)	0.07
Native species rich hedgerow – Moderate condition	Native species rich hedgerow – Good condition	0.34
Native species rich hedgerow – Moderate condition	Native species rich hedgerow – Good condition	0.57
Native species rich hedgerow with trees – Poor condition	Native species rich hedgerow with trees – Moderate condition	0.32
Native species rich hedgerow with trees – Moderate condition	Native species rich hedgerow with trees – Good condition	0.61
Native hedgerow with trees – Moderate condition	Native species rich hedgerow with trees – Moderate condition (Distinctiveness movement Medium – High)	0.58
Native hedgerow with trees – Moderate condition	Native species rich hedgerow with trees – Moderate condition (Distinctiveness movement Medium – High)	0.57

3.27 Existing hedgerow on site is to be enhanced through the use of infill planting of native species to fill in gaps and enhance their conditions by passing criteria B2. In addition, some hedgerows are to be allowed to grow taller to aid with screening and wider to pass criteria A2 of width greater than 1.5m. Infill hedgerow planting to comprise mainly of hawthorn with some hazel, holly, field maple, blackthorn and purging blackthorn.

Enhanced River Habitats

3.28 The proposed on-site river habitat enhancements are detailed below in **Table 3.12**.

Table 3.12: Enhanced River Habitats

Baseline River Type	Proposed Enhancement	Length (km)
Ditches – poor condition	Ditches – moderate condition	0.48
Ditches – poor condition	Ditches – moderate condition	0.13
Other Rivers and Streams – moderate condition	Other Rivers and Streams – fairly-good condition (Sub-reaches A and B)	0.57
Other Rivers and Streams – moderate condition	Other Rivers and Streams – fairly-good condition (Sub-reach Y)	0.24

3.29 Ditches 7 and 17 within the Oaklands Farm Area will be enhanced as part of the Proposed Development with condition assessments detailed within **Appendix E**. The ditches will be enhanced to Moderate condition through the planting of native marginal aquatic species, and selective thinning of bankside woody vegetation to reduce shading. In addition, for Ditch 17 a greater buffer strip of undisturbed vegetation will be allowed to develop on both sides of the ditch to reduce eutrophication. This will in turn help to increase the water quality of the ditch.

3.30 The river sub-reaches will be enhanced to fairly good condition through proposed planting of scrub, and trees along the bank tops as well as marginal planting on the bank face.

Post Development

3.31 The post development design proposals are shown within **Appendix B**.

3.32 A large proportion of the Site post development will be covered by solar arrays with poor condition neutral grassland beneath them. The existing tree lines and hedgerows will be largely retained with sections of hedgerow enhanced through the use of infill planting of native species and improved management. The existing ponds, ditches and woodland will be retained on Site and the solar arrays are situated around these areas. Outside of the main arrays, moderate condition neutral grassland will be created with the existing grassland enhanced to the same. Throughout the Site, access tracks and site compound infrastructure will be created of developed land sealed surface and will be sited sensitivity to minimise the amount of hedgerow breaching and scrub clearance required.

Chapter 4
Discussion

Biodiversity Net Gain Results

4.1 The mitigation and enhancement set out within this document includes a highly precautionary approach within the parameters of the application and makes conservative estimates of the amount of loss and creation. The resulting outcome of the BNG assessment under these assumption is as follows:

- **A net gain** of 565.51 habitat units which is a **125.07% increase** from the baseline units.
- **A net gain** of 37.92 hedgerow units which is an **20.02% increase** from the baseline units.
- **A net gain** of 4.18 river units which is a **19.82% increase** from baseline units.

4.2 The Headline Results and Trading Summary are contained within **Appendix F**.

4.3 The key influential factor to the BNG calculations for habitat units was the replacement of extensive areas of poor semi-improved (modified) grassland and arable land with neutral grassland of poor condition beneath the arrays and moderate condition outside of the arrays. Project wide unit changes for each habitat group are summarised in **Table 4.1.**

4.4 The successful delivery of BNG at the detailed design stage would require detailed landscaping plans and the production of a detailed Landscape and Ecology Management Plan (LEMP), further to the existing Outline LEMP (**ES Appendix 5.6: Outline Landscape Ecological Management Plan**). This document would specify how the condition targets set through the Defra 3.1 Metric will be entered into management in the long term.

4.5 The existing levels of protection afforded to protected species and habitats are not changed by use of this or any other metric. Statutory obligations will still need to be satisfied.

Table 4.1: Unit Change by Area Habitat Group

Habitat Group	Project Wide Unit Change
High Distinctiveness	
None	N/A
Medium Distinctiveness	
Grassland – Other neutral grassland	877.92
Woodland and forest – Other woodland; broadleaved	23.08
Urban – Urban Tree	11.21
Heathland and shrub – Mixed scrub	5.14
Heathland and shrub – Bramble scrub	-0.35
Low Distinctiveness	
Cropland – Non-cereal crops	-199.06
Grassland – Modified grassland	-151.12
Urban – Vacant/derelict land/ bare ground	-1.32

4.6 In addition, trading rules were satisfied as summarised in **Table 4.2** below.

Table 4.2: Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Bespoke compensation likely to be required	Yes
High	Same habitat required	Yes
Medium	Same broad habitat or a higher distinctiveness habitat required	Yes
Low	Same distinctiveness or better habitat required	Yes

Overview of Changes

4.7 The majority of the losses on Site were due to the loss of arable cropland and modified grassland across Oaklands. As these habitats are of low distinctiveness, the majority of losses occurred within this distinctiveness group.

4.8 However, due to the trading rules of low distinctiveness habitats of 'Same distinctiveness or better habitat required', these were offset by the creation of medium distinctiveness habitats, namely neutral grassland, which provided a total of 917.00 medium distinctiveness units available to offset the lower distinctiveness deficit.

4.9 Post development, 37.92 hedgerow units are to be delivered producing a 20.02% gain. The gain is dependent on the delivery of the proposed created hedgerows detailed in **Table 3.8**. This comprises sections along field O1, hedgerow along the eastern side of the Permissive Right of Way, hedgerow along the northern boundary of the planting area in O3, hedgerow within field O2 set back from Coton road for visual screening, and sections along the western and southern boundaries of field O4. In addition, shorter sections are proposed throughout the Site connecting gaps within existing hedgerows.

4.10 An increase in river units will be achieved through the enhancement of three sub-reaches of the river within Site, shown on the Landscape Strategy Plan **(ES Volume 2, Appendix 5.6: Figures 5.8a and 5.8b)**. Sub-reaches A and B will be enhanced from moderate to fairly good

condition through the proposed planting of scrub, trees and species rich grassland along the bank tops. Sub-reach Y will be increased from a moderate to fairly-good condition through the same enhancements and marginal planting such as emergent reeds on the bank face. Further details of the river enhancements are detailed within **Technical Appendix 5.6 Outline Landscape Ecological Management Plan.**

Ensuring Delivery

4.11 To ensure BNG is delivered within the Site it is recommended that habitat creation and enhancement measures are secured through an appropriate mechanism via the Development Consent Order.

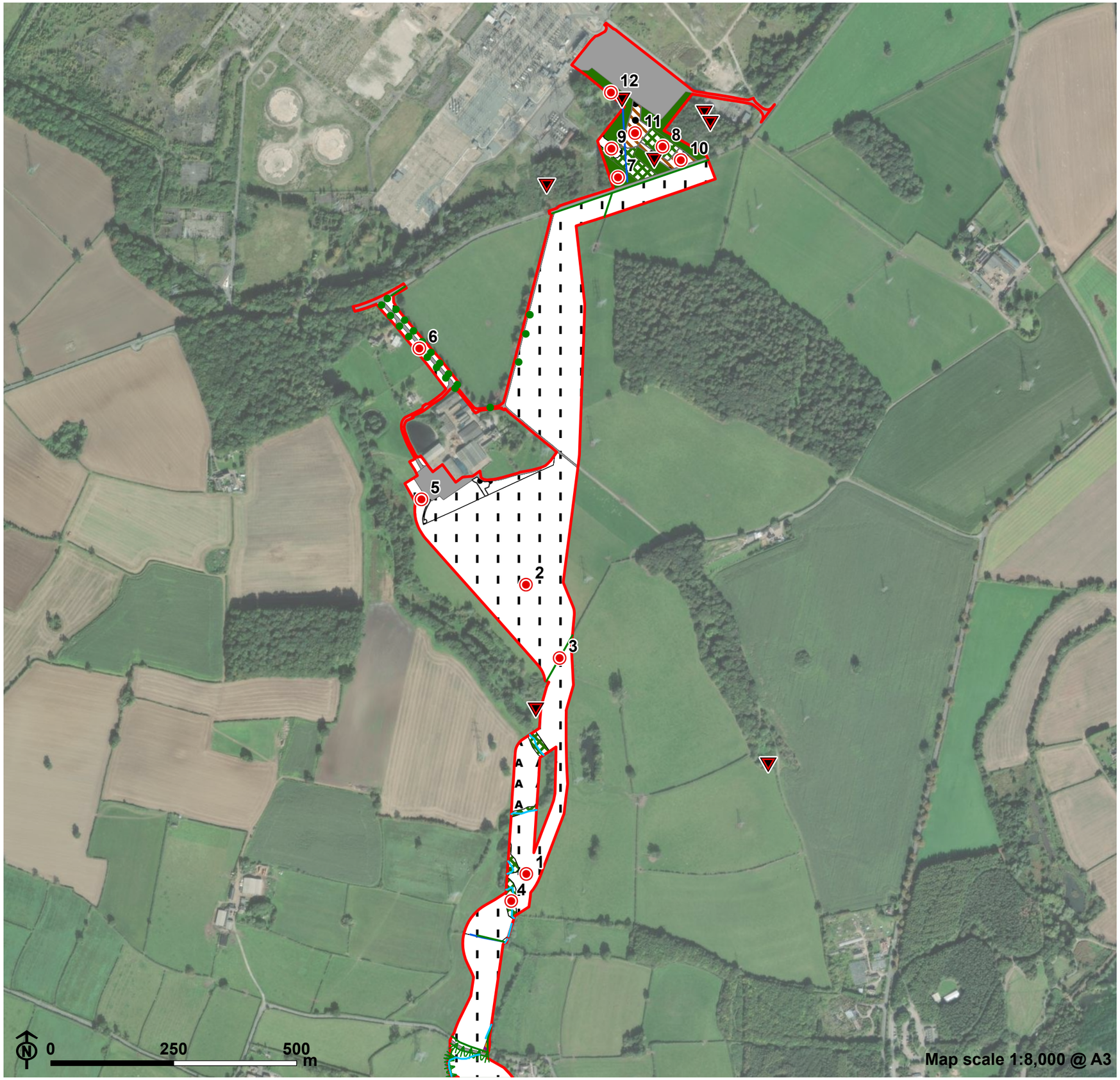
- An Outline Landscape and Ecological Management Plan (LEMP) (**ES Volume 3, Appendix 5.6**), has been prepared which details how the final landscaping and ecological enhancements will be delivered within the Site.
- The delivery of these measures throughout the construction phase is detailed within the Outline Construction and Environmental Management Plan (CEMP) (**ES Volume 3, Appendix 4.3**). Measures secured in the CEMP are summarised in **ES Volume 3, Appendix 17.1: Mitigation Schedule**.

4.12 The final level of commitment provided through these documents should be proportionate to the impact of the proposals.

Appendix A
Phase 1 Figures

Oaklands Farm Solar Park
for Oaklands Farm Solar Ltd

Figure 6.5.1a: Phase 1 Habitat Plan North



- Site boundary
- Target note
- Invasive species

Phase 1 linear

- G1 Standing water
- G2 Running water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.3.1 Hedge with trees (native species-rich)
- TL Tree line

Phase 1 habitat

- A1.1.1 Broadleaved woodland (semi-natural)
- A2.1 Scrub (dense/continuous)
- B4 Improved grassland
- B5 Marshy grassland
- B6 Poor semi-improved grassland
- C3.1 Other tall herb and fern (ruderal)
- C3.1 Other tall herb and fern (ruderal)/J4 Bare ground
- G1 Standing water
- HS Hard standing
- J1.1 Arable
- J4 Bare ground

PINS reference: EN010122

Oaklands Farm Solar Park
for Oaklands Farm Solar Ltd

Figure 6.5.1b: Phase 1 Habitat Plan South

Site boundary

Phase 1 linear

- G1 Standing water
- G2 Running water
- J2.1.1 Intact hedge (native species-rich)
- J2.1.2 Intact hedge (species-poor)
- J2.2.1 Defunct hedge (native species-rich)
- J2.2.2 Defunct hedge (species-poor)
- J2.3.1 Hedge with trees (native species-rich)
- J2.3.2 Hedge with trees (species-poor)
- J2.4 Fence
- J2.6 Dry ditch
- TL Tree line

Phase 1 habitat

- A1.1.1 Broadleaved woodland (semi-natural)
- A2.1 Scrub (dense/continuous)
- A2.2 Scrub (scattered)
- B2.2 Neutral grassland (semi-improved)
- B4 Improved grassland
- B5 Marshy grassland
- B6 Poor semi-improved grassland
- C3.1 Other tall herb and fern (ruderal)
- C3.1 Other tall ruderal/A3.2 Coniferous scattered trees
- G1 Standing water
- HS Hard standing
- J1.1 Arable
- J4 Bare ground

N 0 250 500 m

Map scale 1:7,500 @ A3

PINS reference: EN010122

Appendix B
Landscape Proposals

Oaklands Farm Solar Park
BayWa r.e.

