Biodiversity Net Gain Assessment



Light Valley Solar
November 2026

TG Report No. 16807_[EN0110012/APP/LVS/05.09]
V2_OMD

Tyler Grange

Contents:

Summary
Section 1: Introduction and Context 3
Section 2: Baseline Assessment 7
Section 3: Post Development Assessment 36
Section 4: River MoRPh 5 Survey-Other River and Stream Units 42
Section 5: Conclusions 45

Appendices:

Appendix 1: Methodology
Appendix 2: 16807_Light Valley Solar_ Statutory Biodiversity Metric

Summary

S.1. This report has been prepared by Tyler Grange Limited on behalf of Light Valley Solar Limited (Applicant). It sets out the findings of a Biodiversity Net Gain Assessment completed in relation to the Proposed Development of solar photovoltaic (PV) modules, Battery Energy Storage System (BESS) and associated infrastructure.

S.2. The Proposed Development's boundary, herein referred to as the Order Limits, is made up of four broad areas, the Solar Development Sites, Cable Route Corridor, Highways Improvements Areas, and Solar Development Site 8 Access. The Solar Development Sites are split across a total of seven separate land parcels (Solar Development Sites 1-4 and 6-8) as presented in Figure 2.1: Illustrative Site Layout Plans (ES Volume 2) [**EN0110012/APP/LVS/06.02.02.01**] and in the Outline Environmental Masterplan (OEM) [**EN0110012/APP/LVS/02.12**]. The Solar Development Sites largely comprise agricultural fields bound by hedgerows, ditches and mature trees, with smaller areas of woodland, grassland and scrub. The Cable Route Corridor is similarly comprised of agricultural fields and associated boundary features and passes through the River Ouse and Selby Dam. The Highways Improvements Areas, and Solar Development Site 8 Access largely comprise hardstanding roads and adjacent habitats, with Solar Development Site 8 Access also including a crossing over Selby Dam.

S.3. Within the report, the Cable Route Corridor, Highways Improvements Areas, and Solar Development Site 8 Access are collectively referred to as "Order Limits Outside of the Solar Development Sites".

S.4. UK Habitat surveys and associated Condition Assessments of the Order Limits were completed by Tyler Grange in 2024, 2025 and 2026 as detailed within Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**] which outlines the dates and methodology of the surveys. The full details and descriptions of the habitats recorded within the Order Limits can also be found within Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**] and are shown on Figure 6.6: UK Habitat Classification Results V2 (ES Volume 2) [**EN0110012/APS/LVS/06.02.06.06**].

S.5. The baseline hedgerows and trees were also recorded during the UK Habitat surveys, and associated loss/retention has been taken from the Arboricultural Impact Assessment (AIA) presented in Appendix 16.2: Arboricultural Impact Assessment (ES Volume 3) [**EN0110012/APP/LVS/06.03.16.02**].

S.6. Three small sections of other river and streams are located within the Order Limits, two sections of Selby Dam and one section of the River Ouse. The pre-development MoRPh survey and assessment returned a condition of moderate for all three sections of river surveyed. The indicative proposals for the post-development habitats for the Solar Development Sites are shown on the OEM [**EN0110012/APP/LVS/02.12**]. The vast majority of the Order Limits Outside of the Solar Development Sites will return to baseline

habitat type and condition post development, and all of the habitats will returned to baseline management, with no long-term management by the Applicant for biodiversity proposed for the Order Limits Outside of the Solar Development Sites. The habitats within the Order Limits Outside of the Solar Development Sites are therefore not included in the outline Landscape and Environmental Management Plan (oLEMP) [**EN0110012/APP/LVS/07.05**].

S.7. The Statutory Biodiversity Metric calculated that the trading rules have been satisfied and the Proposed Development will result in a total net biodiversity unit change of:

1) +2291.47 habitat units equating to +78.61%;
2) +254.45 hedgerow units equating to +71.03%; and
3) +15.66 watercourse units equating to +10.4%.

S.8. To deliver the BNG as set out above, habitats within the Solar Development Sites will be maintained for the operational lifetime of the Proposed Development (over 30 years), as secured via the oLEMP [**EN0110012/APP/LVS/07.05**].

S.9. Due to the extensive BNG gains in habitats and hedgerows, and as the Solar Development Sites extend over a large area, there is sufficient scope to accommodate potential updates to the development proposals at detailed design stage, whilst still meeting the newly enforced targeted unit gains required for NSIPs (noting that the statutory requirement is not retrospectively applied to the Proposed Development).

Section 1: Introduction and Context

1.1 This report has been produced by Tyler Grange Limited on behalf of Light Valley Solar Limited (Applicant) and sets out the findings of a Biodiversity Net Gain (BNG) assessment relating to the Proposed Development of solar photovoltaic (PV) modules, Battery Energy Storage System (BESS) and associated infrastructure.

1.2 The Proposed Development's boundary, herein referred to as the Order Limits, is made up of four broad areas, the Solar Development Sites (900 ha), Cable Route Corridor (328.5 ha), Highways Improvements Areas (17.1 ha), and Solar Development Site 8 Access (24.1 ha). Underground electric cables laid within the Cable Route Corridor will connect the Solar Development Sites and the existing Monk Fryston Substation, where the Proposed Development will connect to the National Grid. The Highways Improvement Areas are sections of the highway network that will contain localised improvements to allow movement of construction vehicles on narrower sections of the local highway network, such as improvements to the road edge, traffic management, and provision of temporary passing places or visibility splays. The Solar Development Site 8 Access area will provide optionality to access Solar Development Site 8 from the north. The entirety of the Order Limits is within the administrative area of North Yorkshire Council and falls within what was Selby district.

1.3 The Solar Development Sites are split across a total of seven separate land parcels (Solar Development Sites 1-4 and 6-8) as presented in Figure 2.1: Illustrative Site Layout Plans (ES Volume 2) [**EN0110012/APP/LVS/06.02.02.01**] and in the OEM [**EN0110012/APP/LVS/02.12**]. The Solar Development Sites largely comprise agricultural fields bound by hedgerows, ditches and mature trees, with smaller areas of woodland, grassland and scrub. The Cable Route Corridor is similarly comprised of agricultural fields and associated boundary features and passes through the River Ouse and Selby Dam. The Highways Improvements Areas, and Solar Development Site 8 Access largely comprise hardstanding roads and adjacent habitats, with Solar Development Site 8 Access also including a crossing over Selby Dam.

1.4 Within the report, the Cable Route Corridor, Highways Improvements Areas, and Solar Development Site 8 Access are collectively referred to as "Order Limits Outside of the Solar Development Sites".

1.5 UK Habitat surveys and associated Condition Assessments of the Order Limits were completed by Tyler Grange in 2024, 2025 and 2026 as detailed within Table 1 of Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**] which outlines the dates and methodology of the surveys. The full details and descriptions of the habitats recorded within the Order Limits can also be found Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**]

and are shown on Figure 6.6: UK Habitat Classification Results V2 (ES Volume 2) [**EN0110012/APS/LVS/06.02.06.06**].

1.6 A BNG assessment for the Order Limits was undertaken by Tyler Grange in January 2026 using Defra's latest BNG Metric (The Statutory Biodiversity Metric) which should be looked at in conjunction with this report. The assessment and associated metric were then updated in October 2026 as a result of the Change Application submitted during Examination. The updated metric is detailed at Appendix 2 (16807_Light Valley Solar_ Statutory Biodiversity Metric V2)**.**

1.7 The design of the Proposed Development has been informed by the BNG assessment process and the mitigation hierarchy, through avoiding impacts to habitats where possible, then minimising the impact, using mitigation, and finally compensating for a loss of habitat where this cannot be avoided.

Aims and objectives

1.8 The aim of this report is to provide findings of the BNG calculation and assessment undertaken to accompany the Proposed Development. The objectives of this process are outlined below with the assessment methodology detailed in **Appendix 1:**

1) Demonstrate the application of the mitigation hierarchy through the design evolution of the Proposed Development to inform the design of the Proposed Development and to minimise impacts on biodiversity where possible;

2) Calculate the Proposed Development's pre- and post-development biodiversity unit value.

3) Determine the change in biodiversity units as a result of the Proposed Development and proposed enhancements for biodiversity; and

4) Advise on how the Proposed Development will deliver a minimum of +10% BNG.

1.9 This BNG assessment has been undertaken with respect to the British Standard for BNG BS8683:2020 and this report follows the CIEEM BNG reporting guidance[1] and was completed with reference to the CIRIA BNG good practice principles for development[2].

[1] CIEEM (2021). Biodiversity Net Gain Report and Audit Templates Chartered Institute of Ecology and Environmental Management, Winchester, UK.
[2] Baker, J. Hoskin, R. & Butterworth (2019). Biodiversity net gain: Good practice principles for development. A practical guide. Ciria, CIEEM & IEMA

Legislation and Planning Policy

1.10 The Environment Act (November 2021)[3] makes it mandatory for the vast majority of development projects to deliver a 10% biodiversity net gain (BNG). Further secondary legislation[4] came into force on the 2nd November 2026 making a 10% BNG mandatory for Nationally Significant Infrastructure Projects (NSIP). Although, this will not have to be statutorily applied retrospectively to the Proposed Development.

Local Nature Recovery Strategy

1.11 As required under the Environment Act 2021, every county in England will produce a Local Nature Recovery Strategy. These strategies will work together to restore, create and connect habitats across England.

1.12 The Local Nature Recovery Strategy will consider land at a county scale and will identify locations to improve nature and provide other benefits, such as capturing carbon from the atmosphere, flood regulation and access to nature-rich spaces where this is most needed for health and wellbeing.

1.13 The Order Limits are wholly located within the Local Nature Recovery Strategy (LNRS) for North Yorkshire and York[5].

1.14 Within the North Yorkshire and York LNRS, the vast majority of the Solar Development Sites fall outside the potential nature recovery zones mapped and are therefore not a particular target for biodiversity and nature recovery.

Mitigation hierarchy and good practice principles

1.15 The proposals for the Proposed Development have been developed with reference to the ecological mitigation hierarchy which is central to the BNG process. This was applied by avoiding loss of the most ecologically important habitats, then minimising the impact and using mitigation, and finally compensating for a loss of habitat (see **Section 2**). Ecological advice was provided throughout the project to inform the development and landscape design to adhere to this and to achieve a minimum of +10% BNG (see Legislation and Planning Policy above).

1.16 The CIRIA BNG good practice principles for Proposed Development (which include the mitigation hierarchy) were also applied at all stages of the assessment.

---

[3] UK Government (2021) Environment Act 202. Available at: https://www.legislation.gov.uk/ukpga/2021/30/contents

[4] https://www.gov.uk/guidance/biodiversity-net-gain-nationally-significant-infrastructure-projects

[5] North Yorkshire Council. North Yorkshire and York Local Nature Recovery Strategy (LNRS). Available at: https://democracy.york.gov.uk/documents/s186066/Item%2014%20-%20North%20Yorkshire%20and%20York%20Local%20Nature%20Recovery%20Strategy%20LNRS%20-%20Publication%20Draft%20-%20Annex.pdf

Quality assurance

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

Section 2: Baseline Assessment

Strategic Significance

2.1 The Order Limits are wholly located within the LNRS for North Yorkshire and York.

2.2 Consulting the LNRS mapped measures layer, there are only very discrete areas where mapped measures overlap the Solar Development Sites. There is a small area within Site 7 (0.4 ha) listed in mapped measures as "Enhance, expand and connect areas of fragmentary fen by improving management of existing sites and using species-rich ditches to connect sites." However, the habitat covered by this measure comprises cropland surrounded by railway lines and further cropland, so it is not possible to satisfy this aim for lowland fen in this location.

2.3 General aims and objectives of the LNRS, will however be considered when detailed landscape and planting plans are completed and the detailed Landscape and Ecology Management Plan (LEMP) is developed.

2.4 Mapped measures within the LNRS do overlap the Cable Route Corridor, although there will be no long-term ownership of the Cable Route Corridor, which will be passed back to the current landowners after the temporary works are completed. As such, habitats are not able to be restored or created within the Cable Route Corridor; however, the baseline habitats will largely be reinstated.

2.5 As such, all baseline and post development habitats have been added to the metric as low strategic significance, i.e. “area/compensation not in local strategy/no local strategy”.

Mitigation Hierarchy

2.6 The Proposed Development has been designed to follow the mitigation hierarchy by avoiding ecological impacts as much as possible, with the majority of development to be located within the habitats of lowest ecological importance, namely the cropland. The majority of existing hedgerows and ditches are to be retained, with existing gates/gaps used to create access tracks where possible. The Proposed Development has also been designed to provide buffers to those habitats of highest ecological value, namely the hedgerows, trees, woodland and ditches to ensure the feature is protected through development.

2.7 Where impacts to habitats cannot be avoided, specific measures will be undertaken to mitigate and compensate any loss of habitats and impacts that occur, to ensure opportunities for wildlife are provided for the long-term, biodiversity increases, and an overall ecological enhancement occurs.

Baseline Habitats

2.8 The habitats present within the Order Limits are summarised in Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**], along with a description of the composition of the main plant species present. The location of habitats are shown on in Figure 6.6: UK Habitat Classification Results V2 (ES Volume 2) [**EN0110012/APS/LVS/06.02.06.06**].

2.9 The results of the habitat surveys were used to inform the completion of Condition Assessments for all habitats, which were completed with reference to The Statutory Biodiversity Metric User Guide[6]. The condition criteria passes/failed for the various baseline and post development habitats within the Solar Development Sites are included in the associated BNG metric (16807_Light Valley Solar_ Statutory Biodiversity Metric V2) at Appendix 2. The condition criteria passes/failed for the Order Limits Outside of the Solar Development Sites are not included in the BNG metric as the habitats will be largely retained under current management, with no long-term management by the Applicant for biodiversity proposed, however these are available on request.

Limitations

2.10 No access was permitted to the western terminus of the Cable Route Corridor, CRC 4-POC (as described in Chapter 2 (ES Volume 1) [**EN0110012/APP/LVS/06.01.02**]) where it meets the existing Monk Fryston substation due to the active construction site present in this location for the approved Yorkshire Green development (EN020024). Instead, the proposed site plans submitted for the Yorkshire Green development (5.4.3 ES Chapter 3: Description of the Project Figure 3.12 Outline Landscape Mitigation Strategy (Monk Fryston)) have been used to confirm the baseline habitats present within this area, with a precautionary approach taken when completing the Condition Assessments for the habitats within this area.

2.11 The metric uses habitats as a proxy for biodiversity and does not account for other biodiversity enhancements such as species-targeted enhancements like bat and bird boxes. Detail on biodiversity mitigation and enhancement measures to be delivered outside of the BNG are detailed in Chapter 6: Biodiversity [**EN0110012/APP/LVS/06.01.06**] and the Outline Landscape and Environmental Management Plan (oLEMP) [**EN0110012/APP/LVS/07.05**].

2.12 When mapping and recording habitats, types and conditions were assigned using professional judgement and with reference to the appropriate guidance.

[6] DEFRA (2023) The Statutory Biodiversity Metric User Guide. 2023

2.13 The post-development habitats were determined based on the Outline Environmental Masterplan (OEM) [**EN0110012/APP/LVS/02.12**], which has been used to identify the key habitats proposed. Whilst these are at outline stage currently, there is significant scope within the proposals to achieve a +10% gain and as such it is considered that a robust BNG assessment has been completed.

Habitat Baseline

2.14 A summary of the BNG assessment of the baseline habitats units for the Order Limits is detailed below in **Tables 2.1 – 2.3**, split by the Solar Development Sites, and Order Limits Outside of the Solar Development Sites for clarity. This includes their BNG unit value as calculated through the BNG metric (16807_Light Valley Solar_ Statutory Biodiversity Metric V2) at Appendix 2**.** No baseline habitats will be enhanced.

With regards to the Order Limits Outside of the Solar Development Sites, the works will largely be temporary, completed within two years, and largely extend over habitat that will be reinstated to the existing habitat and reach target condition in one year. As such, the habitats within the Order Limits Outside of the Solar Development Sites have largely been added as retained (apart from a small number of exceptions, as explained below), as per the user guidance. In addition, in locations where trenchless techniques will be used, overlying habitats will remain unaffected by the works and have therefore also been included in the metric as retained.

2.15 However, in practice, there may be locations where habitat recreation is only completed towards the end of the two-year span of works, and the majority of the Order Limits Outside of the Solar Development Sites will be returned to baseline management, with no long term management by the Applicant for biodiversity proposed. Therefore, as a precautionary approach at this stage, any habitats that take over one year to reach target condition, in locations where trenchless techniques are not proposed, have been added to the metric as lost, and then recreated with a habitat that will reach target condition within one year. This situation only applies to 0.376 ha of other neutral grassland of moderate condition, which will be reestablished as modified grassland of poor condition post development.

2.16 As per the Arboricultural Impact Assessment presented in Appendix 16.2 (ES Volume 3) [**EN0110012/APP/LVS/06.03.16.02**], three trees will require removal from an area of coniferous woodland alongside the Highways Improvement Area. This has been included in the metric as a loss of 0.016 ha of woodland, which will also be replaced as modified grassland of poor condition post development.

Table 2.1. Order Limits Outside of the Solar Development Sites Baseline Habitats and BNG Unit Value Summary

Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
Cropland	Arable field margins pollen and nectar	5.33	Medium	Condition Assessment N/A	21.32	21.32	0.00	0.00
Cropland	Temporary grass and clover leys	5.39	Low	Condition Assessment N/A	10.78	10.78	0.00	0.00
Cropland	Cereal crops	164.7	Low	Condition Assessment N/A	329.4	329.40	0.00	0.00
Cropland	Non-cereal crops	106.74	Low	Condition Assessment N/A	213.48	213.48	0.00	0.00
Grassland	Bracken	0.013	Low	Condition Assessment N/A	0.03	0.03	0.00	0.00
Grassland	Other neutral grassland	8.75	Medium	Moderate	70.00	66.99	0.00	3.01
Grassland	Modified grassland	26	Low	Poor	52	52	0.00	0.00
Heathland and shrub	Bramble scrub	0.718	Medium	Condition Assessment N/A	2.87	2.87	0.00	0.00
Heathland and shrub	Mixed scrub	0.8	Medium	Moderate	6.40	6.40	0.00	0.00
Heathland and shrub	Willow scrub	0.12	Medium	Moderate	0.96	0.96	0.00	0.00
Watercourse footprint	Watercourse footprint	0.39	V.low	N/A - Other	0.00	0.00	0.00	0.00
Urban	Vegetated garden	0.01	Low	Condition Assessment N/A	0.02	0.02	0.00	0.00
Urban	Developed land; sealed surface	40.5	V.Low	N/A - Other	0.00	0.00	0.00	0.00
Urban	Artificial unvegetated, unsealed surface	1.43	V.Low	N/A - Other	0.00	0.00	0.00	0.00
Grassland	Other neutral grassland	0.741	Medium	Poor	2.96	2.96	0.00	0.00
Woodland and forest	Other woodland; broadleaved	9.51	Medium	Moderate	76.08	76.08	0.00	0.00

Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
Woodland and forest	Other coniferous woodland	0.06	Low	Moderate	0.24	0.18	0.00	0.06

Table 2.2. Solar Development Sites Baseline Habitats and BNG Unit Value Summary

Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
Urban	Artificial unvegetated, unsealed surface	2.34	V. Low	N/A -Other	0.00	0.00	0.00	0.00
Sparsely vegetated land	Ruderal/Ephemeral	1.04	Low	Moderate	4.16	0.00	0.00	4.16
Urban	Developed land; sealed surface	6.34	V. Low	N/A - Other	0.00	0.00	0.00	0.00
Cropland	Cereal crops	234.394	Low	Condition Assessment N/A	468.79	0.00	0.00	468.79
Cropland	Cereal crops	424.26	Low	Condition Assessment N/A	848.52	0.00	0.00	848.52
Lakes	Ponds (non-priority habitat)	0.29	Medium	Moderate	2.32	2.32	0.00	0.00
Grassland	Modified grassland	6.656	Low	Moderate	26.62	26.14	0.00	0.49
Heathland and shrub	Mixed scrub	0.87	Medium	Poor	3.48	3.48	0.00	0.00
Grassland	Other neutral grassland	28.42	Medium	Moderate	227.36	225.44	0.00	1.92
Cropland	Temporary grass and clover leys	45.29	Low	Condition Assessment N/A	90.58	0.00	0.00	90.58
Woodland and forest	Other woodland; broadleaved	0.13	Medium	Poor	0.52	0.52	0.00	0.00
Cropland	Non-cereal crops	123.03	Low	Condition Assessment N/A	246.06	0.00	0.00	246.06
Cropland	Arable field margins pollen and nectar	27.98	Medium	Condition Assessment N/A	111.92	0.00	0.00	111.92

2.17 The baseline trees were recorded during the UK Habitat surveys (Appendix 6.1 Habitats Report V2 **[EN0110012/APS/LVS/06.03.06.01**]), and trees to be lost/retained within the Order Limits has been taken from the Arboricultural Impact Assessment (AIA) presented in Appendix 16.2 (ES Volume 3) **[EN0110012/APP/LVS/06.03.16.02]**. The AIA also details the veteran trees recorded in the Order Limits, which have been added to the metric as irreplaceable habitat. The areas of trees were calculated using the Tree Helper within the metric, as per guidance.