LUC

Figure 1a: Illustrative Landscape Strategy Plan

- Existing Public Rights of Way (PRoW)
- Existing trees & vegetation retained
- Watercourse contributor to Pessall Brook/River Trent
- Existing Roads
- Temporary construction access track
- Proposed site access track

N

Barn Farm

Grove Wood

Park Farm

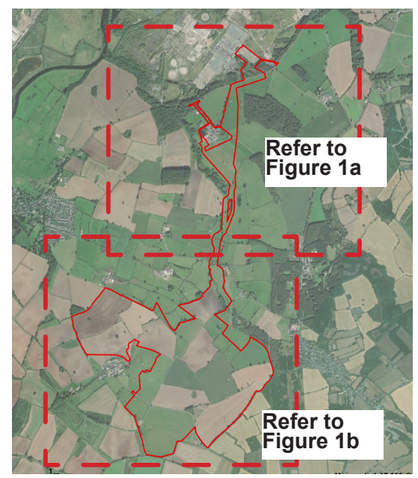
Hill Covert

Fairfield

0 100 250

Refer to Figure 1b

Not to Scale at A4



Site Location Plan

BayWa r.e.

Woodland / scattered trees to consist mainly of Quercus robur (Pendunculate Oak), Acer campestre (Field maple) and Ilex aquifolium (Holly) with some Malus sylvestris (Crab Apple), Populus tremula (Aspen), Sorbus aucuparia (Rowan) and Tilia cordata (Small Leaved Lime).

Woodland understory / native scrub planting to consist mainly of Corylus avellana (Hazel) and Crataegus monogyna (Hawthorn) with some Prunus spinosa (Blackthorn), Rhamnus cathartica (Purging Buckthorn) and Salix cinerea (Grey Willow).

Watercourse trees to consist of Alnus glutinosa (Alder) and Salix fragilis (Crack Willow).

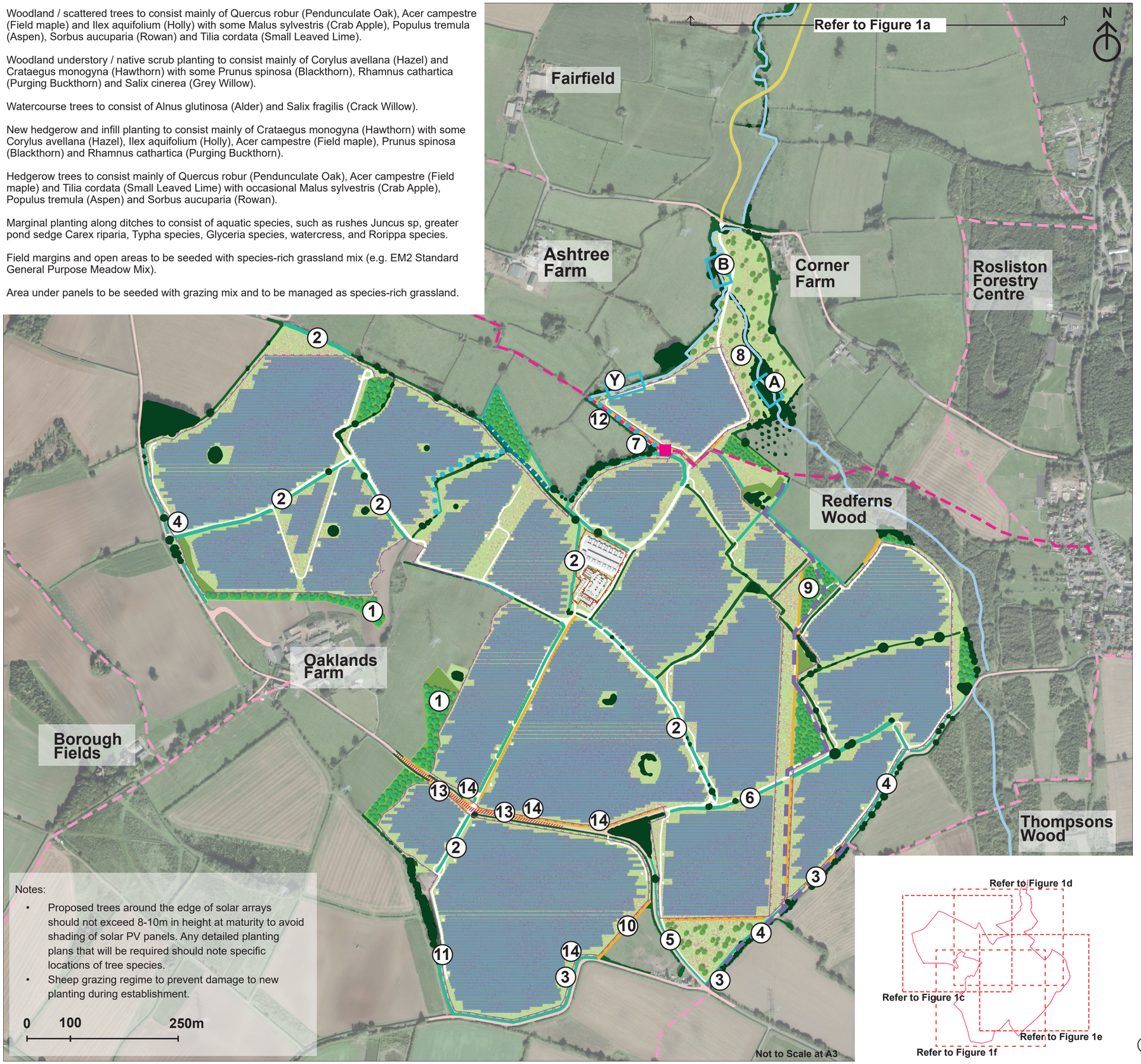
New hedgerow and infill planting to consist mainly of Crataegus monogyna (Hawthorn) with some Corylus avellana (Hazel), Ilex aquifolium (Holly), Acer campestre (Field maple), Prunus spinosa (Blackthorn) and Rhamnus cathartica (Purging Buckthorn).

Hedgerow trees to consist mainly of Quercus robur (Pendunculate Oak), Acer campestre (Field maple) and Tilia cordata (Small Leaved Lime) with occasional Malus sylvestris (Crab Apple), Populus tremula (Aspen) and Sorbus aucuparia (Rowan).

Marginal planting along ditches to consist of aquatic species, such as rushes Juncus sp, greater pond sedge Carex riparia, Typha species, Glyceria species, watercress, and Rorippa species.

Field margins and open areas to be seeded with species-rich grassland mix (e.g. EM2 Standard General Purpose Meadow Mix).

Area under panels to be seeded with grazing mix and to be managed as species-rich grassland.



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Oaklands Farm Solar Park
BayWa r.e.

LUC

Figure 1b: Illustrative Landscape Strategy Plan

- Existing Public Rights of Way (PRoW)
- Cross Britain Way / National Forest Way
- Proposed indicative route of permissive path
- Existing trees & vegetation retained
- Proposed woodland trees & woodland under-storey planting
- Proposed scattered trees
- Existing hedgerow retained
- Existing hedgerow strengthened/ reinforced with additional planting
- Proposed hedgerow
- Proposed native scrub planting
- Watercourse contributor to Pessall Brook/River Trent
- Areas of watercourse enhancements
- Ditch enhancement – Proposed marginal planting and selective thinning of bank side woody vegetation.
- Wet ditch creation
- Proposed species-rich grassland (moderate condition outside solar arrays)
- Proposed solar arrays
- Proposed Battery Storage & Substation
- Proposed deer fencing
- Proposed steel palisade fence
- Existing roads
- Temporary construction access track
- Proposed site access track
- Visibility splay at access point
- Interpretation board providing information on the Solar Farm including its operation and carbon savings

(1) Woodland understorey belt with trees to filter views (avoid trees under electricity lines)

(2) Enhance existing hedgerow by infilling gaps

(3) Restore defunct hedgerow with new hedge planting.

(4) Allow existing hedgerow along road to grow taller (up to 3m)

(5) Strengthen existing hedgerow with trees to filter views

(6) Enhance existing hedgerow by in filling gaps where necessary and strengthen with trees to filter longer views of panels on rising landform from Ladsgrave and enhance the connection between Thompson's Wood and existing copse.

(7) New hedgerow to screen views of panels from Cross Britain Way/ National Forest Way.

(8) Watercourse trees to be planted along the Pessall Brook

(9) Woodland understorey belt with trees to filter views from Rosliston and provide mitigation for glint and glare (avoid trees under electricity lines)

(10) New hedgerow with hedgerow trees

(11) Enhance existing hedgerow by infilling gaps where necessary and strengthen with trees to provide mitigation for glint and glare.

(12) In addition to ditch enhancement, allow a buffer strip of undisturbed vegetation to develop on both sides of the ditch.

(13) New hedgerow planted outside of the visibility splay for visual screening

(14) Glint and glare screening to be provided on fencing until new hedgerow has matured and provides sufficient screening

(A)(B)(Y) Sub-reaches river enhancement - Proposed planting of scrub, and trees along the bank tops as well as marginal planting on the bank face.

BayWa r.e.

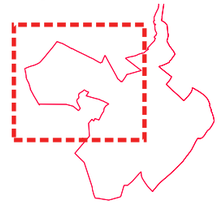
Oaklands Farm Solar Park
BayWa r.e.

LUC

Figure 1c: Illustrative Landscape Strategy Plan

- Existing Public Rights of Way (PRoW)
- Cross Britain Way / National Forest Way
- Proposed indicative route of permissive path
- Existing trees & vegetation retained
- Existing grassland/pasture/arable retained within site
- Proposed woodland trees & woodland understorey planting
- Proposed scattered trees
- Existing hedgerows retained
- Existing hedgerow strengthened/ reinforced with additional planting
- Proposed hedgerow
- Proposed native scrub planting
- Watercourse contributor to Pessall Brook/River Trent
- Areas of watercourse enhancements
- Ditch enhancement – Proposed marginal planting and selective thinning of bankside woody vegetation.
- Wet ditch creation
- Proposed species-rich grassland (moderate condition outside solar arrays)
- Proposed solar arrays
- Proposed Battery Storage & Substation
- Proposed deer fencing
- Proposed steel palisade fence
- Existing Roads
- Temporary construction access track
- Proposed site access track
- Visibility splay at access point

1. Woodland understorey belt with trees to filter views (avoid trees under electricity lines)
2. Enhance existing hedgerow by infilling gaps
4. Allow existing hedgerow along road to grow taller (up to 3m)
7. New hedgerow to screen views of panels from Cross Britain Way/ National Forest Way.
12. In addition to ditch enhancement, allowing a buffer strip of undisturbed vegetation to develop on both sides of the ditch.
14. Glint and glare screening to be provided on fencing until new hedgerow has matured and provides sufficient screening
Y. Sub-reach river enhancement - Proposed planting of scrub, and trees along the bank tops as well as marginal planting on the bank face.



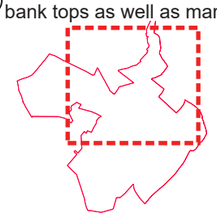
BayWa r.e.

Oaklands Farm Solar Park
BayWa r.e.

LUC

Figure 1d: Illustrative Landscape Strategy Plan

- Existing Public Rights of Way (PRoW)
- Cross Britain Way / National Forest Way
- Proposed indicative route of permissive path
- Existing trees & vegetation retained
- Existing grassland retained within site
- Proposed woodland trees & woodland understorey planting
- Proposed scattered trees
- Existing hedgerow retained
- Existing hedgerow strengthened/ reinforced with additional planting
- Proposed hedgerow
- Proposed native scrub planting
- Watercourse contributor to Pessall Brook/River Trent
- Areas of watercourse enhancements
- Ditch enhancement – Proposed marginal planting and selective thinning of bankside woody vegetation.
- Wet ditch creation
- Proposed species-rich grassland (moderate condition outside solar arrays)
- Proposed solar arrays
- Proposed Battery Storage & Substation
- Proposed deer fencing
- Proposed steel palisade fence
- Existing roads
- Temporary construction access track
- Site access track
- Interpretation board providing information on the Solar Farm including its operation and carbon savings
- Visibility splay at access point
- (1) Woodland understorey belt with trees to filter views (avoid trees under electricity lines)
- (2) Enhance existing hedgerow by infilling gaps
- (7) New hedgerow to screen views of panels from Cross Britain Way/ National Forest Way.
- (8) Watercourse trees to be planted along the Pessall Brook
- (9) Woodland understorey belt with trees to filter views from Rosliston and provide mitigation for glint and glare (avoid trees under electricity lines)
- (12) In addition to ditch enhancement, allowing a buffer strip of undisturbed vegetation to develop on both sides of the ditch.
- (A)(B)(Y) River enhancement - Proposed planting of scrub, and trees along the bank tops as well as marginal planting on the bank face.



BayWa r.e.

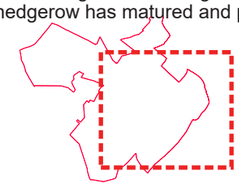
Oaklands Farm Solar Park
BayWa r.e.

LUC

Figure 1e: Illustrative Landscape Strategy Plan

- Existing Public Rights of Way (PRoW)
- Cross Britain Way / National Forest Way
- Proposed indicative route of permissive path
- Existing trees & vegetation retained
- Existing grassland retained within site
- Proposed woodland trees & woodland understorey planting
- Proposed scattered trees
- Existing hedgerow retained
- Existing hedgerow strengthened/ reinforced with additional planting
- Proposed hedgerow
- Proposed native scrub planting
- Watercourse contributor to Pessall Brook/River Trent
- Wet ditch creation
- Proposed species-rich grassland (moderate condition outside solar arrays)
- Proposed solar arrays
- Proposed Battery Storage & Substation
- Proposed deer fencing
- Proposed steel palisade fence
- Existing Roads
- Temporary construction access track
- Site access track
- Interpretation board providing information on the Solar Farm including its operation and carbon savings
- Visibility splay at access point

(2) Enhance existing hedgerow by infilling gaps
(3) Restore defunct hedgerow with new hedge planting.
(4) Allow existing hedgerow along road to grow taller (up to 3m)
(5) Strengthen existing hedgerow with trees to filter views
(6) Enhance existing hedgerow by in filling gaps where necessary and strengthen with trees to filter longer views of panels on rising landform from Ladsgrave and enhance the connection between Thompson's Wood and existing copse.
(7) New hedgerow to screen views of panels from Cross Britain Way/ National Forest Way.
(9) Woodland understorey belt with trees to filter views from Rosliston and provide mitigation for glint and glare (avoid trees under electricity lines)
(13) New hedgerow planted outside of the visibility splay for visual screening
(14) Glint and glare screening to be provided on fencing until new hedgerow has matured and provides sufficient screening



BayWa r.e.

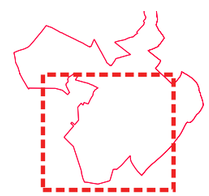
Oaklands Farm Solar Park
BayWa r.e.

LUC

Figure 1f: Illustrative Landscape Strategy Plan

- Existing Public Rights of Way (PRoW)
- Cross Britain Way / National Forest Way
- Proposed indicative route of permissive path
- Existing trees & vegetation retained
- Existing grassland retained within site
- Proposed woodland trees & woodland understorey planting
- Proposed scattered trees
- Existing hedgerow retained
- Existing hedgerow strengthened/ reinforced with additional planting
- Proposed hedgerow
- Proposed native scrub planting
- Proposed species-rich grassland (moderate condition outside solar arrays)
- Proposed solar arrays
- Proposed Battery Storage & Substation
- Proposed deer fencing
- Proposed steel palisade fence
- Existing roads
- Temporary construction access track
- Site access track
- Visibility splay at access point

1. Woodland under-storey belt with trees to filter views (avoid trees under electricity lines)
2. Enhance existing hedgerow by infilling gaps
3. Restore defunct hedgerow with new hedge planting.
4. Allow existing hedgerow along road to grow taller (up to 3m)
5. Strengthen existing hedgerow with trees to filter views
6. Enhance existing hedgerow by in filling gaps where necessary and strengthen with trees to filter longer views of panels on rising landform from Ladsgrave and enhance the connection between Thompson's Wood and existing copse.
9. Woodland understorey belt with trees to filter views from Rosliston and provide mitigation for glint and glare (avoid trees under electricity lines)
10. New hedgerow with hedgerow trees to provide mitigation for glint and glare impacts for road users
11. Enhance existing hedgerow by infilling gaps where necessary and strengthen with trees
13. New hedgerow planted outside of the visibility splay for visual screening
14. Glint and glare screening to be provided on fencing until new hedgerow has matured and provides sufficient screening



BayWa r.e.

Appendix C
BNG Reference Points

Oaklands Farm Solar Park
for Oaklands Farm Solar Ltd

Figure 6.12.1a: Biodiversity Net Gain (BNG) Plan North

Site boundary

BNG reference point

PINS reference: EN010122

Oaklands Farm Solar Park
for Oaklands Farm Solar Ltd

Figure 6.12.1b: Biodiversity Net Gain (BNG) Plan South

Site boundary
BNG reference point

H28
H89 north
H88 north
GL16
G65, G54, G55
No ref
H87
GL17
G65, G54, G55
No ref
H36, G36
H31
D17
O22, O23
W3
H48
H43 north, G46
H64, H65
S7
H32
O16
H63
H62
O17
H36a
H66
S13
H33
H34
D7
GL18
H61
GL24
H47
H37
GL19
H30
D7
H62a
H33
P3
U2
S8
O13
H46
GL22
O14
H59
H68
H38
H60
GL20
O15
H47
H82
H84
H29
H44 west
H45
H69
O11
H59
GL20
O8
GL23
S9
GL25
H72
H44 east
H71
H86
GMH6
H70
H81
H88 south
O7
H43 south
S11
O6
S10
P4
GL26
O4
H73
H89 south
H80
H41 north
H42 west
H74
GL28
GL21
GMH4
H76
H50 north
P5
H53
W4
H77
H79
GL32
O3
GL31
G49, H78, H42 east
H51
O1
H41 south, H49, H50 south, G48
H57
H79
H56
H56

0 250 500 m

Map scale 1:7,500 @ A3

PINS reference: EN010122

Appendix D

Baseline Assessment Proformas

Habitats

Table D.1: Modified grassland

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	There must be 6-8 species per m2.	Fail	Less than 6 species per m2.

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	Sward height was all one length and uniform

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area.	Pass	No scrub present

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
4	Physical damage evident in less than 5% of total grassland area.	Pass	Less than 5% physical damage.

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
5	Cover of bare ground between 1% and 10%, including localised areas.	Fail	Bare ground less than 1%.
6	Cover of bracken less than 20%.	Pass	No bracken noted.

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Pass	No invasive non-native species present.

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
Are any criteria essential? (Y/N)	Yes	**Total**	**4 of 7**
If Yes are they passed?	No	**Condition**	**Poor**

JNCC PH1 Classification	B4 Improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	82.41
Limitations	None	Polygon	GL1, GL2, GL3, GL4, GL5, GL6, GL7, GL8, GL12, GL14 GL16, GL20, GL23, GL22, GL24, GL25, GL26, GL27 O1, O3, O22, O23
Habitat Description	Grasslands were heavily grazed with species including locally dominant crested dog's tail *Cynosurus cristatus*, abundant perennial ryegrass *Lolium perenne* and annual meadow-grass *Poa annua*, frequent soft brome *Bromus hordeaceus*, occasional creeping buttercup *Ranunculus repens*, rarely dandelion *Taraxacum* agg., meadow foxtail *Alopecurus pratensis*, white clover *Trifolium repens*, lesser stitchwort *Stellaria graminea*, red clover *Trifolium pratense*, lesser trefoil *Trifolium dubium* and cuckoo flower *Cardamine pratensis*.		

Criterion	Condition Assessment Criteria	Result	Rationale
Suggested enhancement interventions to improve condition score	Grazing regime could be relaxed to allow a more diverse community to establish. Localised areas of bare ground could be created using hand tools.		

Table D.2: Other neutral grassland

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	3.80
Limitations	None	Polygon	GL17, GL18, GL31, GL21, GL29, GL32
Habitat Description	Species included perennial ryegrass, pineapple weed *Matricaria discoidea*, red campion *Silene dioica*, herb-robert *Geranium robertianum*, false oat-grass *Arrhenatherum elatius*, forget-me-not *Myosotis* sp., daisy *Bellis perennis*, creeping buttercup, cow's parsley *Anthriscus sylvestris* and red fescue *Festuca rubra*.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.	Fail	Low density of wildflowers and sedges
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Pass	Varied sward height.

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	3.80
Limitations	None	Polygon	GL17, GL18, GL31, GL21, GL29, GL32
Habitat Description	Species included perennial ryegrass, pineapple weed *Matricaria discoidea*, red campion *Silene dioica*, herb-robert *Geranium robertianum*, false oat-grass *Arrhenatherum elatius*, forget-me-not *Myosotis* sp., daisy *Bellis perennis*, creeping buttercup, cow's parsley *Anthriscus sylvestris* and red fescue *Festuca rubra*.		

Criterion	Condition Assessment Criteria	Result	Rationale
3	Cover of bare ground between 1% and 5%, including localised areas.	Fail	Bare ground less than 1%
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	No scrub or bracken noted
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	Pass	No invasive non-native species present.
Additional Group (Non-acid types only)			

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	3.80
Limitations	None	Polygon	GL17, GL18, GL31, GL21, GL29, GL32
Habitat Description	Species included perennial ryegrass, pineapple weed *Matricaria discoidea*, red campion *Silene dioica*, herb-robert *Geranium robertianum*, false oat-grass *Arrhenatherum elatius*, forget-me-not *Myosotis* sp., daisy *Bellis perennis*, creeping buttercup, cow's parsley *Anthriscus sylvestris* and red fescue *Festuca rubra*.		

Criterion	Condition Assessment Criteria	Result	Rationale
6	There are greater than 9 species per metre squared.	Fail	Low species diversity

Are any criteria essential? (Y/N)	Yes	**Total**	**3 of 6**
If Yes are they passed?	**No**	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score	Grazing regime could be relaxed to allow a more diverse community to establish. Localised areas of bare ground could be created using hand tools.		

Table D.3: Tall Ruderal (GMH6)

JNCC PH1 Classification	C3.1 Tall ruderal A3.2 Coniferous scattered trees	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.04
Limitations	None	Polygon	GMH6
Habitat Description	Tall ruderal vegetation with Scot's pine, trees accounted for in Urban Tree Helper		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.	Fail	Indicator species not present or clearly visible.
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Pass	Varied sward height.
3	Cover of bare ground between 1% and 5%, including localised areas.	Pass	Bare ground between 1% and 5%

JNCC PH1 Classification	C3.1 Tall ruderal A3.2 Coniferous scattered trees	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.04
Limitations	None	Polygon	GMH6
Habitat Description	Tall ruderal vegetation with Scot's pine, trees accounted for in Urban Tree Helper		

Criterion	Condition Assessment Criteria	Result	Rationale
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Fail	Cover of scrub more than 5%.
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	Pass	No invasive non-native species present.
Additional Group (Non-acid types only)			
6	There are greater than 9 species per metre squared.	Fail	Low species diversity

Are any criteria essential? (Y/N)	Yes	**Total**	**3 of 6**

JNCC PH1 Classification	C3.1 Tall ruderal A3.2 Coniferous scattered trees	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.04
Limitations	None	Polygon	GMH6
Habitat Description	Tall ruderal vegetation with Scot's pine, trees accounted for in Urban Tree Helper		

Criterion	Condition Assessment Criteria	Result	Rationale

If Yes are they passed?	No	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score	Diversify species through planting and control of common nettle and bramble.		

Table D.4: Modified grassland

JNCC PH1 Classification	B6 Poor semi-improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	5.17
Limitations	None	Polygon	GL19, GL28
Habitat Description	Species included locally dominant crested dog's tail, frequent broad-leaved dock and ground elder *Aegopodium podagraria*, occasional common nettle, creeping buttercup and dandelion and locally rare spear thistle, cleavers, ground ivy *Glechoma hederacea*, jack by the hedge *Alliaria petiolata*, red campion, common hogweed and bamboo *Bambusoideae*.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	There must be 6-8 species per m2.	Fail	Less than 6 species per m2.
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Pass	Sward height was varied.
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area.	Pass	No scrub present
4	Physical damage evident in less than 5% of total grassland area.	Pass	Less than 5% physical damage.

JNCC PH1 Classification	B6 Poor semi-improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	5.17
Limitations	None	Polygon	GL19, GL28
Habitat Description	Species included locally dominant crested dog's tail, frequent broad-leaved dock and ground elder *Aegopodium podagraria*, occasional common nettle, creeping buttercup and dandelion and locally rare spear thistle, cleavers, ground ivy *Glechoma hederacea*, jack by the hedge *Alliaria petiolata*, red campion, common hogweed and bamboo *Bambusoideae*.		

Criterion	Condition Assessment Criteria	Result	Rationale
5	Cover of bare ground between 1% and 10%, including localised areas.	Fail	Bare ground less than 1%.
6	Cover of bracken less than 20%.	Pass	No bracken noted.
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Pass	No invasive non-native species present.

Are any criteria essential? (Y/N)	Yes	**Total**	**5 of 7**
If Yes are they passed?	No	**Condition**	**Poor**

JNCC PH1 Classification	B6 Poor semi-improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	5.17
Limitations	None	Polygon	GL19, GL28
Habitat Description	Species included locally dominant crested dog's tail, frequent broad-leaved dock and ground elder *Aegopodium podagraria*, occasional common nettle, creeping buttercup and dandelion and locally rare spear thistle, cleavers, ground ivy *Glechoma hederacea*, jack by the hedge *Alliaria petiolata*, red campion, common hogweed and bamboo *Bambusoideae*.		

Criterion	Condition Assessment Criteria	Result	Rationale
Suggested enhancement interventions to improve condition score	Grazing regime could be relaxed to allow a more diverse community to establish. Localised areas of bare ground could be created using hand tools.		

Table D.5: Modified Grassland

JNCC PH1 Classification	B6 Poor semi-improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	0.10
Limitations	None	Polygon	GL34
Habitat Description	Grassland with dominant Yorkshire fog, and occasional rosebay willow herb. Sward was uniform with a low species diversity.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	There must be 6-8 species per m2.	Fail	Less than 6 species per m2
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	Uniform Sward height
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area.	Pass	No scrub
4	Physical damage evident in less than 5% of total grassland area.	Pass	No damage observed
5	Cover of bare ground between 1% and 10%, including localised areas.	Fail	Bare ground <1%

JNCC PH1 Classification	B6 Poor semi-improved grassland	Distinctiveness	Low
UKHABS Classification	Grassland – Modified Grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (low distinctiveness)	Area (Ha)	0.10
Limitations	None	Polygon	GL34
Habitat Description	Grassland with dominant Yorkshire fog, and occasional rosebay willow herb. Sward was uniform with a low species diversity.		

Criterion	Condition Assessment Criteria	Result	Rationale
6	Cover of bracken less than 20%.	Pass	No bracken present
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	Pass	No INNS recorded

Are any criteria essential? (Y/N)	Yes	**Total**	**4 of 7**
If Yes are they passed?	Yes	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score	Localised areas of bare ground could be created using hand tools.		