2.18 With regards to Change 1 within the Change Application submitted during Examination, optionality has been maintained in the proposals with regards to construction access to the northern aspect of CRC 1-4 by way of the inclusion of Route 3 and CA1, as well as the retention of the original access via CA2.

2.19 As per the BNG guidelines, all habitats within the Order Limits (including Route 3, CA2 and CA1) have been added to the baseline unit value for the Proposed Development.

2.20 However, in reality, only one of these access options will be utilised during construction of the cable route corridor in this location. As such, adding the anticipated habitat loss for all three routes to the current BNG metric would not be reflective of the actual impact of the scheme. This is particularly important for individual tree loss, due to the effects on the trading rules for individual trees and the resulting requirement of replacement tree planting within the solar development sites.

2.21 Therefore, tree loss has only been added to the metric for the worst-case scenario option. This was confirmed to be CA2 because visibility splay tree loss information for Skipwith Road is not yet available for Route 3, and as such, CA2 provides a more complete representation of potential tree loss. Such an approach is consistent with the philosophy behind the recently introduced BNG legislation for NSIPs, which focusses on actual impacts. It is noted however that the loss of all other area and linear habitats has been added to the metric for all three potential access options due to the limited impact this will have on the overall BNG outcome as the majority of these habitats are listed as retained due to their reinstatement following the proposed works.

Table 2.3. Order Limits Individual Tree Baseline and BNG Unit Value Summary

Broad Habitat	Habitat Type	Area (ha)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
Individual trees	Rural tree	3.1844	Medium	Good	38.21	38.21	0.00	0.00
Individual trees	Rural tree	1.4128	Medium	Moderate	11.30	11.17	0.00	0.13
Individual trees	Rural tree	2.8324	Medium	Good	33.99	29.99	0.00	3.99
Individual trees	Rural tree	1.8052	Medium	Moderate	14.44	11.47	0.00	2.98
Individual trees	Rural tree (Irreplaceable habitat)	0.5718	Medium	Good	0.00	Irreplaceable habitat - no units generated	0.00	0.00

Hedgerow Baseline

2.22 A summary of the BNG assessment of the baseline hedgerow units is detailed below in **Tables 2.4 – 2.11**, split by the Order Limits Outside of the Solar Development Sites and the individual Solar Development Sites for clarity. Some hedges have been removed from the Order Limits through the design evolution of the Proposed Development, however reference numbers have remained the same for simplicity. As such, there are instances where hedge numbers are not continuous, however this is intentional.

2.23 No baseline hedgerows have been added to the metric as enhanced at this stage. However, in reality, there will be additional planting included in existing hedgerows within the Solar Development Sites to remove gaps and improve structure, which is likely to enhance existing hedgerows post development. However, as exact lengths of additional planting are not known at this stage, potential hedgerow enhancement has not been included in the metric currently on a precautionary basis.

2.24 The baseline hedgerows were recorded during the UK Habitat surveys (Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**]) and hedgerow loss/retention for the Order Limits has been taken from the Arboricultural Impact Assessment (AIA) presented in Appendix 16.2: Arboricultural Impact Assessment (ES Volume 3) [**EN0110012/APP/LVS/06.03.16.02**]. Largely, there will only be discreate losses of hedgerows e.g. for access. The only incident of entire hedgerow removal within the Solar Development Sites is within Solar Development Site 1, for the creation of the Bird Mitigation Area. Here H1.1 and H1.20 (as shown on Figure 6.6: UK Habitat Classification Results V2 (ES Volume 2) [**EN0110012/APS/LVS/06.02.06.06**]) will be removed. These hedgerows comprise unimportant species poor hedgerows, which will be replaced by hedgerows of higher quality elsewhere within the Proposed Development.

2.25 Treeline 1.2 (TL1.2) within Solar Development Site 1 comprises a line of cherry trees in poor condition adjacent to a farm track. In discussion with the current landowner, they intend to remove this treeline for health and safety purposes, as the trees keep dropping limbs on the track. As such, as a precautionary approach, this treeline has been included in the metric as a loss at this stage, although this will not be as a result of the Proposed Development.

2.26 With regards to the Order Limits Outside of the Solar Development Sites, as discussed above, there may be locations where hedgerow recreation is only completed towards the end of the two-year span of works, and the majority of the Order Limits Outside of the Solar Development Sites will be returned to baseline management with no long term management by the Applicant for

biodiversity proposed. Therefore, as a precautionary approach at this stage, any hedgerow removal required within the Order Limits Outside of the Solar Development Sites, in locations where trenchless techniques are not proposed, has been added to the metric as a loss, and then a recreation with hedgerow that will reach target condition within one year. This situation applies to 2.026 km of hedgerow, which will be reestablished as species rich native hedgerow of poor condition post development.

2.27 With regards to Change 1 within the Change Application submitted during Examination, optionality has been maintained in the proposals with regards to construction access to the northern aspect of CRC 1-4 by way of the inclusion of Route 3 and CA1, as well as the retention of the original access via CA2.

2.28 As per the BNG guidelines, all habitats within the Order Limits (including Route 3, CA2 and CA1) have been added to the baseline unit value for the Proposed Development, including additional treelines and hedgerows along Route 3.

2.29 Should Route 3 be utilised, it has been assessed that two short treelines of poor condition (TL 9.19 and TL 9.20) totalling 97 m in length, that largely comprise semi-mature hawthorn *Crataegus monogyna* and sycamore *Acer pseudoplatanus* may require removal to facilitate access via this potential route. Two hedgerows, H9.145 and H9.146 comprising a moderate condition native hedgerow, and a moderate condition native hedgerow with trees respectively, will also require removal (totalling 214 m). However, the trees within H9.146 will be retained. Even though the use of this route, and therefore the loss of these treelines and hedgerows is not yet confirmed, the loss of TL 9.19, TL 9.20, H9.145 and H9.146 has been added to the metric as a worst-case scenario assessment.

Table 2.4. Solar Development Site 1 Baseline Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H1.1	Other native hedgerow.	0.439	Low.	Moderate	1.76	0.00	0.00	1.76
H1.2	Other native hedgerow.	0.553	Low.	Good	3.32	3.32	0.00	0.00
H1.4	Other native hedgerow with trees.	0.357	Medium.	Good	4.28	4.28	0.00	0.00
H1.5	Other native hedgerow with trees.	0.293	Medium.	Good	3.52	3.52	0.00	0.00
H1.6	Other native hedgerow.	0.158	Low.	Good	0.95	0.95	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H1.7	Other native hedgerow.	0.481	Low.	Moderate	1.92	1.92	0.00	0.00
H1.8	Other native hedgerow.	0.202	Low.	Moderate	0.81	0.81	0.00	0.00
H1.9	Other native hedgerow.	0.243	Low.	Good	1.46	1.46	0.00	0.00
H1.10	Other native hedgerow with trees.	0.376	Medium.	Good	4.51	4.40	0.00	0.11
H1.11	Other native hedgerow.	0.161	Low.	Poor	0.32	0.32	0.00	0.00
H1.12	Other native hedgerow.	0.443	Low.	Moderate	1.77	1.77	0.00	0.00
H1.13	Other native hedgerow.	0.208	Low.	Moderate	0.83	0.83	0.00	0.00
H1.14	Other native hedgerow with trees.	0.2	Medium.	Good	2.40	2.40	0.00	0.00
H1.15	Other native hedgerow with trees.	0.24	Medium.	Good	2.88	2.82	0.00	0.06
H1.16	Other native hedgerow with trees.	0.234	Medium.	Good	2.81	2.71	0.00	0.10
H1.17	Other native hedgerow with trees.	0.437	Medium.	Moderate	3.50	3.50	0.00	0.00
H1.18	Other native hedgerow with trees.	0.689	Medium.	Moderate	5.51	5.51	0.00	0.00
H1.19	Other native hedgerow	0.557	Low.	Moderate	2.23	2.22	0.00	0.01
H1.20	Other native hedgerow.	0.335	Low.	Poor	0.67	0.00	0.00	0.67
H1.21	Other native hedgerow.	0.465	Low.	Moderate	1.86	1.86	0.00	0.00
H1.22	Other native hedgerow with trees.	0.159	Medium.	Moderate	1.27	1.27	0.00	0.00
H1.23	Other native hedgerow.	0.249	Low.	Moderate	1.00	1.00	0.00	0.00
H1.24	Other native hedgerow with trees.	0.158	Medium.	Moderate	1.26	1.26	0.00	0.00
H1.25	Other native hedgerow.	0.222	Low.	Moderate	0.89	0.89	0.00	0.00
H1.27	Other native hedgerow.	0.27	Low.	Moderate	1.08	1.08	0.00	0.00
H1.28	Other native hedgerow with trees.	0.133	Medium.	Poor	0.53	0.53	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H1.31	Other native hedgerow with trees.	0.23	Medium.	Moderate	1.84	1.84	0.00	0.00
H1.32	Other native hedgerow.	0.251	Low.	Poor	0.50	0.50	0.00	0.00
H1.33	Other native hedgerow.	0.164	Low.	Poor	0.33	0.33	0.00	0.00
H1.34	Other native hedgerow.	0.118	Low.	Good	0.71	0.71	0.00	0.00
H1.35	Other native hedgerow with trees.	0.165	Medium.	Good	1.98	1.98	0.00	0.00
H1.36	Other native hedgerow with trees.	0.367	Medium.	Good	4.40	4.40	0.00	0.00
H1.37	Other native hedgerow with trees.	0.449	Medium.	Good	5.39	5.39	0.00	0.00
H1.38	Other native hedgerow.	0.5	Low.	Good	3.00	3.00	0.00	0.00
H1.39	Other native hedgerow.	0.06	Low.	Moderate	0.24	0.24	0.00	0.00
H1.40	Other native hedgerow with trees.	0.213	Medium.	Moderate	1.70	1.70	0.00	0.00
H1.42	Other native hedgerow with trees.	0.165	Medium.	Moderate	1.32	1.32	0.00	0.00
H1.44	Other native hedgerow with trees.	0.3	Medium.	Moderate	2.40	2.36	0.00	0.04
H1.49	Other native hedgerow with trees.	0.791	Medium.	Moderate	6.33	6.30	0.00	0.02
H1.50	Other native hedgerow with trees.	0.258	Medium.	Moderate	2.06	2.06	0.00	0.00
H1.51	Other native hedgerow with trees.	0.632	Medium.	Moderate	5.06	5.03	0.00	0.02
H1.52	Other native hedgerow with trees.	0.21	Medium.	Poor	0.84	0.84	0.00	0.00
H1.53	Other native hedgerow.	0.263	Low.	Moderate	1.05	1.05	0.00	0.00
H1.54	Other native hedgerow	0.237	Low	Moderate	0.95	0.95	0.00	0.00
H1.55	Other native hedgerow.	0.274	Low.	Moderate	1.10	1.10	0.00	0.00
H1.56	Other native hedgerow with trees.	0.411	Medium.	Moderate	3.29	3.29	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H1.57	Other native hedgerow.	0.173	Low.	Moderate	0.69	0.67	0.00	0.02
H1.58	Other native hedgerow with trees.	0.753	Medium.	Moderate	6.02	5.98	0.00	0.05
H1.59	Other native hedgerow with trees.	0.109	Medium.	Moderate	0.87	0.87	0.00	0.00
H1.60	Other native hedgerow.	0.228	Low.	Moderate	0.91	0.91	0.00	0.00
H1.61	Other native hedgerow with trees.	0.225	Medium.	Poor	0.90	0.90	0.00	0.00
H1.62	Other native hedgerow with trees.	0.239	Medium.	Moderate	1.91	1.91	0.00	0.00
H1.63	Other native hedgerow.	0.447	Low.	Moderate	1.79	1.79	0.00	0.00
H1.64	Other native hedgerow.	0.349	Low.	Moderate	1.40	1.40	0.00	0.00
H1.65	Other native hedgerow with trees.	0.151	Medium.	Moderate	1.21	1.21	0.00	0.00
H1.66	Other native hedgerow with trees.	0.144	Medium.	Moderate	1.15	1.15	0.00	0.00
H1.67	Other native hedgerow with trees.	0.06	Medium.	Poor	0.24	0.24	0.00	0.00
H1.71	Other native hedgerow with trees.	0.292	Medium	Moderate	2.34	2.34	0.00	0.00
H1.72	Other native hedgerow	0.385	Low	Moderate	1.54	1.54	0.00	0.00
H1.73	Other native hedgerow	0.373	Low	Good	2.24	2.24	0.00	0.00
H1.75	Other native hedgerow with trees.	0.114	Medium	Moderate	0.91	0.91	0.00	0.00
H1.76	Other native hedgerow with trees	0.066	Medium	Moderate	0.53	0.53	0.00	0.00
H1.77	Other native hedgerow.	0.07	Low	Moderate	0.28	0.28	0.00	0.00
H1.78	Other native hedgerow.	0.283	Low	Good	1.70	1.66	0.00	0.04
H1.80	Other native hedgerow with trees.	0.14	Medium	Good	1.68	1.50	0.00	0.18
H1.81	Other native hedgerow with trees.	0.118	Medium	Good	1.42	1.42	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H1.82	Other native hedgerow.	0.31	Low.	Moderate	1.24	1.24	0.00	0.00
H1.83	Other native hedgerow.	0.595	Low.	Poor	1.19	1.19	0.00	0.00
TL1.1	Line of Trees	0.233	Low.	Moderate	0.93	0.93	0.00	0.00
TL1.2	Line of Trees	0.66	Low.	Poor	1.32	0.00	0.00	1.32