Table D.6: Other neutral grassland

JNCC PH1 Classification	B5 Marshy grassland	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.03
Limitations	None	Polygon	GMH5
Habitat Description	Species include abundant hard rush *Juncus inflexus*, occasional great willowherb *Epilobium hirsutum*, lesser celandine *Ficaria verna* and creeping buttercup and locally rare dock *Rumex* sp., wavy bittercress *Cardamine flexuosa*, common nettle, and cleavers.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.	Pass	Indicator species present throughout.
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Pass	Varied sward height.

JNCC PH1 Classification	B5 Marshy grassland	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.03
Limitations	None	Polygon	GMH5
Habitat Description	Species include abundant hard rush *Juncus inflexus*, occasional great willowherb *Epilobium hirsutum*, lesser celandine *Ficaria verna* and creeping buttercup and locally rare dock *Rumex* sp., wavy bittercress *Cardamine flexuosa*, common nettle, and cleavers.		

Criterion	Condition Assessment Criteria	Result	Rationale
3	Cover of bare ground between 1% and 5%, including localised areas.	Pass	Bare ground cover between 1 and 5%.
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	Minimal areas of bracken and scrub.
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	Pass	No invasive non-native species present.
Additional Group (Non-acid types only)			

JNCC PH1 Classification	B5 Marshy grassland	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.03
Limitations	None	Polygon	GMH5
Habitat Description	Species include abundant hard rush *Juncus inflexus*, occasional great willowherb *Epilobium hirsutum*, lesser celandine *Ficaria verna* and creeping buttercup and locally rare dock *Rumex* sp., wavy bittercress *Cardamine flexuosa*, common nettle, and cleavers.		

Criterion	Condition Assessment Criteria	Result	Rationale
6	There are greater than 9 species per metre squared.	Fail	Low species diversity

Are any criteria essential? (Y/N)	Yes	**Total**	**5 of 6**
If Yes are they passed?	No	**Condition**	**Moderate**
Suggested enhancement interventions to improve condition score	Diversify species through planting and control of common nettle.		

Table D.7: Other neutral grassland

JNCC PH1 Classification	C3.1 Tall ruderal	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.38
Limitations	None	Polygon	GMH4
Habitat Description	Tall ruderal vegetation with species including frequent rush and common nettle with scattered trees.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.	Fail	Homogenous stand of common nettle
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Pass	Sward height was varied.
3	Cover of bare ground between 1% and 5%, including localised areas.	Pass	Bare ground between 1% and 5%.

JNCC PH1 Classification	C3.1 Tall ruderal	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.38
Limitations	None	Polygon	GMH4
Habitat Description	Tall ruderal vegetation with species including frequent rush and common nettle with scattered trees.		

Criterion	Condition Assessment Criteria	Result	Rationale
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	Minimal cover of scrub and bracken.
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	Fail	Species indicative of sub-optimal condition and physical damage accounts for more than 5%.
Additional Group (Non-acid types only)			
6	There are greater than 9 species per metre squared.	Fail	Low species diversity

Are any criteria essential? (Y/N)	Yes	**Total**	**3 of 6**

JNCC PH1 Classification	C3.1 Tall ruderal	Distinctiveness	Medium
UKHABS Classification	Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	0.38
Limitations	None	Polygon	GMH4
Habitat Description	Tall ruderal vegetation with species including frequent rush and common nettle with scattered trees.		

Criterion	Condition Assessment Criteria	Result	Rationale
If Yes are they passed?	No	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score	Diversify species through planting and control of common nettle. Control poaching and use of machinery to reduce physical damage.		

Table D.8: Mixed scrub

JNCC PH1 Classification	A2.1 Dense scrub	Distinctiveness	Medium
UKHABS Classification	Heathland and shrub – Mixed scrub	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Scrub	Area	0.56

Limitations	None	Polygon	S5, S13, S10
Habitat Description	Dense scrub with abundant bramble *Rubus fruticosus*, frequent hawthorn *Crataegus monogyna*, occasional blackthorn *Prunus spinosa,* elder *Sambucus nigra* and silver birch *Betula pendula*.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be up to 100% cover).	Pass	Range of species noted with no species more than 75% of the cover.
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	Pass	Varied age range noted.
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Pass	No INNS or undesirable species noted.

4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).	Pass	Well-developed edge noted.
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail	Scrub dense with no clearings, glades or rides.
Are any criteria non-negotiable? (Y/N)	N	**Total**	**4 of 5**
If Yes are they passed?	n/a	**Condition**	Moderate
Suggested enhancement interventions to improve condition score	Introduce a rotational cutting regime to create clearings, glades or rides within the scrub.		

Table D.9: Bramble scrub

JNCC PH1 Classification	A2.1 Dense scrub	Distinctiveness	Medium
UKHABS Classification	Heathland and shrub – Bramble scrub	Strategic Significance	Location ecologically desirable but not in local strategy

JNCC PH1 Classification	A2.1 Dense scrub	Distinctiveness	Medium
Condition Sheet	No assessment required – condition N/A	Area	0.54
Limitations	None	Polygon	S16
Habitat Description	Scrub dominated by bramble.		

Table D.10: Mixed scrub

JNCC PH1 Classification	A2.1 Dense scrub	Distinctiveness	Medium
UKHABS Classification	Heathland and shrub – Mixed scrub	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Scrub	Area	0.11
Limitations	None	Polygon	S8
Habitat Description	Dense scrub present to the north of the Site within the understorey of the broadleaved woodland.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except common	Pass	Range of species noted with no species more than 75% of the cover.

	juniper, sea buckthorn or box, which can be up to 100% cover).		
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	Pass	Varied age range noted.
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Pass	No INNS or undesirable species noted.
4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).	Pass	Well-developed edge noted.
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Pass	Clearings noted within the scrub.
Are any criteria non-negotiable? (Y/N)	N	**Total**	**5 of 5**
If Yes are they passed?	n/a	**Condition**	Good

Suggested enhancement interventions to improve condition score	Favourable management of the scrub to maintain its condition should include selective clearing to maintain open spaces and permit a diverse age range to continue to grow. Monitoring to ensure no encroachment from INNS should also be carried out.

Table D.11: Mixed scrub

JNCC PH1 Classification	A2.1 Dense scrub	Distinctiveness	Medium
UKHABS Classification	Heathland and shrub – Mixed scrub	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Scrub	Area	0.08
Limitations	None	Polygon	S9, S15
Habitat Description	Dense scrub was scattered throughout the Site and consisted mainly of hawthorn and bramble. Other species included blackthorn and dog rose *Rosa canina*.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box,	Pass	Range of species noted with no species more than 75% of the cover.

	which can be up to 100% cover).		
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	Fail	Not all ages were noted.
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Fail	INNS or undesirable species noted.
4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).	Fail	A well-developed edge was absent.
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail	No clearings were noted within the scrub.
Are any criteria non-negotiable? (Y/N)	N	**Total**	**1 of 5**
If Yes are they passed?	n/a	**Condition**	Poor

Suggested enhancement interventions to improve condition score	Selective clearance of some of the scrub will allow more growth, increasing the diversity of the ages present and will also create clearings within the scrub. Any INNS and undesirable species should be controlled and the edge of the scrub should be increased and left to grow longer.

Table D.12: Mixed scrub

JNCC PH1 Classification	A2.2 Scrub (scattered)	Distinctiveness	Medium
UKHABS Classification	Heathland and shrub – Mixed scrub	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Scrub	Area	0.07
Limitations	None	Polygon	S11
Habitat Description	Scattered scrub was found within the centre of field O4 and was dominated by hawthorn.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box,	Pass	Range of species noted with no species more than 75% of the cover.

	which can be up to 100% cover).		
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	Fail	Not all ages were noted.
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Fail	INNS or undesirable species noted.
4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or herbs present between the scrub and adjacent habitat(s).	Fail	A well-developed edge was absent.
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail	No clearings were noted within the scrub.
Are any criteria non-negotiable? (Y/N)	N	**Total**	**1 of 5**
If Yes are they passed?	n/a	**Condition**	Poor

Suggested enhancement interventions to improve condition score	Selective clearance of some of the scrub will allow more growth, increasing the diversity of the ages present and will also create clearings within the scrub. The edge of the scrub should be increased and left to grow longer.

Table D.13: Other woodland; broadleaved

JNCC PH1 Classification	A1.1 Semi-natural broadleaved woodland	Distinctiveness	Moderate
UKHABS Classification	Woodland and forest – Other woodland; broadleaved	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Woodland	Area (Ha)	0.17
Limitations	None	Polygon	W7
Habitat Description	Semi-natural broadleaved woodland with dominant sycamore, frequent rosebay willow herb *Chamaenerion angustifolium* and bluebell *Hyacinthoides non-scripta,* with occasional birch and rare oak.		

Criterion	Indicator	Condition Description	Score	Rationale
1	Age distribution of trees	Two age classes present	Moderate (2 points)	Two classes present
2	Wild, domestic and feral herbivore damage	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Moderate (2 points)	Browsing pressure widely evident

3	Invasive plant species	Rhododendron or laurel not present, other invasive species > 10% cover	Poor (1 point)	Sycamore dominant
4	Number of native tree species	None to two native tree or shrub species across woodland parcel	Poor (1 point)	As above
5	Cover of native tree and shrub species	< 50% of canopy trees and <50% of understory shrubs are native	Poor (1 point)	As above
6	Open space within woodland	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	Good (3 points)	Low levels of open space
7	Woodland regeneration	One or two classes only present in woodland	Moderate (2 points)	Low regeneration
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	Good (3 points)	High tree health
9	Vegetation and ground flora	Recognisable NVC plant community present	Moderate (2 points)	Some woodland ground flora
10	Woodland vertical structure	Two storeys across all survey plots	Moderate (2 points)	Moderate vertical structure

11	Veteran trees	No veteran trees present in woodland	Poor (1 point)	None present
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Good (3 points)	Large amount of deadwood
13	Woodland disturbance	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	Moderate (2 points)	Damaged ground
Are any criteria non-negotiable? (Y/N)		N	**Total**	**25 of 39**
If Yes are they passed?		n/a	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score		Planting of native trees and shrubs. Planting of a woodland ground flora seed mix to develop diversity within the ground layer. Creation of veteran trees and deadwood habitats.		

Table D.14: Other woodland; broadleaved

JNCC PH1 Classification	A1.1 Semi-natural broadleaved woodland	Distinctiveness	Moderate
UKHABS Classification	Woodland and forest – Other woodland; broadleaved	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Woodland	Area (Ha)	2.00

Limitations	None	Polygon	W3, W4 W5, W6, W8
Habitat Description	W3 – Semi-natural broadleaved woodland noted to the north-east of Oaklands Farm. This area of woodland was noted to be very dense with a slow flowing ditch running through the centre. W4 – Semi-natural broadleaved woodland present near the south-east boundary of Oaklands Farm. W5, W6, W8 – Semi-natural broadleaved woodland patches within Drakelow, with abundant sycamore, frequent oak, ash and beech, occasional Scot's pine *Pinus sylvestris*, birch and hawthorn.		

Criterion	Indicator	Condition Description	Score	Rationale
1	Age distribution of trees	Two age classes present	Moderate (2 points)	Two age classes
2	Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland	Good (3 points)	No browsing evident
3	Invasive plant species	Rhododendron or laurel present, or other invasive species >10% cover	Poor (1 point)	Sycamore >10% cover.
4	Number of native tree species	Five or more native tree or shrub species found across woodland parcel	Good (3 points)	Native species found across parcels

5	Cover of native tree and shrub species	50-80% of canopy trees and 50-80% of understory shrubs are native	Moderate (2 points)	Sycamore present but mainly native species
6	Open space within woodland	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower threshold of 10% does not apply	Good (3 points)	Some areas of temporary open space
7	Woodland regeneration	One or two classes only present in woodland	Moderate (2 points)	Some regeneration
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	Good (3 points)	Only minor amount of tree mortality
9	Vegetation and ground flora	No recognisable NVC community	Poor (1 point)	Poor ground flora assemblage
10	Woodland vertical structure	Two storeys across all survey plots	Moderate (2 points)	Only two storeys
11	Veteran trees	One veteran tree per hectare	Moderate (2 points)	Few veteran trees
12	Amount of deadwood	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large	Moderate (2 points)	Some deadwood

		dead branches/ stems and stumps.		
13	Woodland disturbance	More than 1 hectare of nutrient enrichment and/or more than 20% of woodland area has damaged ground	Poor (1 point)	Damaged ground in woodland
Are any criteria non-negotiable? (Y/N)		N	**Total**	**27 of 39**
If Yes are they passed?		n/a	**Condition**	**Moderate**
Suggested enhancement interventions to improve condition score		Planting of a woodland ground flora seed mix to develop diversity within the ground layer.		

Table D.15: Ponds

JNCC PH1 Classification	G1 Standing water	Distinctiveness	Medium
UKHABS Classification	Lakes – Ponds (non-priority habitat)	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Pond	Area (Ha)	0.08
Limitations	None	Polygon	P3, P6
Habitat Description	P3 – Pond located within the north-east of Oaklands far within an area of scrub.		

	P6 – Large pond surrounded by woodland in the north of the accessible Drakelow survey area. The pond had a 100% duckweed cover and was partially shaded around the edges.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Fail	Water showing signs indicative of poor water quality.
2	There is semi-natural habitat (i.e. moderate distinctiveness or above) for at least 10 m from the pond edge.	Pass	Surrounded by semi-natural broadleaved woodland
3	Less than 10% of the pond is covered with duckweed or filamentous algae.	Fail	100% duckweed cover
4	The pond is not artificially connected to other waterbodies, either via streams, ditches or artificial pipework.	Pass	Not artificially connected
5	Pond water levels should be able to fluctuate naturally throughout the year. No	Pass	No obvious dams, pumps or pipework was visible.

	obvious dams, pumps or pipework.		
6	There is an absence of non-native plant and animal species.	Pass	No INNS noted.
7	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Pass	No fish noted within the pond.
Additional criteria – only applicable to non-woodland ponds:			
8	In non-woodland ponds, plants, be they emergent, submerged or floating (excluding duckweeds)3, should cover at least 50% of the pond area that is less than 3 m deep.	N/A	Woodland pond
9	The surface of non-woodland ponds is no more than 50% shaded by woody bankside species.	N/A	Woodland pond
Are any criteria non-negotiable? (Y/N)	N	Total	**5 of 7**

If Yes are they passed?	n/a	Condition	**Moderate**
Suggested enhancement interventions to improve condition score	Reduce duckweed cover to improve water quality.		

Table D.16: Ponds

JNCC PH1 Classification	G1 Standing water	Distinctiveness	Medium
UKHABS Classification	Lakes – Ponds (non-priority habitat)	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Pond	Area (Ha)	0.03
Limitations	Due to the presence of thick scrub,P4 couldn't be fully accessed to survey. Best judgement was used within the context of the Site and the condition of the surrounding ponds.	Polygon	P4, P5
Habitat Description	P4 – Small pond surrounded by dense scrub, located along the south-east boundary of Oaklands farm.		

	P5 – Small pond located within field boundary in south-east corner of Oaklands farm.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	The pond is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution. Turbidity is acceptable if the pond is grazed by livestock.	Fail	Water indicative of poor water quality.
2	There is semi-natural habitat (i.e. moderate distinctiveness or above) for at least 10 m from the pond edge.	Pass	Semi-natural habitat present at least 10m from the edge.
3	Less than 10% of the pond is covered with duckweed or filamentous algae.	Fail	High duckweed cover
4	The pond is not artificially connected to other waterbodies, either via streams, ditches or artificial pipework.	Pass	None noted
5	Pond water levels should be able to fluctuate naturally throughout the year. No	Fail	Water levels do not appear to fluctuate, view of P4 constrained as above.

	obvious dams, pumps or pipework.		
6	There is an absence of non-native plant and animal species.	Pass	None noted
7	The pond is not artificially stocked with fish. If the pond naturally contains fish, it is a native fish assemblage at low densities.	Fail	Fish present
Additional criteria – only applicable to non-woodland ponds:			
8	In non-woodland ponds, plants, be they emergent, submerged or floating (excluding duckweeds)3, should cover at least 50% of the pond area that is less than 3 m deep.	Fail	Less than 50% of the pond area that is less than 3m deep covered by plants.
9	The surface of non-woodland ponds is no more than 50% shaded by woody bankside species.	Fail	More than 50% shaded by woody bankside species.
Are any criteria non-negotiable? (Y/N)	N	Total	**3 of 9**

If Yes are they passed?	n/a	Condition	**Poor**
Suggested enhancement interventions to improve condition score	Allow a greater buffer of undisturbed semi-natural habitat to develop around the pond, so that the surrounding habitat can intercept run off and reduce inputs of nutrient enrichment. Selectively thin some of the woody bankside species to allow more light to reach the pond, which in turn will allow more aquatic plants to grow along the edge of the pond. Control any INNS and fish populations.		

Table D.17: Urban

JNCC PH1 Classification	J4 Bare ground	Distinctiveness	Low
UKHABS Classification	Urban – Vacant / derelict land / bare ground	Strategic Significance	Area/compensation not in local strategy/ no local strategy
Condition Sheet	Urban	Area (Ha)	0.51
Limitations	None	Polygon	U2, U4
Habitat Description	U2 – Bare soil in the west of Oaklands Farm. U4 – Bare soil within fields at Park Farm.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs)	Fail	None present

	should not account for more than 80% of the total habitat area.		
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. **NB – To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.**	Fail	Bare ground with no flowering plant species.
3	Invasive non-native species (Schedule 9 of WCA) cover less than 5% of total vegetated area. **NB – To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-**	Pass	No INNS present

	native species (rather than <5% cover).		
Are any criteria non-negotiable? (Y/N)	Has to meet the requirements for good condition within criterion 2 and 3	Total	**1 of 3**
If Yes are they passed?	n/a	Condition	**Poor**
Suggested enhancement interventions to improve condition score	Create structure within the ground to introduce opportunities for invertebrates as well as planting of native flowering plant species.		

Table D.18: Urban

JNCC PH1 Classification	J4 Bare ground	Distinctiveness	Low
UKHABS Classification	Urban – Vacant / derelict land / bare ground	Strategic Significance	Area/compensation not in local strategy/ no local strategy
Condition Sheet	Urban	Area (Ha)	0.50
Limitations	None	Polygon	U3
Habitat Description	Area of bare ground within Drakelow with scatted rosebay willowherb, sycamore, fringed willowherb *Epilobium ciliatum* and oak.		
Criterion	Condition Assessment Criteria	Result	Rationale

1	Vegetation structure is varied, providing opportunities for insects, birds and bats to live and breed. A single ecotone (i.e. scrub, grassland, herbs) should not account for more than 80% of the total habitat area.	Pass	Herbs and trees present creating structure
2	There is a diverse range of flowering plant species, providing nectar sources for insects. These species may be either native, or non-native but beneficial to wildlife. **NB – To achieve GOOD condition, criterion 2 must be satisfied by native species only (rather than non-natives beneficial to wildlife). Note that Biodiverse green roofs are exempt from this requirement, and can include non-native sedums, as set out in footnote 1.**	Fail	Few plant species
3	Invasive non-native species (Schedule 9 of WCA) cover	Pass	No INNS present

	less than 5% of total vegetated area. **NB – To achieve GOOD condition, criterion 3 must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).**		
Are any criteria non-negotiable? (Y/N)	Has to meet the requirements for good condition within criterion 2 and 3	Total	**2 of 3**
If Yes are they passed?	n/a	Condition	**Moderate**
Suggested enhancement interventions to improve condition score	Planting of native flowering plant species.		

Table D.19: Non-cereal crops

JNCC PH1 Classification	J1. Cultivated / disturbed land – arable	Distinctiveness	Low
UKHAB Classification	Cropland – Non-cereal crops	Strategic Significance	Location ecologically desirable but not in local strategy

JNCC PH1 Classification	J1. Cultivated / disturbed land – arable	Distinctiveness	Low
Condition Sheet	No assessment required – condition N/A	Area	91.14
Limitations	None	Polygon	Fields: F3, O4, O6, O7, O8, O11, O13, O14, O15, O16, O17
Habitat Description	Cultivated arable land.		

Table D.20: Developed land; sealed surface

JNCC PH1 Classification	Hard standing / Buildings / Other habitat	Distinctiveness	Very Low
UKHAB Classification	Developed land; sealed surface	Strategic Significance	Area/compensation not in local strategy/ no local strategy
Condition Sheet	No assessment required – condition N/A	Area	4.59
Limitations	None	Polygon	N/A
Habitat Description	Hard standing and buildings as well as chicken coup within Park Farm.		

Table D.21: Urban Trees

JNCC PH1 Classification	A3.1 Broadleaved scattered trees	Distinctiveness	Moderate
UKHAB Classification	Urban tree	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Urban trees	Area (ha)	0.38
Limitations		Tree reference	Arcus trees[21]: T1, T2, T9, T29
Habitat Description	Scattered broadleaved trees within Oaklands, comprising 5 large trees mapped by Arcus T1 (ash), T2 (oak), T3 (ash) T9 (oak), and T29 (oak). Area calculated using the Urban Tree Helper within the Defra 3.1 Metric.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The tree is a native species(or more than 70% within the block are native species).	Pass	Native species
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Fail	Scattered trees with gaps between

[21] Reference numbers for these trees are consistent with the original Arcus mapping within **ES Volume 3, Appendix 6.3 Preliminary Ecological Appraisal (Arcus, 2020),** and as such does not correspond with the arboricultural reference numbers on the TRR.

3	The tree is mature or veteran or more than 50% within the block are mature or veteran).	Pass	Large, mature trees
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	Pass	-
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	Pass	Present with Bat Roosting Suitability features present also
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Fail	Arable cultivated land beneath
Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		

Table D.22: Urban Trees

JNCC PH1 Classification	A3.1 Broadleaved scattered trees	Distinctiveness	Moderate

UKHAB Classification	Urban tree	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Urban trees	Area (ha)	0.18
Limitations		Tree reference	Arcus[21]: T24, T26, T30 LUC: T39, T58
Habitat Description	Medium sized broadleaved trees scattered across the Site, with oak dominant and frequent ash, mainly situated within arable fields. Area calculated using the Urban Tree Helper within the Defra 3.1 Metric.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The tree is a native species(or more than 70% within the block are native species).	Pass	Native species
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Fail	Scattered trees with gaps between
3	The tree is mature or veteran or more than 50% within the block are mature or veteran).	Fail	Less than 50% mature or veteran
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current	Pass	None noted

	regular pruning regime so the trees retain >75% of expected canopy for their age range and height.		
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	Pass	Cavities present with most having Bat Roosting Suitability
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Fail	Arable cultivated land beneath
Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		

Table D.23: Urban Trees

JNCC PH1 Classification	A3.2 Coniferous scattered trees	Distinctiveness	Moderate
UKHAB Classification	Urban tree	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Urban trees	Area (ha)	0.22

Limitations		Location	G44
Habitat Description	Coniferous scattered trees located within GMH6 in Oaklands and dominated by Scot's pine. Area calculated using Urban Tree Helper within the Defra 3.1 Metric.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The tree is a native species(or more than 70% within the block are native species).	Pass	Native species
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Pass	Some gaps in canopy cover
3	The tree is mature or veteran or more than 50% within the block are mature or veteran).	Fail	Few mature trees
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	Pass	
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	Fail	-
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Pass	Ruderal vegetation beneath

Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		

Hedgerow Habitats

Table D.24: Line of Trees

JNCC PH1 Classification	Tree Line	Distinctiveness	Low
UKHABS Classification	Line of trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Line of trees	Length (km)	0.53
Limitations	None	Line	G5, G7, G8, G1, G2, G3, G4
Habitat Description	G5, G7, G8 dominated by mature horse chestnut *Aesculus hippocastanum* trees. G1, G2, G3, G4 dominated by mature lime *Tilia x europaea* trees		

Criterion	Condition Assessment Criteria	Result	Rationale
1	More than 70% of trees are native species.	Pass	-

2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Fail	Tree cover not continuous
3	Includes one or more mature or veteran tree.	Pass	-
4	There is an undisturbed naturally vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other anthropogenic operations.	Fail	Tree lines adajcent to road.
5	At least 95% of the trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	-

Are any criteria non-negotiable? (Y/N)	No	Total	**3 of 5**
If Yes are they passed?	n/a	**Condition**	**Moderate**
Suggested enhancement interventions to improve condition score	Plant additional trees to reduce gaps in the canopy cover. Increase the area of undisturbed natural vegetation to at least 6m on both sides of the tree lines.		

Table D.25: Native hedgerow

JNCC PH1 Classification	J2.1.2 Intact hedge (species-poor)	Distinctiveness	Low
UKHABS Classification	Native Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.16
Limitations	None	Line	H28, H48
Habitat Description	Abundant hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*. Ground flora comprised abundant common nettle with rarely dock, hogweed, white dead-nettle *Lamium album* and red dead-nettle *Lamium purpureum* and bramble *Rubus fruticosus.*		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	Leggy
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and	Fail	-

perennial vegetation	Is present on one side of the hedge (at least)		
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Pass	Common nettle and cleavers present but <20%
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Underplant hedgerow or improve cutting management.		

Table D.26: Native hedgerow

JNCC PH1 Classification	J2.1.2 Intact hedge (species-poor) G1 Standing water	Distinctiveness	Moderate

UKHABS Classification	Native Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.104
Limitations	None	Line	H25, G66
Habitat Description	Hedgerow dominated by either blackthorn or hawthorn *Crataegus mongyna*, with occasional dog rose *Rosa canina* and locally rare hornbeam *Carpinus betulus*. Ground flora comprised abundant common nettle with rarely dock, hogweed, white dead-nettle and red dead-nettle. Adjacent ditches accounted for in rivers units.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-

C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Underplant hedgerow or improve cutting management. Control species indicative of enrichment. Ditch could be restored and enhanced.		

Table D.27: Native hedgerow

JNCC PH1 Classification	J2.1.2 Intact hedge (species-poor)	Distinctiveness	Low
UKHABS Classification	Native Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.42
Limitations	None	Line	H1, H2

Habitat Description	Hedgerow dominated by blackthorn. Ground flora comprised abundant common nettle with rarely dock, hogweed, white dead-nettle and red dead-nettle.		
Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Fail	-
A2. Width	>1.5 m average along length	Fail	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	-
B2. Gap – hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-

Are any criteria essential? (Y/N)	No	**Condition**	Poor
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Hedgerow could be allowed to grow wider and taller. Underplant hedgerow or improve cutting management. In plant gaps in hedgerow. Control species indicative of enrichment.		

Table D.28: Native hedgerow

JNCC PH1 Classification	J2.1.2 Intact hedge (species-poor)	Distinctiveness	Low
UKHABS Classification	Native Hedgerow	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Hedgerow	Length (km)	0.22
Limitations	None	Line	H3, H42 west
Habitat Description	Hedgerow dominated by blackthorn. Ground flora comprised abundant common nettle with rarely dock, hogweed, white dead-nettle and red dead-nettle.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-

B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Pass	
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Underplant hedgerow, infill planting		

Table D.29: Native hedgerow

JNCC PH1 Classification	J2.2.2 Defunct hedge (species-poor)	Distinctiveness	Low
UKHABS Classification	Native Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.42
Limitations	None	Line	H66, H84, H72
Habitat Description	Dominated by blackthorn. Ground flora comprised abundant common nettle with rarely dock, hogweed, white dead-nettle and red dead-nettle.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-

C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Pass	
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Underplant hedgerow.		