Table 2.5. Solar Development Site 2 Baseline Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H2.1	Other native hedgerow with trees and ditch.	0.8	High.	Poor	4.80	4.80	0.00	0.00
H2.2	Species rich native hedgerow with trees.	0.259	High.	Moderate	3.11	3.11	0.00	0.00
H2.3	Other native hedgerow.	0.094	Low.	Moderate	0.38	0.38	0.00	0.00
H2.4	Other native hedgerow with ditch.	0.035	Medium.	Moderate	0.28	0.28	0.00	0.00
H2.5	Species-rich native hedgerow with trees and ditch.	0.703	V. High.	Poor	5.62	5.62	0.00	0.00

Table 2.6. Solar Development Site 3 Baseline Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H3.1	Other Native hedgerow.	0.041	Low.	Good	0.25	0.25	0.00	0.00
H3.2	Other native hedgerow with ditch and trees.	0.304	High.	Moderate	3.65	3.65	0.00	0.00
H3.3	Species-rich native hedgerow with trees.	0.092	High.	Moderate	1.10	0.83	0.00	0.28

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H3.4	Other native hedgerow with ditch and trees.	0.088	High.	Moderate	1.06	1.06	0.00	0.00
H3.5	Species-rich native hedgerow.	0.131	Medium.	Moderate	1.05	1.05	0.00	0.00
TL3.1	Ecologically valuable line of trees	0.105	Medium	Moderate	0.84	0.84	0.00	0.00

Table 2.7. Solar Development Site 4 Baseline Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H4.1	Species-rich native hedgerow with trees.	0.126	High	Moderate	1.51	1.51	0.00	0.00
H4.2	Species-rich native hedgerow.	0.192	Medium	Moderate	1.54	1.54	0.00	0.00
H4.3	Other native hedgerow.	0.084	Low	Good	0.50	0.50	0.00	0.00
H4.4	Other native hedgerow with trees.	0.067	Medium	Moderate	0.54	0.54	0.00	0.00
H4.5	Species-rich native hedgerow with trees.	0.39	High	Moderate	4.68	4.68	0.00	0.00
H4.10	Species-rich native hedgerow.	0.388	Medium	Moderate	3.10	3.10	0.00	0.00
H4.11	Other native hedgerow with trees.	0.339	Medium	Moderate	2.71	2.71	0.00	0.00
H4.12	Species-rich native hedgerow	0.181	Medium	Poor	0.72	0.72	0.00	0.00
H4.13	Species-rich native hedgerow	0.228	Medium	Poor	0.91	0.91	0.00	0.00
H4.14	Species-rich native hedgerow.	0.069	Medium	Poor	0.28	0.28	0.00	0.00
TL4.1	Line of Trees.	0.093	Low	Moderate	0.37	0.37	0.00	0.00
TL4.2	Ecologically Valuable Line of Trees.	0.084	Medium	Moderate	0.67	0.67	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
TL4.3	Line of Trees.	0.115	Low.	Moderate	0.46	0.46	0.00	0.00
TL4.4	Ecologically Valuable Line of Trees.	0.228	Medium.	Moderate	1.82	1.82	0.00	0.00

Table 2.8. Solar Development Site 6 Baseline Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H6.2	Species-rich native hedgerow with trees.	0.237	High	Good	4.27	4.00	0.00	0.27
H6.3	Species-rich native hedgerow with trees.	0.324	High	Good	5.83	5.83	0.00	0.00
H6.5	Other native hedgerow.	0.147	Low	Moderate	0.59	0.59	0.00	0.00
H6.6	Species-rich native hedgerow with trees.	0.117	High	Moderate	1.40	1.40	0.00	0.00
H6.7	Species-rich native hedgerow.	0.112	Medium.	Moderate	0.90	0.90	0.00	0.00
H6.8	Species-rich native hedgerow.	0.055	Medium.	Good	0.66	0.66	0.00	0.00
H6.9	Species-rich native hedgerow with trees.	0.147	High.	Good	2.65	2.65	0.00	0.00
H6.10	Species-rich native hedgerow.	0.088	Medium.	Good	1.06	0.94	0.00	0.12
H6.11	Other native hedgerow.	0.262	Low.	Good	1.57	1.57	0.00	0.00
H6.12	Other native hedgerow.	0.157	Low.	Moderate	0.63	0.63	0.00	0.00
H6.13	Other native hedgerow.	0.054	Low.	Moderate	0.22	0.22	0.00	0.00
H6.14	Species-rich native hedgerow.	0.114	Medium.	Moderate	0.91	0.87	0.00	0.04
H6.15	Other native hedgerow.	0.2	Low	Moderate	0.80	0.80	0.00	0.00

TL6.1	Ecologically Valuable Line of Trees.	0.237	Medium.	Moderate	1.90	1.90	0.00	0.00
TL6.2	Ecologically Valuable Line of Trees.	0.32	Medium.	Moderate	2.56	2.56	0.00	0.00
TL6.3	Line of Trees.	0.168	Low.	Moderate	0.67	0.67	0.00	0.00

Table 2.9. Solar Development Site 7 Baseline Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H7.1	Species-rich native hedgerow with trees.	0.129	High	Good	2.32	2.32	0.00	0.00
H7.2	Other native hedgerow.	0.19	Low	Good	1.14	1.14	0.00	0.00
H7.3	Species-rich native hedgerow with trees.	0.21	High	Good	3.78	3.78	0.00	0.00

Table 2.10. Solar Development Site 8 Baseline Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H8.1	Other native hedgerow.	0.106	Low	Moderate	0.42	0.42	0.00	0.00
H8.2	Other native hedgerow.	0.311	Low	Poor	0.62	0.62	0.00	0.00
TL8.1	Ecologically Valuable Line of Trees	0.062	Medium	Moderate	0.50	0.50	0.00	0.00

Table 2.11. Order Limits Outside of the Solar Development Sites Hedgerows and Units Retained/Enhanced/Lost

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H9.1	Species-rich native hedgerow	0.375	Medium	Good	4.50	4.50	0.00	0.00
H9.2	Other native hedgerow with trees	0.196	Medium	Moderate	1.57	0.37	0.00	1.20