Table D.30: Native species rich hedgerow

JNCC PH1 Classification	J2.1.1 Intact hedge (species-rich)	Distinctiveness	Moderate
UKHABS Classification	Native Species Rich Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	2.63

Limitations	None	Line	No ref[22], H62a, H61, H59, H68, H69, H71, H70, H74, H47, H41 north, H53, H57
Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, with rare hedge mustard *Sisymbrium officinale,* petty spurge *Euphorbia peplus*, red dead nettle, spear thistle and Shepherd's purse *Capsella bursa-pastoris*.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-

[22] H19 was identified as hedge with trees on Arcus Phase 1 map but an updated condition assessment was undertaken for intact species-rich hedgerow.

C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Fail	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Control species indicative of enrichment. Litter management and in plant cut through.		

Table D.31: Native species rich hedgerow

JNCC PH1 Classification	J2.1.1 Intact hedge (species-rich)	Distinctiveness	Moderate
UKHABS Classification	Native Species Rich Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.74
Limitations	None	Line	H45, H46, H47, H51, H50 north

Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse.		
Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Fail	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Fail	-

Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Hedgerow could be allowed to grow wider. Control species indicative of enrichment. Litter management and in plant cut through.		

Table D.32: Species-rich defunct hedge

JNCC PH1 Classification	J2.2.1 Defunct hedge (species-rich)	Distinctiveness	Moderate
UKHABS Classification	Native Species Rich Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.76
Limitations	None	Line	H87, H43 south, H56
Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	-

B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Underplant hedgerow or improve cutting management. In plant gaps in hedgerow. Control species indicative of enrichment.		

Table D.33: Native species rich hedgerow with trees

JNCC PH1 Classification	J2.3.1 Hedge with trees (native species-rich)	Distinctiveness	High
UKHABS Classification	Native Species Rich Hedgerow with trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.32
Limitations	None	Line	H73
Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Fail	-

perennial vegetation			
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Additional group – applicable to hedgerows with trees only			
E1. Tree age	At least one mature tree per 30m stretch of hedgerow.	Fail	-
E.2 Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Poor
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Underplant hedgerow or improve cutting management. In plant gaps in hedgerow. Control species indicative of enrichment.		

Table D.34: Native species rich hedgerow with trees

JNCC PH1 Classification	J2.3.1 Hedge with trees (native species-rich)	Distinctiveness	High
UKHABS Classification	Native Species Rich Hedgerow with trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	2.74
Limitations	None	Line	H62, H63, H60, H59, H82, H81, H88, H85, H32, H29, H30, H31, H36, G36
Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-

C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Additional group – applicable to hedgerows with trees only			
E1. Tree age	At least one mature tree per 30m stretch of hedgerow.	Pass	-
E.2 Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		

Suggested enhancement interventions to improve condition score	Control species indicative of enrichment.

Table D.35: Native species rich hedgerow with trees

JNCC PH1 Classification	J2.3.1 Hedge with trees (native species-rich)	Distinctiveness	High
UKHABS Classification	Native Species Rich Hedgerow with trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	1.18
Limitations	None	Line	H86[23], H75, H76, H44 east, H34, H33
Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-

[23] Hedge 36 was identified as intact species rich hedgerow on Arcus Phase 1 map but an updated condition assessment was undertaken for species rich hedge with trees.

B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Fail	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Fail	-
Additional group – applicable to hedgerows with trees only			
E1. Tree age	At least one mature tree per 30m stretch of hedgerow.	Pass	-
E.2 Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	-

Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Control species indicative of enrichment, invasive non-native and neophyte species. Litter management and in plant cut through.		

Table D.36: Native species rich hedgerow

JNCC PH1 Classification	J2.2.1 Defunct hedge (species-rich)	Distinctiveness	Moderate
UKHABS Classification	Native Species Rich Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.38
Limitations	None	Line	H44 west
Habitat Description	Species included blackthorn and hawthorn with defunct gaps within hedge structure. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-

B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	In plant gaps in hedgerow. Control species indicative of species enrichment.		

Table D.37: Native species rich hedgerow – Associated with bank or ditch

JNCC PH1 Classification	J2.1.1 Intact hedge (species-rich) G1 Standing water	Distinctiveness	High
UKHABS Classification	Native Species Rich Hedgerow – Associated with bank or ditch	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.23
Limitations	None	Line	H47
Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Fail	-

perennial vegetation			
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Underplant hedgerow or improve cutting management. Ditch could be restored and enhanced. Control species indicative of enrichment.		

Table D.38: Native species rich hedgerow with trees – Associated with bank or ditch

JNCC PH1 Classification	J2.3.1 Hedge with trees (native species-rich) G1 Standing water	Distinctiveness	Very High
UKHABS Classification	Native Species Rich Hedgerow with trees – Associated with bank or ditch	Strategic Significance	Location ecologically desirable but not in local strategy

Condition Sheet	Hedgerow	Length (km)	0.40
Limitations	None	Line	H77, H38[24], H78, H42 east, G49
Habitat Description	Species included blackthorn and hawthorn. Species present in the understorey consisted of common ivy, dock, cow's parsley, hedge mustard, petty spurge, red dead nettle, spear thistle and Shepherd's purse. Associated with a ditch of running water.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	

[24] Not mapped by Arcus, hedgerow noted and assessed by LUC during condition assessments.

perennial vegetation			
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Additional group – applicable to hedgerows with trees only			
E1. Tree age	At least one mature tree per 30m stretch of hedgerow.	Pass	
E.2 Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	In plant gaps in hedgerow. Control species indicative of nutrient enrichment.		

Table D.39: Native hedgerow with trees

JNCC PH1 Classification	N/A[25]	Distinctiveness	Moderate

UKHABS Classification	Native Hedgerow with trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.68
Limitations	None	Line	H79, H36a
Habitat Description	not assessed by Arcus. Hedgerows dominated by hawthorn with abundant balckthorn and rare damson.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Fail	-
A2. Width	>1.5 m average along length	Fail	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Additional group – applicable to hedgerows with trees only			
E1. Tree age	At least one mature tree per 30m stretch of hedgerow.	Fail	

E.2 Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	
Are any criteria essential? (Y/N)	No	**Condition**	Moderate
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	Hedgerow could be allowed to grow wider and taller. In plant gaps in hedgerow. Control species indicative of enrichment.		

Table D.40: Native species rich hedgerow with trees

JNCC PH1 Classification	N/A[25]	Distinctiveness	High
UKHABS Classification	Native Species Rich Hedgerow with trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	1.59
Limitations	None	Line	H89 north, H88 north, G65, G54, G55, H64, H65, H80, H37, H33
Habitat Description	not assessed by Arcus. Hedgerows dominated by hawthorn with frequent elder and blackthorn and rare ash and elm.		
Criterion	Condition Assessment Criteria	Result	Rationale

[25] Not mapped by Arcus so no JNCC Ph1 Classification available. Hedgerow noted and assessed by LUC during condition assessments

A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Pass	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		

Suggested enhancement interventions to improve condition score	Control species indicative of nutrient enrichment.

Table D.41: Line of Trees

JNCC PH1 Classification	Tree Line – Not mapped by Arcus[20]	Distinctiveness	Low
UKHABS Classification	Line of Trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Line of Trees	Length (km)	0.51
Limitations	None	Line	H49, H41 south, H50 south, G48
Habitat Description	Tree line comprising ash, oak, elder, hawthorn and hazel.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	More than 70% of trees are native species.	Pass	-
2	Tree canopy is predominantly continuous with gaps in canopy cover	Pass	-

	making up <10% of total area and no individual gap being >5 m wide.		
3	Includes one or more mature or veteran tree.	Pass	-
4	There is an undisturbed naturally vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other anthropogenic operations.	Fail	-
5	At least 95% of the trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Pass	-
Are any criteria non-negotiable? (Y/N)	No	Total	**4 of 5**
If Yes are they passed?	N/A	**Condition**	**Moderate**
Suggested enhancement interventions to improve condition score	Increase the area of undisturbed vegetation on both sides of the tree line to at least 6m.		

Table D.42: Native hedgerow with trees

JNCC PH1 Classification	N/A[25]	Distinctiveness	Moderate

UKHABS Classification	Native Hedgerow with trees	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	0.57
Limitations	None	Line	H43 west, G46
Habitat Description	Defunct hedgerow with trees along the northern border of Oaklands Farm section, not previously assessed by Arcus. Dense hedgerow with gaps along length, dominated by hawthorn with abundant blackthorn.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Fail	Hedgerow defunct
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Fail	Large gaps, defunct
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Fail	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Fail	Large area of nettles and undesirable species at base
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	Non non-native species noted
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Pass	No damage noted
Additional group – applicable to hedgerows with trees only			

E1. Tree age	At least one mature tree per 30m stretch of hedgerow.	Pass	-
E.2 Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Fail	Large areas of damaged trees
Are any criteria essential? (Y/N)	No	**Condition**	Poor
If Yes are they passed?	N/A		
Suggested enhancement interventions to improve condition score	In plant gaps in hedgerow. Control species indicative of enrichment.		

River Habitats

Table D.43: Ditches

JNCC PH1 Classification	G1 Standing Water	Distinctiveness	Medium
UKHABS Classification	Rivers and streams - Ditches	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Ditch	Length (km)	0.07
Limitations	None	Line	D6
Habitat Description	Ditches were largely associated with hedgerows along field boundaries within Park Farm.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Pass	-
2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.	Fail	Lack of marginal aquatic vegetation noted.
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Fail	Signs of eutrophication present.
4	A fringe of marginal vegetation is present along more than 75% of the ditch.	Pass	-
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Pass	-
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Fail	-
7	Less than 10% of the ditch is heavily shaded.	Pass	-

8	There is an absence of non-native plant and animal species.	Pass	-
Are any criteria non-negotiable? (Y/N)	No	Total	**5 of 8**
If Yes are they passed?	n/a	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score	Planting of native marginal aquatic species. Allow a greater buffer strip of undisturbed vegetation to develop on both sides of the ditch to reduce eutrophication.		

Table D.44: Ditches

JNCC PH1 Classification	G1 Standing Water	Distinctiveness	Medium
UKHABS Classification	Rivers and streams - Ditches	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Ditch	Length (km)	0.48
Limitations	None	Line	D7
Habitat Description	Ditches associated with hedgerows along field boundaries, within the north-west of Oaklands.		
Criterion	Condition Assessment Criteria	Result	Rationale

1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Fail	-
2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.	Fail	Lack of marginal aquatic vegetation noted.
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Pass	-
4	A fringe of marginal vegetation is present along more than 75% of the ditch.	Pass	-
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Pass	-
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Fail	
7	Less than 10% of the ditch is heavily shaded.	Fail	-
8	There is an absence of non-native plant and animal species.	Pass	-

Are any criteria non-negotiable? (Y/N)	No	Total	**4 of 8**
If Yes are they passed?	n/a	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score	Planting of native marginal aquatic species. Selective thinning of bankside woody vegetation to reduce shading.		

Table D.45: Ditches

JNCC PH1 Classification	G1 Standing Water	Distinctiveness	Medium
UKHABS Classification	Rivers and streams - Ditches	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Ditch	Length (km)	0.15
Limitations	None	Line	D12
Habitat Description	Ditches present within the woodland at Drakelow, with D12 associated with Pond 6. Small stream with low flow and Himalayan balsam *Impatiens glandulifera* present.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Pass	Clear water

2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.	Fail	Lack of aquatic vegetation noted.
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Pass	None present
4	A fringe of marginal vegetation is present along more than 75% of the ditch.	Fail	Bare earth banks no marginal vegetation
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Pass	No damage noted
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Fail	Shallow and low flow
7	Less than 10% of the ditch is heavily shaded.	Fail	90% of ditch shaded
8	There is an absence of non-native plant and animal species.	Fail	Himalayan balsam present
Are any criteria non-negotiable? (Y/N)	No	Total	**3 of 8**

If Yes are they passed?	n/a	**Condition**	**Poor**
Suggested enhancement interventions to improve condition score	Planting of native marginal aquatic species. Selective thinning of bankside woody vegetation to reduce shading. Control Himalayan balsam.		

Table D.46: Ditches

JNCC PH1 Classification	G1 Standing Water	Distinctiveness	Medium
UKHABS Classification	Rivers and streams - Ditches	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Ditch	Length (km)	0.13
Limitations	None	Line	D17
Habitat Description	Ditch with standing water along H22 within Oaklands. Part of ditch contained water with sections further along the hedge that were dry at the time of survey.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Fail	-
2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating	Fail	Lack of marginal aquatic vegetation noted.

	or submerged plants in a 20 m ditch length.		
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Pass	No signs of eutrophication present.
4	A fringe of marginal vegetation is present along more than 75% of the ditch.	Fail	-
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Pass	-
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Fail	-
7	Less than 10% of the ditch is heavily shaded.	Fail	Heavily shaded by hedge and other vegetation
8	There is an absence of non-native plant and animal species.	Pass	None noted
Are any criteria non-negotiable? (Y/N)	No	Total	**3 of 8**
If Yes are they passed?	n/a	**Condition**	**Poor**

Suggested enhancement interventions to improve condition score	Planting of native marginal aquatic species.

River Condition Assessment Results

D.2 The following table details the condition assessments of the river sub-reaches on Site. Further information is provided within **Technical Appendix 6.13: River Condition Assessment.**

D.3 RCI results are outlined below, for ease when interpreting these data, the following colour coding has been adopted:

- Green indicates an RCI in optimal condition and no enhancement options are available.
- Yellow indicates an RCI where some enhancement options may be available.
- Red indicates an RCI where significant enhancement options may be available.

Table D.47: River Condition Indicator Results

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
Bank Top Positive Indicators								
Bank top vegetation structure	2	3	3	3	3	4	3	Relatively diverse vegetation structure from mosses, grasses, scrub and trees.
Bank top tree	2	0	0	4	1	3	0	Mainly saplings and mature trees, with small amounts of large trees.

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
feature richness								
Bank top water-related features	2	1	0	2	0	0	0	No water related features on the bank tops for the majority of the stream, with small areas of marginal vegetation.
Bank Top Negative Indicators								
Bank top NNIPS cover	0	0	0	0	0	0	0	No non-native invasive plant species (within 10m of the bank edge).
Bank top managed ground cover	-3	-4	-4	-3	-4	-4	-4	Consisted of arable fields on both bank tops.
Bank Face Positive Indicators								
Bank face riparian vegetation structure	2	3	3	2	3	3	3	Vegetation structure is diverse with mosses, grasses, scrub, saplings and trees.

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
Bank face tree feature richness	3	3	3	4	3	3	3	Large areas of trees and shrubs on the bank face.
Bank face natural bank profile extent	3	3	3	2	3	3	3	The majority of the stream possessed a natural bank profile.
Bank face natural bank profile richness	4	4	3	4	4	3	3	Bank face profile is typical of low gradient rivers.
Bank face natural bank material richness	1	1	1	2	1	1	1	Mainly dominant earth sediment with small areas of silt.
Bank face bare	3	4	3	1	4	3	1	Sub-reaches D and Z had larger areas of bare sediment.

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
sediment extent								
Bank Face Negative Indicators								
Bank face artificial bank profile extent	0	0	0	0	0	0	0	No artificial bank profile.
Bank face reinforcement extent	0	0	0	0	0	0	0	No bank reinforcement along the bank face.
Bank face reinforcement material severity	0	0	0	0	0	0	0	No bank reinforcement along the bank face.
Bank face NNIPS cover	0	0	0	0	0	0	0	No non-native invasive plant species.
Channel Margin Positive Indicators								

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
Channel margin aquatic vegetation extent	1	1	1	2	1	1	1	Aquatic vegetation is partially present along the channel margins.
Channel margin aquatic morphotype richness	0	0	0	1	0	1	0	Little variety in the aquatic morphotypes.
Channel margin physical feature extent	2	3	3	2	3	2	2	Nest holes present on some of the bank faces.
Channel margin physical feature richness	3	1	1	3	1	1	1	Little variety in channel margin physical features.
Channel Margin Negative Indicators								

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
Channel margin artificial features	0	0	0	0	0	0	0	No artificial features.
Channel Aquatic Positive Indicators								
Channel aquatic morphotype richness	1	2	3	2	2	1	1	Some variety in the aquatic morphotypes, in areas less shaded by trees.
Channel Bed Positive Indicators								
Channel bed tree features richness	3	2	2	4	3	3	3	Majority of the channel beds were shaded by trees.
Channel bed hydraulic features richness	2	0	1	3	1	2	2	Little variety in hydraulic features, due to low flow rate.

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
Channel bed natural features extent	3	1	0	3	0	0	1	Reaches A and D had areas such as pools and riffles.
Channel bed natural features richness	2	0	0	1	0	0	0	Little variety in channel bed features.
Channel bed material richness	2	3	3	3	3	4	3	Channel bed had variety of different material including gravel/pebble, sand, organic matter.
Channel Bed Negative Indicators								
Channel bed siltation	-3	-2	0	-4	-2	-2	-1	Sub-reaches A and D had deep layers of silt on the channel bed, whilst the remaining reaches had little silt.
Channel bed	0	0	0	0	0	0	0	No channel bed reinforcements.

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
reinforcement extent								
Channel bed reinforcement severity	0	0	0	0	0	0	0	No channel bed reinforcements.
Channel bed artificial features severity	-1	0	0	-3	0	-3	-1	Majority of reaches had no or little artificial features, however, reaches D and Y had small organic weirs.
Channel bed NNIPS extent	0	0	0	0	0	0	0	No non-native invasive plant species.
Channel bed filamentous algae extent	-1	0	0	-2	0	0	0	Little filamentous algae identified.

Condition Indicator	Sub-reach A	Sub-reach B	Sub-reach C	Sub-reach D	Sub-reach E	Sub-reach Y	Sub-reach Z	Comments
River Type	H	H	H	H	H	H	H	
Final Condition Assessment[26]	Moderate	Moderate	Moderate	Fairly Good	Moderate	Moderate	Moderate	

[26] Average of RCI's (subject to weighting by river type) and calculated through cartographer.io software.

Appendix E
Proposed Assessment Proformas

E.1 The following proformas constitute the created habitats on Site and provide further clarity in their proposed conditions.

Proposed Habitat Condition Assessments

Table E.1: Other woodland; broadleaved

JNCC PH1 Classification	A1.1 Semi-natural broadleaved woodland	Distinctiveness	High
UKHABS Classification	Woodland and forest - Other woodland; broadleaved	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Woodland	Area (Ha)	5.51
Limitations	None	Polygon	-
Habitat Description	Semi-natural broadleaved woodland to be created across the Site for screening and enhancement purposes. Woodland understory to consist mainly of Corylus avellana (Hazel) and Crataegus monogyna (Hawthorn) with some Prunus spinosa (Blackthorn), Rhamnus cathartica (Purging Buckthorn) and Salix cinerea (Grey Willow). Woodland trees to consist mainly of Acer campestre (Field maple) and Ilex aquifolium (Holly) with some Malus		

		sylvestris (Crab Apple), Populus tremula (Aspen) and Sorbus aucuparia (Rowan) .		
Criterion	Indicator	Condition Description	Score	Rationale
1	Age distribution of trees	One age present	Poor (1 point)	New specimens added
2	Wild, domestic and feral herbivore damage	Evidence of significant browsing pressure is present in 40% or less of whole woodland	Moderate (2 points)	Potential for browsing but deer fencing proposed.
3	Invasive plant species	Rhododendron or laurel not present, other invasive species < 10% cover	Good (3 points)	Only native species proposed
4	Number of native tree species	Five or more native tree or shrub species found across woodland parcel	Good (3 points)	As above
5	Cover of native tree and shrub species	> 80% of canopy trees and >80% of understory shrubs are native	Good (3 points)	As above
6	Open space within woodland	10 – 20% of woodland has areas of temporary open space, unless woodland is <10ha in which case lower	Good (3 points)	

		threshold of 10% does not apply		
7	Woodland regeneration	No classes or coppice regrowth present in woodland	Poor (1 point)	New woodland
8	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback	Good (3 points)	
9	Vegetation and ground flora	No recognisable NVC community	Poor (1 point)	Will take time to establish
10	Woodland vertical structure	Two storeys across all survey plots	Moderate (2 points)	
11	Veteran trees	No veteran trees present in woodland	Poor (1 point)	
12	Amount of deadwood	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems and stumps	Good (3 points)	
13	Woodland disturbance	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground	Moderate (2 points)	
Are any criteria non-negotiable? (Y/N)		N	**Total**	**29 of 39**

If Yes are they passed?	n/a	**Condition**	**Moderate**

Table E.2: Other neutral grassland (created beneath arrays)

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	61.89
Limitations	None	Polygon	-
Habitat Description	Grassland beneath the solar arrays created after construction and sown with meadow mix but kept shorter to prevent shading so conservatively estimated at poor condition.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.	Fail	
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	Maintained sward height

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	61.89
Limitations	None	Polygon	-
Habitat Description	Grassland beneath the solar arrays created after construction and sown with meadow mix but kept shorter to prevent shading so conservatively estimated at poor condition.		

Criterion	Condition Assessment Criteria	Result	Rationale
3	Cover of bare ground between 1% and 5%, including localised areas.	Fail	Bare ground less than 1%
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	No scrub or bracken noted
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	Pass	No invasive non-native species present.
Additional Group (Non-acid types only)			
6	There are greater than 9 species per metre squared.	Fail	Species diversity dependant on meadow mix,

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	61.89
Limitations	None	Polygon	-
Habitat Description	Grassland beneath the solar arrays created after construction and sown with meadow mix but kept shorter to prevent shading so conservatively estimated at poor condition.		

Criterion	Condition Assessment Criteria	Result	Rationale
			conservative approach taken.

Are any criteria essential? (Y/N)	Yes	**Total**	**2 of 6**
If Yes are they passed?	**No**	**Condition**	**Poor**

Table E.3: Neutral semi-improved grassland (created outside arrays)

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	47.99
Limitations	None	Polygon	-
Habitat Description	Species rich grassland created around the arrays and across the site through use of a seed mix and management. In addition, grassland created with scattered urban trees as enhancement within the north of Oaklands Farm.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The appearance and composition of the vegetation closely matches characteristics of the specific grassland habitat type (see UKHab definition). Wildflowers, sedges and indicator species for the specific grassland habitat type are very clearly and easily visible throughout the sward.	Pass	Grassland will be managed as species rich grassland meadow.
2	Sward height is varied creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Fail	Maintained sward height
3	Cover of bare ground between 1% and 5%, including localised areas.	Fail	Bare ground less than 1%

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	47.99
Limitations	None	Polygon	-
Habitat Description	Species rich grassland created around the arrays and across the site through use of a seed mix and management. In addition, grassland created with scattered urban trees as enhancement within the north of Oaklands Farm.		

Criterion	Condition Assessment Criteria	Result	Rationale
4	Cover of bracken less than 20% and cover of scrub (including bramble) less than 5%.	Pass	No scrub or bracken noted
5	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981). Combined cover of species indicative of sub-optimal condition and physical damage accounts for less than 5% of total area.	Pass	No invasive non-native species present.
Additional Group (Non-acid types only)			
6	There are greater than 9 species per metre squared.	Fail	Species diversity dependant on meadow mix, conservative approach taken.

JNCC PH1 Classification	J2.2 Neutral semi-improved grassland	Distinctiveness	Medium
UKHABS Classification	Grassland – Other neutral grassland	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Grassland Habitat Type (medium, high & very high distinctiveness)	Area (Ha)	47.99
Limitations	None	Polygon	-
Habitat Description	Species rich grassland created around the arrays and across the site through use of a seed mix and management. In addition, grassland created with scattered urban trees as enhancement within the north of Oaklands Farm.		

Criterion	Condition Assessment Criteria	Result	Rationale
Are any criteria essential? (Y/N)	Yes	**Total**	**3 of 6**
If Yes are they passed?	**Yes**	**Condition**	**Moderate**

Table E.4: Mixed scrub

JNCC PH1 Classification	A2.1 Dense scrub	Distinctiveness	Medium
UKHABS Classification	Heathland and shrub – Mixed scrub	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Scrub	Area	0.71
Limitations	None	Polygon	-

Habitat Description	New areas of mixed scrub created to increase habitat connectivity across the Site. Planting to consist mainly of hazel and hawthorn, with some blackthorn, purging buckthorn and grey willow.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	Habitat is representative of UKHab description (where in its natural range). There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be up to 100% cover).	Pass	Range of species noted with no species more than 75% of the cover.
2	There is a good age range – all of the following are present: seedlings, young shrubs and mature shrubs.	Pass	Varied age range noted.
3	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981) and species indicative of sub-optimal condition make up less than 5% of ground cover.	Pass	No INNS or undesirable species noted.
4	The scrub has a well-developed edge with scattered scrub and tall grassland and/or	Pass	Well-developed edge noted.

	herbs present between the scrub and adjacent habitat(s).		
5	There are clearings, glades or rides present within the scrub, providing sheltered edges.	Fail	Scrub dense with no clearings, glades or rides.
Are any criteria non-negotiable? (Y/N)	N	**Total**	**4 of 5**
If Yes are they passed?	n/a	**Condition**	Moderate

Table E.5: Proposed Urban Trees

JNCC PH1 Classification	A3.1 Broadleaved scattered trees	Distinctiveness	Moderate
UKHABS Classification	Urban tree	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Urban trees	Area (ha)	3.48
Limitations	Number taken from Landscape Strategy plan and area calculated using Urban Tree Helper within 3.1 Metric	Location	Within fields P1 and O3 as scattered tree planting areas
Habitat Description	New scattered tree planting to consist mainly of pedunculate oak, field maple, and holly with some crab apple, aspen, rowan and small leaved lime.		

	Proposed trees around the edge of solar arrays should not exceed 8-10m in height at maturity to avoid shading of solar PV panels.		
Criterion	Condition Assessment Criteria	Result	Rationale
1	The tree is a native species(or more than 70% within the block are native species).	Pass	Native species proposed
2	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Fail	Scattered trees with gaps between
3	The tree is mature or veteran or more than 50% within the block are mature or veteran).	Fail	-
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.	Fail	Pruning may be required close to arrays
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark	Fail	-
6	More than 20% of the tree canopy area is oversailing vegetation beneath.	Pass	Trees within planting area with grassland beneath

Are any criteria essential? (Y/N)	No	**Condition**	Poor
If Yes are they passed?	N/A		

Proposed Hedgerow Condition Assessment Proformas

Table E.6: Proposed native species rich hedgerow

JNCC PH1 Classification	J2.1.1 Intact hedge (species-rich)	Distinctiveness	Moderate
UKHABS Classification	Native Species Rich Hedgerow	Strategic Significance	Location ecologically desirable but not in local strategy
Condition Sheet	Hedgerow	Length (km)	2.86
Limitations	None	Line	N/A
Habitat Description	New hedgerow planting to comprise mainly of Crataegus monogyna (Hawthorn) with some Corylus avellana (Hazel), Ilex aquifolium (Holly), Acer campestre (Field maple), Prunus spinosa (Blackthorn) and Rhamnus cathartica (Purging Buckthorn). Hedgerow is to be created along the proposed Permissive Right Of Way, that lies within fields O3, O6 and O9, in the south of Oaklands Farm. In addition, hedgerow will be created along the northern boundary of proposed planting within the O3, within field O2 set back from Coton Road for visual screening, and at several points around the Oaklands Farm Site boundary in field O1, for greater screening and habitat connectivity. Additional hedgerow is proposed along the farmers track along O4 and to the north of Coton Road within O4, to increase visual screening.		