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H9.3	Species-rich native hedgerow with trees	0.514	High	Good	9.25	7.47	0.00	1.78
H9.4	Other native hedgerow with trees	0.374	Medium	Good	4.49	4.49	0.00	0.00
H9.5	Other native hedgerow with trees	0.384	Medium	Good	4.61	4.31	0.00	0.30
H9.6	Other native hedgerow	0.283	Low	Moderate	1.13	0.65	0.00	0.48
H9.7	Other native hedgerow with trees	0.113	Medium	Moderate	0.90	0.90	0.00	0.00
H9.8	Other native hedgerow	0.016	Low	Moderate	0.06	0.02	0.00	0.05
H9.9	Other native hedgerow	0.067	Low	Moderate	0.27	0.27	0.00	0.00
H9.10	Other native hedgerow	0.339	Low	Good	2.03	1.94	0.00	0.09
H9.11	Other native hedgerow with trees	0.102	Medium	Good	1.22	1.22	0.00	0.00
H9.12	Other native hedgerow	0.062	Low	Moderate	0.25	0.25	0.00	0.00
H9.13	Other native hedgerow	0.087	Low	Moderate	0.35	0.25	0.00	0.10
H9.14	Other native hedgerow with trees	0.238	Medium	Moderate	1.90	1.70	0.00	0.20
H9.15	Species-rich native hedgerow with trees	0.336	High	Moderate	4.03	4.03	0.00	0.00
H9.16	Other native hedgerow	0.051	Low	Moderate	0.20	0.20	0.00	0.00
H9.17	Other native hedgerow with trees	0.302	Medium	Moderate	2.42	2.42	0.00	0.00
H9.18	Other native hedgerow	0.263	Low	Moderate	1.05	1.05	0.00	0.00
H9.19	Other native hedgerow with trees	0.129	Medium	Moderate	1.03	1.03	0.00	0.00
H9.20	Other native hedgerow with trees	0.09	Medium	Moderate	0.72	0.72	0.00	0.00
H9.21	Other native hedgerow	0.049	Low	Moderate	0.20	0.20	0.00	0.00
H9.22	Other native hedgerow	0.09	Low	Poor	0.18	0.18	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H9.23	Other native hedgerow with trees	0.373	Medium	Moderate	2.98	2.98	0.00	0.00
H9.24	Other native hedgerow with trees	0.062	Medium	Moderate	0.50	0.42	0.00	0.08
H9.25	Other native hedgerow with trees	0.054	Medium	Good	0.65	0.35	0.00	0.30
H9.26	Other native hedgerow with trees	0.126	Medium	Good	1.51	1.21	0.00	0.30
H9.27	Other native hedgerow with trees	0.079	Medium	Moderate	0.63	0.63	0.00	0.00
H9.28	Other native hedgerow	0.035	Low	Moderate	0.14	0.05	0.00	0.09
H9.29	Other native hedgerow with trees	0.087	Medium	Moderate	0.70	0.46	0.00	0.24
H9.30	Other native hedgerow	0.294	Low	Moderate	1.18	0.23	0.00	0.95
H9.31	Other native hedgerow with trees	0.27	Medium	Moderate	2.16	0.64	0.00	1.52
H9.32	Other native hedgerow	0.096	Low	Moderate	0.38	0.38	0.00	0.00
H9.33	Other native hedgerow with trees	0.086	Medium	Moderate	0.69	0.69	0.00	0.00
H9.34	Other native hedgerow with trees	0.081	Medium	Moderate	0.65	0.65	0.00	0.00
H9.35	Other native hedgerow with trees	0.153	Medium	Moderate	1.22	1.22	0.00	0.00
H9.36	Other native hedgerow	0.029	Low	Poor	0.06	0.06	0.00	0.00
H9.37	Other native hedgerow with trees	0.135	Medium	Moderate	1.08	0.80	0.00	0.28
H9.38	Other native hedgerow	0.354	Low	Moderate	1.42	1.42	0.00	0.00
H9.39	Other native hedgerow	0.333	Low	Moderate	1.33	1.33	0.00	0.00
H9.40	Other native hedgerow with trees	0.079	Medium	Moderate	0.63	0.63	0.00	0.00
H9.41	Species-rich native hedgerow with trees	0.074	High	Good	1.33	1.15	0.00	0.18
H9.42	Other native hedgerow	0.057	Low	Moderate	0.23	0.23	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H9.43	Other native hedgerow	0.269	Low	Good	1.61	1.52	0.00	0.09
H9.44	Species-rich native hedgerow	0.06	Medium	Poor	0.24	0.24	0.00	0.00
H9.45	Other native hedgerow	0.122	Low	Moderate	0.49	0.31	0.00	0.18
H9.46	Other native hedgerow with trees	0.034	Medium	Moderate	0.27	0.27	0.00	0.00
H9.47	Other native hedgerow	0.03	Low	Poor	0.06	0.06	0.00	0.00
H9.48	Other native hedgerow	0.026	Low	Good	0.16	0.16	0.00	0.00
H9.49	Other native hedgerow	0.025	Low	Good	0.15	0.15	0.00	0.00
H9.50	Other native hedgerow	0.086	Low	Moderate	0.34	0.34	0.00	0.00
H9.51	Species-rich native hedgerow with trees	0.129	High	Good	2.32	1.87	0.00	0.45
H9.52	Other native hedgerow	0.105	Low	Poor	0.21	0.21	0.00	0.00
H9.53	Species-rich native hedgerow	0.229	Medium	Poor	0.92	0.92	0.00	0.00
H9.54	Species-rich native hedgerow	0.101	Medium	Moderate	0.81	0.81	0.00	0.00
H9.55	Other native hedgerow	0.1	Low	Moderate	0.40	0.40	0.00	0.00
H9.56	Other native hedgerow with trees	0.186	Medium	Moderate	1.49	1.29	0.00	0.20
H9.57	Other native hedgerow	0.055	Low	Good	0.33	0.33	0.00	0.00
H9.58	Other native hedgerow	0.136	Low	Good	0.82	0.82	0.00	0.00
H9.59	Other native hedgerow	0.128	Low	Poor	0.26	0.26	0.00	0.00
H9.60	Other native hedgerow with trees	0.1	Medium	Moderate	0.80	0.80	0.00	0.00
H9.61	Other native hedgerow	0.232	Low	Moderate	0.93	0.93	0.00	0.00
H9.62	Other native hedgerow	0.135	Low	Moderate	0.54	0.54	0.00	0.00
H9.63	Other native hedgerow	0.148	Low	Moderate	0.59	0.49	0.00	0.10
H9.64	Other native hedgerow	0.094	Low	Moderate	0.38	0.38	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H9.65	Other native hedgerow	0.092	Low	Moderate	0.37	0.37	0.00	0.00
H9.66	Other native hedgerow with trees	0.253	Medium	Moderate	2.02	0.62	0.00	1.41
H9.67	Other native hedgerow with trees	0.058	Medium	Moderate	0.46	0.05	0.00	0.42
H9.68	Other native hedgerow with trees	0.058	Medium	Moderate	0.46	0.34	0.00	0.12
H9.69	Other native hedgerow with trees	0.075	Medium	Moderate	0.60	0.60	0.00	0.00
H9.70	Other native hedgerow	0.252	Low	Moderate	1.01	0.22	0.00	0.79
H9.71	Other native hedgerow	0.137	Low	Moderate	0.55	0.16	0.00	0.39
H9.72	Other native hedgerow	0.172	Low	Moderate	0.69	0.28	0.00	0.41
H9.73	Species-rich native hedgerow	0.059	Medium	Moderate	0.47	0.23	0.00	0.24
H9.74	Other native hedgerow	0.204	Low	Moderate	0.82	0.82	0.00	0.00
H9.75	Other native hedgerow	0.121	Low	Moderate	0.48	0.38	0.00	0.10
H9.76	Other native hedgerow	0.121	Low	Poor	0.24	0.21	0.00	0.03
H9.77	Other native hedgerow	0.075	Low	Good	0.45	0.33	0.00	0.12
H9.78	Other native hedgerow	0.14	Low	Moderate	0.56	0.46	0.00	0.10
H9.79	Other native hedgerow	0.079	Low	Moderate	0.32	0.32	0.00	0.00
H9.80	Other native hedgerow with trees	0.115	Medium	Moderate	0.92	0.46	0.00	0.46
H9.81	Other native hedgerow	0.059	Low	Moderate	0.24	0.24	0.00	0.00
H9.82	Other native hedgerow	0.206	Low	Poor	0.41	0.41	0.00	0.00
H9.83	Other native hedgerow	0.169	Low	Moderate	0.68	0.68	0.00	0.00
H9.84	Other native hedgerow	0.074	Low	Moderate	0.30	0.30	0.00	0.00
H9.85	Other native hedgerow	0.149	Low	Moderate	0.60	0.60	0.00	0.00
H9.86	Other native hedgerow	0.205	Low	Poor	0.41	0.41	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H9.139 and H9.140	Species-rich native hedgerow with trees	0.426	High	Moderate	5.11	5.11	0.00	0.00
H9.88	Other native hedgerow	0.204	Low	Moderate	0.82	0.82	0.00	0.00
H9.89	Species-rich native hedgerow with trees	0.351	High	Good	6.32	6.32	0.00	0.00
H9.90	Species-rich native hedgerow with trees	0.311	High	Poor	1.87	1.87	0.00	0.00
H9.91	Other native hedgerow	0.047	Low	Good	0.28	0.00	0.00	0.28
H9.92	Other native hedgerow with trees	0.055	Medium	Poor	0.22	0.22	0.00	0.00
H9.93	Other native hedgerow	0.253	Low	Moderate	1.01	1.01	0.00	0.00
H9.94	Other native hedgerow	0.051	Low	Moderate	0.20	0.10	0.00	0.10
H9.95	Other native hedgerow	0.051	Low	Moderate	0.20	0.10	0.00	0.10
H9.96	Other native hedgerow	0.05	Low	Moderate	0.20	0.10	0.00	0.10
H9.97	Other native hedgerow	0.058	Low	Poor	0.12	0.07	0.00	0.05
H9.98	Other native hedgerow	0.095	Low	Moderate	0.38	0.20	0.00	0.18
H9.99	Other native hedgerow with trees	0.121	Medium	Moderate	0.97	0.70	0.00	0.27
H9.100	Other native hedgerow with trees	0.03	Medium	Moderate	0.24	0.24	0.00	0.00
H9.101	Species-rich native hedgerow with trees	0.093	High	Poor	0.56	0.56	0.00	0.00
H9.102, 142, 143, 144, 147	Other native hedgerow	0.6503	Low	Moderate	2.6	2.6	0.00	0.00
H9.103 and 9.148	Other native hedgerow with trees	0.23	Medium	Moderate	1.84	1.84	0.00	0.00
H9.104	Other native hedgerow	0.132	Low	Good	0.79	0.79	0.00	0.00
H9.105	Other native hedgerow	0.103	Low	Good	0.62	0.62	0.00	0.00
H9.106	Other native hedgerow	0.05	Low	Good	0.30	0.30	0.00	0.00
H9.111	Non-native and ornamental hedgerow	0.032	V.Low	Poor	0.03	0.03	0.00	0.00

Hedge number	Hedgerow type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value – Retained	BNG unit Value – Enhanced	BNG unit Value – Lost
H9.130	Other native hedgerow with trees	0.049	Medium	Good	0.59	0.59	0.00	0.00
H9.107,108, 117, 122, 124, 126, 134, 137, 146	Other native hedgerow with trees	1.027	Medium	Moderate	8.22	6.84	0.00	1.38
H9.131	Species-rich native hedgerow with trees	0.4	High	Good	7.20	7.20	0.00	0.00
H9.127	Species-rich native hedgerow with trees	0.053	High	Moderate	0.64	0.34	0.00	0.30
H9.118	Species-rich native hedgerow	0.059	Medium	Good	0.71	0.71	0.00	0.00
H9.121	Species-rich native hedgerow	0.214	Medium	Moderate	1.71	1.71	0.00	0.00
H9. 112, 113, 136	Other native hedgerow	0.392	Low	Good	2.35	2.32	0.00	0.04
H9.114, 115, 116, 119, 120, 123, 125, 128, 129, 132, 133, 135, 138, 145	Other native hedgerow	1.384	Low	Moderate	5.54	4.76	0.00	0.77
H9.110 and H9.141	Other native hedgerow	0.05	Low	Poor	0.10	0.10	0.00	0.00
TL9.8, TL9.15, TL9.2, TL9.19, TL9.20	Line of trees	0.407	Low	Poor	0.81	0.59	0.00	0.23
TL9.4, TL9.6, TL9.7, TL9.18	Ecologically valuable line of trees	0.212	Medium	Moderate	1.70	1.58	0.00	0.11
TL9.1-TL9.3, TL9.5, TL9.8-TL9.17	Line of trees	1.356	Low	Moderate	5.42	5.10	0.00	0.32

Watercourse Baseline

2.30 A summary of the BNG assessment of the baseline watercourse units for the Order Limits is detailed below in **Tables 2.12 – 2.20**, split by the Order Limits Outside of the Solar Development Sites, the individual Solar Development Sites, and watercourse type (ditch, or other rivers and streams) for clarity. Some ditches have been removed from the Order Limits through the design evolution of the Proposed Development; however, reference numbers have remained the same for simplicity. As such, there are instances where ditch numbers are not continuous, however this is intentional.