Criterion	Condition Assessment Criteria	Result	Rationale
A1. Height	>1.5 m average along length	Pass	-
A2. Width	>1.5 m average along length	Pass	-
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for >90% of length (unless 'line of trees')	Pass	-
B2. Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	Pass	-
C1. Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedge (at least)	Fail	-
C2. Undesirable perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	Pass	-
D1. Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Pass	-
D2. Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities	Fail	-
Are any criteria essential? (Y/N)	No	**Condition**	Good
If Yes are they passed?	N/A		

Proposed River Condition Assessments

E.2 Further information on the proposed River condition assessment for the river on Site is detailed within **ES Volume 3, Appendix 6.13: River Condition Assessment**.

Table E.7: Ditches

JNCC PH1 Classification	G1 Standing Water	Distinctiveness	Medium
UKHABS Classification	Rivers and streams - Ditches	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Ditch	Length (km)	0.48
Limitations	None	Line	D7
Habitat Description	Ditch 7 located within the north west of the Oaklands Farm Area, along a field boundary and associated with a hedgerow. Proposed for enhancement through planting of native marginal aquatic species, and selective thinning of bankside woody vegetation to reduce shading. Enhances to moderate by passing criteria 2 and 7.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Fail	-

2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.	Pass	Enhanced through planting of native marginal aquatic species
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Pass	-
4	A fringe of marginal vegetation is present along more than 75% of the ditch.	Pass	-
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Pass	-
6	Sufficient water levels are maintained; as a guide a minimum summer depth of approximately 50 cm in minor ditches and 1 m in main drains.	Fail	
7	Less than 10% of the ditch is heavily shaded.	Pass	Enhanced through selective thinning of bankside woody vegetation to reduce shading
8	There is an absence of non-native plant and animal species.	Pass	-

Are any criteria non-negotiable? (Y/N)	No	Total	**6 of 8**
If Yes are they passed?	n/a	**Condition**	**Moderate**

Table E.8: Ditches

JNCC PH1 Classification	G1 Standing Water	Distinctiveness	Medium
UKHABS Classification	Rivers and streams - Ditches	Strategic Significance	Within area formally identified in local strategy
Condition Sheet	Ditch	Length (km)	0.13
Limitations	None	Line	D17
Habitat Description	Ditch with standing water along H22 within Oaklands. Part of ditch contained water with sections further along the hedge that were dry at the time of survey. Enhanced through planting of native marginal aquatic species and selective thinning of bankside woody vegetation to reduce shading. Also by allowing a greater buffer strip of undisturbed vegetation to develop on both sides of the ditch to reduce eutrophication. This will in turn help to increase the water quality of the ditch. Enhances to moderate condition by passing criteria 1, 2 and 7.		

Criterion	Condition Assessment Criteria	Result	Rationale
1	The ditch is of good water quality, with clear water (low turbidity) indicating no obvious signs of pollution.	Pass	Enhance by allowing a greater buffer strip of undisturbed vegetation to develop on both sides of the ditch to reduce eutrophication
2	A range of emergent, submerged and floating leaved plants are present. As a guide >10 species of emergent, floating or submerged plants in a 20 m ditch length.	Pass	Enhanced through planting of native marginal aquatic species
3	There is less than 10% cover of filamentous algae and/or duckweed (these are signs of eutrophication).	Pass	No signs of eutrophication present.
4	A fringe of marginal vegetation is present along more than 75% of the ditch.	Fail	-
5	Physical damage evident along less than 5% of the ditch, such as excessive poaching, damage from machinery use or storage, or any other damaging management activities.	Pass	-
6	Sufficient water levels are maintained; as a guide a minimum summer depth of	Fail	-

	approximately 50 cm in minor ditches and 1 m in main drains.		
7	Less than 10% of the ditch is heavily shaded.	Pass	Enhanced through selective thinning of bankside woody vegetation to reduce shading
8	There is an absence of non-native plant and animal species.	Pass	None noted
Are any criteria non-negotiable? (Y/N)	No	Total	**6 of 8**
If Yes are they passed?	n/a	**Condition**	**Moderate**

Appendix F
Assessment Results

Oaklands Farm Solar Park

Headline Results

Return to results menu

On-site baseline	*Habitat units*	452.17
	Hedgerow units	189.42
	River units	21.06
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	1017.68
	Hedgerow units	227.34
	River units	25.24
On-site net % change (Including habitat retention, creation & enhancement)	*Habitat units*	125.07%
	Hedgerow units	20.02%
	River units	19.82%
Off-site baseline	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	565.51
	Hedgerow units	37.92
	River units	4.18
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	125.07%
	Hedgerow units	20.02%
	River units	19.82%
Trading rules Satisfied?		**Yes ✓**

Oaklands Farm Solar Park
January 2024

Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Bespoke compensation likely to be required ✕	Yes ✓
High	Same habitat required =	Yes ✓
Medium	Same broad habitat or a higher distinctiveness habitat required (≥)	Yes ✓
Low	Same distinctiveness or better habitat required ≥	Yes ✓

Very High Distinctiveness

Habitat group	Group	On Site Unit Change	Off Site Unit Change	Project wide Unit Change	Unit Losses
Grassland - Lowland dry acid grassland	Grassland	0.00	0.00	0.00	
Grassland - Lowland meadows	Grassland	0.00	0.00	0.00	
Grassland - Upland hay meadows	Grassland	0.00	0.00	0.00	
Heathland and shrub - Mountain heaths and willow scrub	Heathland and shrub	0.00	0.00	0.00	
Lakes - Aquifer fed naturally fluctuating water bodies	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Calaminarian grasslands	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Limestone pavement	Sparsely vegetated land	0.00	0.00	0.00	
Wetland - Blanket bog	Wetland	0.00	0.00	0.00	
Wetland - Depressions on Peat substrates (H7150)	Wetland	0.00	0.00	0.00	
Wetland - Fens (upland and lowland)	Wetland	0.00	0.00	0.00	
Wetland - Lowland raised bog	Wetland	0.00	0.00	0.00	
Wetland - Oceanic Valley Mire[1] (D2.1)	Wetland	0.00	0.00	0.00	
Wetland - Purple moor grass and rush pastures	Wetland	0.00	0.00	0.00	
Wetland - Transition mires and quaking bogs (H7140)	Wetland	0.00	0.00	0.00	
Woodland and forest - Wood-pasture and parkland	Woodland and forest	0.00	0.00	0.00	
Rocky shore - High energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass on peat, clay or chalk	Intertidal sediment	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

Very High Distinctiveness Summary

Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00

High Distinctiveness

Habitat group	Group	On Site Unit Change	Off Site Unit Change	Project wide Unit Change	Losses not yet accounted for
Grassland - Traditional orchards	Grassland	0.00	0.00	0.00	
Grassland - Floodplain Wetland Mosaic (CFGM)	Grassland	0.00	0.00	0.00	
Grassland - Lowland calcareous grassland	Grassland	0.00	0.00	0.00	
Grassland - Tall herb communities (H6430)	Grassland	0.00	0.00	0.00	
Grassland - Upland calcareous grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Lowland Heathland	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Sea buckthorn scrub (Annex 1)	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Upland Heathland	Heathland and shrub	0.00	0.00	0.00	
Lakes - High alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Low alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Marl Lakes	Lakes	0.00	0.00	0.00	
Lakes - Moderate alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Peat Lakes	Lakes	0.00	0.00	0.00	
Lakes - Ponds (Priority Habitat)	Lakes	0.00	0.00	0.00	
Lakes - Temporary lakes, ponds and pools	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Coastal sand dunes	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Coastal vegetated shingle	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Inland rock outcrop and scree habitats	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Maritime cliff and slopes	Sparsely vegetated land	0.00	0.00	0.00	
Urban - Open Mosaic Habitats on Previously Developed Land	Urban	0.00	0.00	0.00	
Wetland - Reedbeds	Wetland	0.00	0.00	0.00	
Woodland and forest - Felled	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland beech and yew woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland mixed deciduous woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Native pine woodlands	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland birchwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland mixed ashwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland oakwood	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Wet woodland	Woodland and forest	0.00	0.00	0.00	
Coastal lagoons - Coastal lagoons	Coastal lagoons	0.00	0.00	0.00	
Rocky shore - High energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral mud	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00	
Coastal saltmarsh - Saltmarshes and saline reedbeds	Coastal Saltmarsh	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Mussels	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Sabellaria	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Features of littoral sediment	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral muddy sand	Intertidal sediment	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Unit Deficit: Like for like not satisfied	✓ 0.00

Medium Distinctiveness

Habitat Group	Group	On site unit change	Off Site unit	Project wide unit change	Cumulative Broad Habitat Change
Cropland - Arable field margins cultivated annually	Cropland	0.00	0.00	0.00	0.00
Cropland - Arable field margins game bird mix	Cropland	0.00	0.00	0.00	
Cropland - Arable field margins pollen & nectar	Cropland	0.00	0.00	0.00	
Cropland - Arable field margins tussocky	Cropland	0.00	0.00	0.00	
Grassland - Other lowland acid grassland	Grassland	0.00	0.00	0.00	877.92
Grassland - Other neutral grassland	Grassland	877.92	0.00	877.92	
Grassland - Upland acid grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Blackthorn scrub	Heathland and shrub	0.00	0.00	0.00	4.79
Heathland and shrub - Bramble scrub	Heathland and shrub	-0.35	0.00	-0.35	
Heathland and shrub - Gorse scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hawthorn scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hazel scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Mixed scrub	Heathland and shrub	5.14	0.00	5.14	
Lakes - Ponds (Non- Priority Habitat)	Lakes	0.00	0.00	0.00	0.00
Lakes - Reservoirs	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Other inland rock and scree	Sparsely vegetated land	0.00	0.00	0.00	0.00
Urban - Cemeteries and churchyards	Urban	0.00	0.00	0.00	11.21
Urban - Biodiverse green roof	Urban	0.00	0.00	0.00	
Urban - Urban Tree	Urban	11.21	0.00	11.21	
Woodland and forest - Other Scot's Pine woodland	Woodland and forest	0.00	0.00	0.00	23.08
Woodland and forest - Other woodland; broadleaved	Woodland and forest	23.08	0.00	23.08	
Woodland and forest - Other woodland; mixed	Woodland and forest	0.00	0.00	0.00	
Intertidal sediment - Littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00	0.00
Intertidal sediment - Littoral sand	Intertidal sediment	0.00	0.00	0.00	
Intertidal Hard Structures - Artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)	Intertidal	0.00	0.00	0.00	
		917.00	0.00	917.00	

Medium Distinctiveness Summary

Medium Distinctiveness Units available to offset lower distinctiveness deficit	917.00
Medium Distinctiveness Broad Habitat Deficit to be offset by trading up	0.00
Higher distinctiveness surplus units minus Medium Distinctiveness Broad Habitat Deficit	0.00
Cumulative surplus of units	917.00

Low Distinctiveness				
Habitat group	Group	On site unit change	Off Site Unit	Project wide unit change
Cropland - Cereal crops	Cropland	0.00	0.00	0.00
Cropland - Horticulture	Cropland	0.00	0.00	0.00
Cropland - Intensive orchards	Cropland	0.00	0.00	0.00
Cropland - Non-cereal crops	Cropland	-199.06	0.00	-199.06
Cropland - Temporary grass and clover leys	Cropland	0.00	0.00	0.00
Cropland - Cereal crops winter stubble	Cropland	0.00	0.00	0.00
Grassland - Modified grassland	Grassland	-151.12	0.00	-151.12
Grassland - Bracken	Grassland	0.00	0.00	0.00
Heathland and shrub - Rhododendron scrub	Heathland and shrub	0.00	0.00	0.00
Lakes - Ornamental lake or pond	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Ruderal/Ephemeral	Sparsely vegetated land	0.00	0.00	0.00
Urban - Bioswale	Sparsely vegetated land	0.00	0.00	0.00
Urban - Allotments	Urban	0.00	0.00	0.00
Urban - Facade-bound green wall	Urban	0.00	0.00	0.00
Urban - Ground based green wall	Urban	0.00	0.00	0.00
Urban - Ground level planters	Urban	0.00	0.00	0.00
Urban - Other green roof	Urban	0.00	0.00	0.00
Urban - Intensive green roof	Urban	0.00	0.00	0.00
Urban - Introduced shrub	Urban	0.00	0.00	0.00
Urban - Rain garden	Urban	0.00	0.00	0.00
Urban - Actively worked sand pit quarry or open cast mine	Urban	0.00	0.00	0.00
Urban - Sustainable urban drainage feature	Urban	0.00	0.00	0.00
Urban - Vacant/derelict land/ bareground	Urban	-1.32	0.00	-1.32
Urban - Vegetated garden	Urban	0.00	0.00	0.00
Woodland and forest - Other coniferous woodland	Woodland and forest	0.00	0.00	0.00
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00
Intertidal sediment - Artificial littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mud	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral muddy sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral seagrass	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral biogenic reefs	Intertidal sediment	0.00	0.00	0.00
Intertidal Hard Structures - Artificial hard structures	Intertidal	0.00	0.00	0.00
Intertidal Hard Structures - Artificial features of hard structures	Intertidal	0.00	0.00	0.00
Heathland and shrub - Sea buckthorn scrub (other)	Heathland and shrub	0.00	0.00	0.00
		-351.49		-351.49

Low Distinctiveness Summary	
Low Distinctiveness Net Change in Units	-351.49
Cumulative surplus of units	565.51