2.31 Within the Solar Development Sites, ditches are the only watercourse present. As per the Design Parameters and Commitments Document, a 10 m buffer will be provided from bank top for all ditches where possible, and as such, diches have been largely added to the metric as retained/enhanced (further discussed in **Section 3**).

2.32 There will however be some limited works within the 10 m buffer zone of the ditches in the Solar Development Sites, comprising works to some of the existing ditch crossing points for vehicle access into the solar panel areas, and as a result of cable trenching passing through ditches within the Solar Development Sites. With regards to the cable trenching, this may result in the use of some temporary short-term culverting to cross ditches. However, the watercourse will be returned to a minimum of baseline condition once the cable has been installed, and therefore impacts will be temporary and reversible. As such, where this culverting will be required, it has been added to the metric as a retention of ditch units. With regards to vehicle access over ditches into the solar panel areas, these works will not result in the loss of any ditch units as the footprint of the existing culverts will be maintained. There will be a new temporary watercourse crossing proposed over a wet ditch within Solar Development Site 1, and the current ditch crossing in the south of Solar Development Site 4 will be widened by approximately 14 m during construction (the Site 4 ditch is currently dry in the location of the existing culvert, however has been added as a loss of wet ditch as a worst case scenario). As these two culverts may be in place for over two years, they have been added to the metric as a loss of ditch units as a precautionary approach.

2.33 With regards to the Order Limits Outside of the Solar Development Sites, temporary culverts, and the potential temporary open span crossing (introduced as access option CA1 as part of the Change Application during Examination) are only proposed to cross ditches of poor condition at baseline. As the temporary culverts and open span crossing will be removed within two years, these ditches have therefore been added to the metric as a retention. All other poor and moderate ditches, apart from one (D8.1a), will be crossed via trenchless techniques and are therefore also detailed as a retention in the metric. D8.1a may need to be crossed as part of the Solar Development Site 8 Access. Here a permanent 8 m culvert will be created (if this access option is used), and as such 8 m of D8.1a has been separately assessed in the metric as a loss.

2.34 Two small sections of other river and streams are located within the Cable Route Corridor. The condition of these watercourses was established during River MoRPh Surveys (see **Section 4**). These sections will be crossed via trenchless techniques, namely where the Cable Route Corridor crosses Selby Dam and the River Ouse, with no works to occur within the 10 m riparian zone. As such, the baseline other river and stream units in these locations will be retained post development.

2.35 A final small section of other river and stream habitat is included in the BNG baseline as part of the Solar Development Site 8 Access route that crosses Selby Dam. In this location, it is likely the existing crossing will be used, and the footprint of the culvert will be maintained (if this access option is used). However, as a worst-case scenario assessment, the existing culvert may need replacing with a new crossing structure. However, any new crossing structure is not anticipated to be any wider than the existing crossing structure and therefore the length of river (and therefore units) impacted by this modification is expected to remain the same as in the baseline condition. Should a new crossing be required, a temporary crossing may also be needed during the construction of the new permanent crossing to maintain access. This temporary crossing will not be in place for more than 6 months and the baseline condition of the river will be reestablished after its removal. As such, the other river and stream units are also detailed as retained in this location.

Table 2.12. Solar Development Site 1 Baseline Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D1.1	Ditches	0.318	Medium.	Poor	0.95	0.00	0.95	0.00
D1.2	Ditches	0.165	Medium.	Poor	0.50	0.00	0.50	0.00

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D1.3	Ditches	1.787	Medium.	Poor	7.15	0.95	6.20	0.00
D1.4	Ditches	0.484	Medium.	Poor	1.45	0.00	1.41	0.04
D1.5	Ditches	0.413	Medium.	Poor	1.24	0.00	1.24	0.00
D1.6	Ditches	0.942	Medium.	Poor	3.77	3.77	0.00	0.00
D1.7	Ditches	1.118	Medium.	Moderate	8.94	8.94	0.00	0.00
D1.9	Ditches	0.965	Medium.	Poor	2.90	0.00	2.90	0.00
D1.10	Ditches	0.117	Medium.	Poor	0.47	0.47	0.00	0.00
D1.11	Ditches	0.961	Medium	Poor	2.88	0.00	2.88	0.00
D1.12	Ditches	0.428	Medium	Poor	1.49	0.00	1.49	0.00
D1.13	Ditches.	0.187	Medium	Poor	0.56	0.00	0.56	0.00

Table 2.13. Solar Development Site 2 Baseline Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D2.1	Ditches	1.781	Medium.	Moderate	14.25	14.25	0.00	0.00
D2.2	Ditches	0.17	Medium.	Poor	0.51	0.00	0.51	0.00

Table 2.14. Solar Development Site 3 Baseline Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D3.1	Ditches	0.339	Medium.	Moderate	2.28	0.00	2.28	0.00
D3.2	Ditches	0.481	Medium.	Moderate	3.85	3.85	0.00	0.00

Table 2.15. Solar Development Site 4 Baseline Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D4.1	Ditches	4.234	Medium	Poor	16.94	16.94	0.00	0.00
D4.2	Ditches	0.871	Medium	Moderate	6.97	6.97	0.00	0.00
D4.3	Ditches	0.759	Medium	Moderate	6.07	6.07	0.00	0.00
D4.4	Ditches	0.33	Medium	Poor	0.99	0.00	0.99	0.00
D4.5	Ditches	0.217	Medium	Moderate	1.74	1.74	0.00	0.00
D4.6	Ditches	2.118	Medium	Moderate	16.94	16.94	0.00	0.00
D4.7	Ditches	0.494	Medium	Poor	1.48	0.00	1.48	0.00
D4.8	Ditches	0.264	Medium	Poor	1.06	1.0	0.00	0.06
D4.13	Ditches	0.374	Medium	Poor	1.12	0.00	1.12	0.00
D4.14	Ditches	0.496	Medium	Poor	1.49	0.00	1.49	0.00

Table 2.16. Solar Development Site 6 Baseline Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D6.1	Ditches	0.345	Medium.	Moderate	2.76	2.76	0.00	0.00
D6.2	Ditches	0.137	Medium.	Moderate	1.10	1.10	0.00	0.00
D6.3	Ditches	1.746	Medium.	Poor	6.98	2.98	4.00	0.00
D6.4	Ditches	0.504	Medium.	Moderate	4.03	4.03	0.00	0.00
D6.5	Ditches	0.212	Medium.	Poor	0.64	0.00	0.64	0.00
D6.6	Ditches	0.517	Medium.	Moderate	4.14	4.14	0.00	0.00

Table 2.17. Solar Development Site 7 Baseline Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D7.1	Ditches	0.101	Medium.	Moderate	0.61	0.00	0.61	0.00

Table 2.18. Solar Development Site 8 Baseline Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D8.1	Ditches	1.18	Medium.	Moderate	8.21	8.21	0.00	0.00

Table 2.19. Order Limits Outside of the Solar Development Sites Ditches and Units Retained/Enhanced/Lost

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D9.14	Ditches	0.06	Medium	Poor	0.18	0.18	0.00	0.00
D9.16	Ditches	0.221	Medium	Poor	0.66	0.66	0.00	0.00
D9.18	Ditches	0.099	Medium	Poor	0.40	0.40	0.00	0.00
D9.26	Ditches	0.512	Medium	Poor	1.95	1.95	0.00	0.00
D9.28	Ditches	0.135	Medium	Poor	0.54	0.54	0.00	0.00
D9.29	Ditches	0.079	Medium	Poor	0.32	0.32	0.00	0.00
D9.30	Ditches	0.234	Medium	Moderate	1.78	1.78	0.00	0.00
D9.31	Ditches	0.067	Medium	Poor	0.23	0.23	0.00	0.00
D9.32	Ditches	0.077	Medium	Poor	0.31	0.31	0.00	0.00
D9.33	Ditches	0.157	Medium	Poor	0.47	0.47	0.00	0.00
D9.34	Ditches	0.105	Medium	Poor	0.32	0.32	0.00	0.00
D9.35	Ditches	0.09	Medium	Moderate	0.54	0.54	0.00	0.00
D9.36	Ditches	0.144	Medium	Moderate	0.86	0.86	0.00	0.00

Ditch number	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
D8.1a	Ditches	0.39	Medium	Moderate	2.96	2.90	0.00	0.06
D9.38	Ditches	0.048	Medium	Moderate	0.38	0.38	0.00	0.00

Table 2.20. Order Limits Outside of the Solar Development Sites Other River and Streams Units Retained/Enhanced/Lost

Watercourse reference	Watercourse type	Length (km)	Distinctiveness	Condition	BNG unit Value – Total	BNG unit Value - Retained	BNG unit Value - Enhanced	BNG unit Value - Lost
River Ouse	Other rivers and streams	0.08	High	Moderate (see Section 4)	0.96	0.96	0.00	0.00
Selby Dam	Other rivers and streams	0.087	High	Moderate (see Section 4)	0.99	0.99	0.00	0.00
Selby Dam (Solar Development Site 8 Access)	Other rivers and streams	0.026	High	Moderate (see Section 4)	0.3	0.3	0.00	0.00

Section 3: Post Development Assessment

Habitats Created, Retained and Enhanced

3.1 With regards to the Order Limits Outside of the Solar Development Sites, the works will largely be temporary, completed within two years, and largely extend over habitat that will reach target condition in one year when reestablished. As such, the habitats within the Order Limits Outside of the Solar Development Sites have largely been assessed as retained (apart from a small number of exceptions, as previously discussed in Section 2), as per the BNG user guidance. In addition, in locations where trenchless techniques will be used, overlying habitats will remain unaffected by the works and have therefore also been included in the metric as retained.

3.2 Within the Solar Development Sites, all the pond, scrub and woodland habitats will be retained, with the majority of the modified grassland, neutral grassland, scattered trees, diches and hedgerows also retained. The Proposed Development will largely extend over the arable habitats, which will be lost to development.

3.3 For the entirety of the Order Limits, the only enhancement included in the BNG metric is associated with the ditches within the Solar Development Sites. As per the Design Parameters and Commitments Document, a 10 m buffer will be provided from bank top for all ditches where possible, with neutral grassland largely proposed within this buffer. The change from arable at baseline to neutral grassland post development within parts of this proposed 10 m buffer will result in reduced riparian zone encroachment (from Major to No encroachment), and as such, the applicable lengths of ditches have been added to the metric as enhanced resulting from reduced riparian zone encroachment, namely D1.1, D1.2, D1.4, D1.5, D1.9, D1.11, D1.12, D1.13, D2.2, D3.1, D4.4, D4.7, D4.13, D4.14, D6.5, and D7.1. Where ditches are present on the Solar Development Sites boundary, the extent of encroachment on the offsite bank is anticipated to remain unchanged from the baseline and as such is not changed in the metric.

3.4 In addition, the condition of a smaller number of ditches within the Solar Development Sites will be improved from poor to moderate through in channel works such as removal of undesirable species such as filamentous algae and duckweed, reducing physical damage to the banks of the ditch through halting damaging management activities, and increasing the water quality through no longer using chemical fertiliser and pesticides on adjacent land and via planting within the ditch, namely within D1.3, D1.12, D1.13, D6.3, and D6.5. Only sections of these ditches where both banks are included in the Order Limits are added to the metric as enhanced. These enhancement measures are detailed within the oLEMP [**EN0110012/APP/LVS/07.05**].

3.5 Post-development, appropriate mitigation, compensatory and/or enhancement planting/habitat creation has been implemented to replace losses and create new habitats within the Solar Development Sites, namely woodland, scrub and tree planting, and wildflower grassland creation. The calculation of post-development habitats for the Solar Development Sites is based on area measurements provided from the Outline Environmental Masterplan (OEM) [**EN0110012/APP/LVS/02.12**]. As a precautionary worst-case scenario approach, any remaining areas have been added to the metric as hardstanding at this stage.

3.6 The vast majority of the Order Limits Outside of the Solar Development Sites will be returned to baseline habitat type and condition post development, and all of the habitats will return to baseline management, with no long-term management by the Applicant for biodiversity proposed for the Order Limits Outside of the Solar Development Sites. The habitats within the Order Limits Outside of the Solar Development Sites are therefore not included in the outline Landscape and Ecology Management Plan (oLEMP) [**EN0110012/APP/LVS/07.05**].

3.7 The measurements of the created and enhanced habitats, as well as their conditions and BNG unit value, are detailed in **Tables 3.1-Table 3.3** below. The condition criteria passed/failed for the various post development habitats are included in the associated BNG metric (16807_Light Valley Solar_ Statutory Biodiversity Metric V2) at Appendix 2**.**

3.8 Within the Solar Development Sites, modified grassland of good condition is proposed beneath the solar panels, where 3% of the area has been added to the metric as developed land; sealed surface to account for the feet of the solar panels, and 97% of the area has been added as grassland. In addition, 7.94 ha of this habitat has archaeological interest, and within this area non-penetrative techniques such as larger concrete feet have been included in the assessment to reflect the archaeological mitigation strategy. Here, 30% of the area has been added as developed land; sealed surface to account for larger concrete feet, with 70% added as grassland.

3.9 The Bird Mitigation Area proposed in the south of Site 1 has been added to the metric as neutral grassland of moderate condition. The grassland will be wet in places, including a number of ephemeral scrapes. A second area of habitat proposed for bird mitigation was introduced in the Change Application during Examination within Site 6, which was also added to the metric as neutral grassland.[7] As these areas are proposed as species mitigation, they will only count towards no net BNG loss for the Proposed Development, with habitat creation elsewhere within the Solar Development sites creating the net gain in BNG units, as per guidance.

[7] A third area of bird mitigation has also been introduced in Site 4. However as this area was previously included in the metric as grassland margin there has been no change in habitat proposed within this area, which is still included in the metric as neutral grassland of moderate condition.

3.10 The proposed grassland margins across the Solar Development Sites will comprise retained habitat (neutral grassland etc.), proposed neutral grassland of moderate condition, and 29 ha of arable field margin, with the latter required to satisfy the trading rules due to the loss of this habitat at baseline.

Table 3.1 Created Habitats within the Order Limits

Broad Habitat	Proposed Habitat	OEM Description	Area (ha)	Distinctiveness	Target Condition	BNG unit Value
Urban	Developed land; sealed surface	3% of Proposed Grassland Creation (Beneath Panels)	18.05	V.Low	N/A - Other	0.00
Grassland	Modified grassland	97% of Proposed Grassland Creation (Beneath Panels)	575.71	Low	Good	2691.83
Urban	Developed land; sealed surface	30% of Proposed Grassland Creation (Beneath Panels) for area of concrete feet	2.39	V.Low	N/A - Other	0.00
Grassland	Modified grassland	70% of Proposed Grassland Creation (Beneath Panels) for area of concrete feet	5.55	Low	Good	25.95
Urban	Developed land; sealed surface	Proposed BESS, Substations, Access Tracks, Conversion Units and existing hardstanding	45.39	V.Low	N/A - Other	0.00
Grassland	Other neutral grassland	Proposed Non-Breeding Bird mitigation And Enhancement Area	88.81	Medium	Moderate	594.55
Woodland and forest	Other woodland; broadleaved	Proposed Native Woodland Block and Belt	8.485	Medium	Poor	28.40
Heathland and shrub	Mixed scrub	Proposed Scrub and Trees	4.779	Medium	Moderate	31.99
Grassland	Other neutral grassland	Proposed Meadow Grassland Margins and Bird Area in Site 6	86.868	Medium	Moderate	581.55
Grassland	Modified grassland	Area of habitat to replace neutral grassland and woodland lost in Cable Route Corridor	0.392	Low	Poor	0.76
Individual trees	Rural tree	Proposed Native Tree	2.3225 (571 small trees)	Medium	Moderate	7.10
Cropland	Arable field margins game bird mix	Proposed Meadow Grassland Margins	29	Medium	Condition Assessment N/A	111.94

Table 3.2 Created Hedgerows within the Order Limits

Habitat type	Length (km)	Distinctiveness	Target Condition	BNG Unit Value
Species-rich native hedgerow with trees	20.33	High	Moderate	170.84
Species-rich native hedgerow	14.77	Medium	Moderate	98.88
Species-rich native hedgerow	2.026 (hedgerow reinstatement in Order Limits Outside of the Solar Development Sites)	Medium	Poor	7.82

Table 3.3 Enhanced Ditches within the Solar Development Sites

Ditch Reference	Length (km)	Distinctiveness	Condition Movement	Baseline Riparian Encroachment	Target Riparian Encroachment	BNG Unit Value
D1.1	0.318	Medium	Poor-Poor	Major/ major	No encroachment/no encroachment	1.27
D1.2	0.165	Medium	Poor-Poor	Major/ major	No encroachment/no encroachment	0.66
D1.3	1.549	Medium	Poor-Moderate	No encroachment/no encroachment	No encroachment/no encroachment	11.57
D1.4	0.469	Medium	Poor-Poor	Major/ major	Major/ no encroachment	1.63
D1.5	0.413	Medium	Poor-Poor	Major/ major	Major/ no encroachment	1.44
D1.9	0.965	Medium	Poor-Poor	Major/ major	No encroachment/no encroachment	3.86
D1.11	0.961	Medium	Poor-Poor	Major/ major	Major/ no encroachment	3.34
D1.12	0.428	Medium	Poor-Moderate	Major/ no encroachment	No encroachment/no encroachment	3.20
D1.13	0.187	Medium	Poor-Moderate	Major/ major	No encroachment/no encroachment	1.40
D2.2	0.17	Medium	Poor-Poor	Major/ major	Major/ no encroachment	0.59
D3.1	0.339	Medium	Moderate-Moderate	Major/ Minor	Major/ no encroachment	2.36
D4.4	0.33	Medium	Poor-Poor	Major/ major	Major/ no encroachment	1.15

Ditch Reference	Length (km)	Distinctiveness	Condition Movement	Baseline Riparian Encroachment	Target Riparian Encroachment	BNG Unit Value
D4.7	0.494	Medium	Poor-Poor	Major/ major	No encroachment/no encroachment	1.98
D4.13	0.374	Medium	Poor-Poor	Major/ major	Major/ no encroachment	1.30
D4.14	0.496	Medium	Poor-Poor	Major/ major	Major/ no encroachment	1.73
D6.3	1	Medium	Poor-Moderate	No encroachment/no encroachment	No encroachment/no encroachment	7.47
D6.5	0.212	Medium	Poor-Moderate	Major/ major	Major/ no encroachment	1.38
D7.1	0.101	Medium	Moderate-Moderate	Major/ major	Major/ no encroachment	0.70

Future Management

3.11 Habitats created, retained and enhanced within the Solar Development Sites will be managed and maintained for the operational lifetime of the Proposed Development (over 30 years), pursuant to the oLEMP [**EN0110012/APP/LVS/07.05**]. The management will be adapted based on monitoring results to ensure the best desired outcomes are achieved.

3.12 The majority of the Order Limits Outside of the Solar Development Sites will be returned to baseline management post development, with no long-term management by the Applicant for biodiversity proposed. The habitats within the Order Limits Outside of the Solar Development Sites are therefore not included in the outline Landscape and Ecology Management Plan (oLEMP) [**EN0110012/APP/LVS/07.05**]

.

Section 4: River MoRPh 5 Survey-Other River and Stream Units

Baseline

4.1 The condition score of a river is assessed based on a combination of the total of the positive and negative indicators. The value of this score will determine which condition class (Poor/Fairly Poor/Moderate/Fairly Good/Good) the river falls into, based on the index score thresholds for each condition class, which are dependent on the river type.

4.2 All sections of river surveyed within the Order Limits were determined to be River Type K. **Table 4.1** below details the condition score required for each condition class for River Type K.

Table 4.1 Condition Score Threshold for River Type K.

River Condition Class	Condition Score Threshold
Good	> 1.9
Fairly Good	> 1.2
Moderate	> 0.2
Fairly Poor	> -1.0
Poor	< -1.0

4.3 Two small sections of other river and streams are located within the Cable Route Corridor, Selby Dam and the River Ouse, with a second small section of Selby Dam located within Solar Development Site 8 Access. The pre-development MoRPh survey and assessment returned a condition of moderate for all three sections of river within the Order Limits. **Tables 4.2-Table 4.4** detail the index score of each section surveyed.

4.4 Sheep grazing in 10 m of Selby Dam resulted in minor riparian zone encroachment on both banks of the watercourse at baseline. A full breakdown of the river condition assessment is available in Excel format on request.

Table 4.2 Results of MoRPh 5 River Survey Condition Assessment – River Ouse

Index	Scores
Positive Indicator Average	1.316
Negative Indicator Average	-0.231
Provisional Condition Score (Positive index + Negative Index)	1.085
River Type	K
Condition Score	**Moderate**

Table 4.3 Results of MoRPh 5 River Survey Condition Assessment – Selby Dam East

Index	Scores
Positive Indicator Average	0.895
Negative Indicator Average	-0.231
Provisional Condition Score (Positive index + Negative Index)	0.664
River Type	K
Condition Score	**Moderate**

Table 4.4 Results of MoRPh 5 River Survey Condition Assessment – Selby Dam West (Solar Development Site 8 Access)

Index	Scores
Positive Indicator Average	1.211
Negative Indicator Average	-0.846
Provisional Condition Score (Positive index + Negative Index)	0.364
River Type	K
Condition Score	**Moderate**

Post-Development

4.5 Two of the sections of river with the Order Limits will be crossed via trenchless techniques, namely where the Cable Route Corridor crosses Selby Dam and the River Ouse. As such, the baseline other river and stream units in these locations will be retained post development.

4.6 The final small section of other river and stream habitat is located within the Solar Development Site 8 Access that crosses Selby Dam. In this location, (should this access option is used to enter Site 8) it is likely that the existing crossing will be used, and the footprint of the culvert will be maintained. However, as a worst-case scenario assessment, the existing culvert may need replacing with a new crossing structure. However, any new crossing structure is not anticipated to be any wider than the existing crossing structure and therefore the length of river (and therefore units) impacted by this modification is expected to remain the same as in the baseline condition. Should this access option be used, and a new crossing be required, a temporary crossing may also be needed during the construction of the new permanent crossing to maintain access. This temporary crossing will not be in place for more than six months and the baseline condition of the river will be reestablished after its removal. As such, the other river and stream units are also detailed as retained in this location.

4.7 The riparian zone encroachment will also stay the same as baseline for all river units as current land use will be continued post-development.

Section 5: Conclusions

5.1 The Statutory Biodiversity Metric calculated that the Proposed Development will result in a total net biodiversity unit change of:

1) +2291.47 habitat units equating to +78.61%;

2) +254.45 hedgerow units equating to +71.03%; and

3) +15.66 watercourse units equating to +10.4%.

5.2 The trading rules have also been satisfied.

5.3 The headline results of the metric are shown in the screenshot in **Plate 5.1.**

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	2291.47
	Hedgerow units	254.45
	Watercourse units	15.66
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	78.61%
	Hedgerow units	71.03%
	Watercourse units	10.40%
Trading rules satisfied?	Yes ✓	

Plate 5.1. Screenshot of Statutory Biodiversity Metric Headline Results

5.4 To deliver the BNG as set out above, habitats within the Solar Development Sites will be managed and maintained for the operational lifetime of the Proposed Development (over 30 years), pursuant to the oLEMP [**EN0110012/APP/LVS/07.05].** The management will be adapted based on monitoring results to ensure the best desired outcomes are achieved.

5.5 Due to the extensive BNG gains in habitats and hedgerows, and as the Solar Development Sites extend over a large area, there is sufficient scope to accommodate potential updates to the development proposals at detailed design stage, whilst still meeting the newly enforced targeted unit gains required for NSIPs (noting that the statutory requirement is not retrospectively applied to the Proposed Development).

Appendix 1: Methodology

Desk Study

A1.1. A desk study was completed to assess the strategic significance of the Order Limits to identify and give extra value to any habitats in optimal locations or that meet local objectives for biodiversity. This process is informed by reviewing local plans and strategies and with habitats assigned a multiplier based in being of 'low', 'medium' or 'high' strategic significance[8].

A1.2. See **Section 1** for details of the Local Nature Recovery Strategy for North Yorkshire and York which has been used to assign strategic significance.

Habitat survey

A1.3. UK Habitat surveys and associated Condition Assessments were completed by Tyler Grange in 2024, 2025 and 2026 as detailed within Table 1 of Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**] which outlines the dates, methodology and surveyor details of the surveys. The full details and descriptions of the habitats recorded within the Order Limits can also be found within Appendix 6.1: Habitats Report V2 (ES Volume 3) [**EN0110012/APS/LVS/06.03.06.01**] and are shown on Figure 6.6: UK Habitat Classification Results V2 (ES Volume 2) [**EN0110012/APS/LVS/06.02.06.06**]. The Statutory Biodiversity Metric User Guide was used during surveys to determine habitat condition and ecological importance.

A1.4. As discussed in the limitations section, no access was permitted to the western terminus of the Cable Route Corridor, CRC 4-POC (as described in Chapter 2 (ES Volume 1) [**EN0110012/APP/LVS/06.01.02]**) where it meets the existing Monk Fryston substation due to the active construction site present in this location for the approved Yorkshire Green development (EN020024). Instead, the proposed site plans submitted for the Yorkshire Green development (5.4.3 ES Chapter 3: Description of the Project Figure 3.12 Outline Landscape Mitigation Strategy (Monk Fryston)) have been used to confirm the baseline habitats present within this area, with a precautionary approach taken when completing the Condition Assessments for the habitats within this area.

A1.5. All habitats were assessed utilising the relevant condition criteria for the relevant habitat type under the Statutory Biodiversity Metric, which included confirming 'pass' / 'fail' of criteria.

[8] Natural England (2023). The Biodiversity Metric 4.0 User Guide: Natural England Joint Publication JP039.

A1.6. During the UK Habitat surveys, hedgerows were also assessed and recorded in order to determine their species-richness. Hedgerow were classed as species rich if they comprised four or more native wooded species.

A1.7. Ditches, which were confirmed as not meeting the definition of other watercourses were also survey using the same methodology as above in order to inform the assessment.

Modular River Physical (MoRPh) Survey

A1.8. The River Ouse and two sections of Selby Dam are present within the Order Limits. A River MoRPh survey was therefore undertaken by a MoRPh accredited ecologist and suitably qualified person under the definition of the BS8683:2021.

A1.9. The methodology was based upon that set out in The MoRPh Survey Technical Reference Manual 2022[9] and is used to gather information on short lengths (or modules) of a river that are used to assess overall river condition. The data recorded in each module to assess condition is comprised of 32 condition indicators, split between four morphological features (Bank Top, Bank Face, Channel-Water Margin and Channel Bed). MoRPh surveys included the river and all habitat within a radius of 10 m of the watercourse.

A1.10. This survey covers at least 20% of the total river length adjacent to the Order Limits, and is broken down into subreach surveys comprised of five contiguous MoRPh modules (MoRPh5) (see **Table A1.1** for breakdown of modules). The length of each module is approximately twice the river width, with a minimum length of 10 m, and with each MoRPh5 located so as to be spread out as much as possible as well as to cover locations where noticeable changes in river condition occur e.g. areas of high riverine/riparian quality, areas of physical modification, areas where restoration could occur and areas of potential impact.

A1.11. In addition to the field survey, a desk based assessment is also completed to determine river type and to inform the completion of the condition assessment.

Table A1.1. Breakdown of Modules Completed

River	Total River Length*	20% of River Length	River Width	Module length	MoRPh Length	Number of MoRPHs Completed
River Ouse	80 m	16 m	22m	40 m (based on river width between 20-30 m)	200 m (x5 modules)	1
Selby Dam East	80 m	16 m	4 m	10 m (based on width <5 m)	50 m (x5 modules)	1
Selby Dam West (Solar	80 m	16 m	1 -2 m	10 m (based on width <5 m)	50 m (x5 modules)	1

[9] Gunnell, A. and Shuker, L. (2022) The MoRPh survey: Technical reference Manual 2022 version.

Development Site 8 Access)						

* Adjacent to Order Limits or where 10 m riparian zone is present in Order Limits

Metric calculations

A1.12. The Statutory Biodiversity Metric operates by calculating the number of biodiversity units associated with a particular habitat type (both pre-and post-development). The 'unit' value associated with each habitat type is calculated based on the following parameters:

1) Size (in hectares)/Length (in km);

2) Distinctiveness (i.e. how rare/valuable a given habitat is);

3) Condition (i.e. how well the recorded habitat fits the standardised description of that habitat); and

4) Strategic significance (i.e. if the existing or proposed habitat is within an area formally adopted in local policy for green infrastructure or biodiversity improvements).

A1.13. When considering the creation of new habitats in the post-development proposals, other factors are also considered when calculating the 'unit' value of a given habitat and these are:

1) Time to reach the target condition of each habitat; and

2) Difficulty category for the creation of a given habitat.

A1.14. The findings of the MoRPh survey and assessment of ditches are inputted into the BNG metric using similar information as for habitats with the addition of the following:

1) Watercourse encroachment: Extent of development within the banks or river channel which includes any intervention that adversely affects hydrological and geo-morphological processes; and

2) Riparian encroachment: Extent of development within riparian zone which is defined as a 10 m zone from the top of the riverbank.

A1.15. Habitat survey metric calculations were undertaken by an experienced ecologist at Tyler Grange who is a suitably qualified person under the definition of the BS8683:2020[10]. River condition assessment and the river sections of the metric were undertaken by a MoRPh

[10] The British Standards Institution (2021). Process for designing and implementing Biodiversity Net Gain Specification.

accredited ecologist and a suitably qualified person under the definition of the BS8683:2021.

Application of Mitigation Hierarchy

A1.16. Application of the mitigation hierarchy is fundamental to the ecological impact assessment process. This requires consideration of the following measures, in order of priority, for all potential impacts, to determine the most appropriate mitigation, compensation and enhancement strategy for the project. This is taken into account within **Section 3** of this report and set out below:

1) Avoidance – measures to avoid harm to ecological features;

2) Mitigation – measures to avoid or minimise potential impacts as part of the design or guaranteed by planning controls;

3) Compensation – measures required to offset significant residual negative effects following avoidance and mitigation; and

4) Enhancement – measures over and above requirements for avoidance, mitigation and compensation to provide biodiversity net gain.

Appendix 2: 16807_Light Valley Solar_ Statutory Biodiversity Metric



Step into our world

www.tylergrange.co.uk

Tyler Grange

Landscape | Ecology | Arboriculture