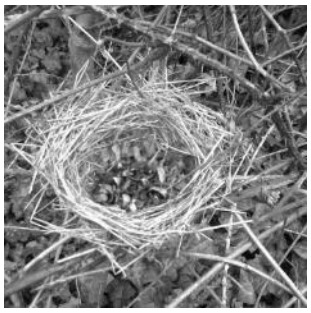

Minety 400kV substation Extension, Wiltshire

Biodiversity Net Gain (BNG) Report

Prepared For: National Grid

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1.0	05/07/23	First draft for review	PJB	CK	AE
2.0	31/05/24	Second draft based on new off-site mitigation	PJB	NG	PJB

TEP is a is a Registered Practice of the Chartered Institute of Ecology and Environmental Management. The content of this document has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Code of Professional Conduct and is compliant with British Standard BS42020:2013 Biodiversity Code of Practice for Planning and Development.

The conclusions and recommendations contained in this document are based upon information gathered by TEP and provided by third parties. Information provided by third parties and referred to herein has not been independently verified by TEP, unless otherwise expressly stated in the document.

Nothing in this report constitutes legal opinion. If legal opinion is required, the advice of a qualified legal professional should be secured.

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1.0 Introduction

Background

1.1 The Environment Partnership (TEP) were commissioned by National Grid (NG) to undertake a Biodiversity Net Gain (BNG) assessment of proposed planning application (Ref: PL/2022/09258) for an extension to the existing 400kV substation; hereafter referred to as the "Site".

1.2 Discussions with both the Local Authority and Natural England (NE) have been ongoing since September 2023, following submission of additional information in July 2023. From comments raised by Natural England and the Local County Ecologist, through consultation, amendments have been made to consider of both additional on and off-site mitigation and habitat creation/enhancement for protected species, in particular bats and hazel dormouse.

1.3 As the application was submitted in November 2022, before Mandatory Biodiversity Net Gain came into force in February 2024, the revisions were inputted into the original submitted Biodiversity Metric 4.0 which has been used to assess the revised net gain output.

Site description

1.4 The footprint of the development application boundary measures 7.46ha and lies to the southwest of the village of Minety, Malmesbury in Wiltshire. The site is bordered on three sides by woodland and hedgerow with agricultural fields beyond.

Proposed development and demand

1.5 National Grid (NG) has identified the need to extend its existing substation site at Minety (NGR: SU 00028 89842) comprising the installation of a 400/132kV transformer, 3no. 400/33kV transformers, circuit breakers, construction of a retaining wall and 33kV switch room, formation of an access road, culverting of a watercourse, erection of fencing and associated works (refer to drawing PDD-101488-LAY-302-REV-3).

1.6 The works are required to facilitate connection of 450MVA of battery / solar generation, achieve greater reliability of the existing substation to enable the increase in embedded generation within the local Distribution Network Operator (DNO) and 240MVA of additional capacity for the DNO to enable meet increased energy demand in the wider region. All of these aspects will enable the decarbonisation of the electricity supply network.

Relevant Policy and Legislation

National Policies

1.7 Paragraph 180(d) of the NPPF (2023) states that "Planning policies and decisions should contribute to and enhance the natural and local environment by […] minimising impacts on and providing net gains for biodiversity […]" The Government 25-year Environment Plan states that government will "[…] embed environmental net gain principle for development".

1.8 In July 2019, the government issued revised planning practice guidance (NPPG) with details on how planners can implement "net environmental gain" requirements when assessing development proposals, including new advice on protecting wildlife.

1.9 Revised guidance recently published by the government says that net gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand. Net gain is an umbrella term for both biodiversity net gain and wider environmental net gain. It states: "Planning conditions or obligations can, in appropriate circumstances, be used to require that a planning permission provides for works that will measurably increase biodiversity".

1.10 In terms of measuring net gain, the guidance states that using a metric is a pragmatic way to calculate the impact of a development and the net gain that can be achieved. It goes on to state that "[…] tools such as the Defra biodiversity metric can be used to assess whether a biodiversity net gain outcome is expected to be achieved".

1.11 BNG became mandatory in England from 12th February 2024 which requires all Town and Country Planning Act 1990 developments (except those that are exempt[1]) to meet 10% net gain.

Local Policies

Wiltshire Core Strategy (adopted January 2015)

- Core Policy 50: Biodiversity and Geodiversity

1.12 Aligning with the National Planning Policy Framework (NPPF), Wiltshire Council explain their implementation of biodiversity net gain within Core Policy 50 of the Wiltshire Core Strategy[2].

1.13 The strategy enforces that developments present no net loss and 10% net gain of biodiversity following the completion of planning projects in Wiltshire, and that planning applications can only be granted if the planning officer has received evidence that measurable net gains of biodiversity will be met.

[1] The Biodiversity Gain Requirements (Exemptions) Regulations 2024

[2] https://www.wiltshire.gov.uk/article/1102/Biodiversity-and-development (accessed 05/07/23)

1.14 The aims of this report are to:

- Set out the methods used to assess the habitat baseline of the Site.
- Set out the methods and assumptions used to assess the post development habitat scoring of the Site.
- Assess the BNG that is delivered as a result of the site design and offsetting required; and
- Demonstrate how the BNG good practice principals for development have been addressed.

2.0 Methods

Ecological and Survey Reference Documents

2.1 To support this assessment the following ecological survey reports were reviewed:

- Ecological Desk Study – TEP 2022
- Extended Phase 1 Habitat Survey (updated) – TEP 2023
- UKHab Condition Assessment for Habitats – TEP 2023/2024
- Arboricultural impact Assessment – TEP/AECOM 2022
- Ecological Assessment (updated) – TEP 2023, and
- Dormouse Mitigation Strategy – TEP 2024 (updated)

Survey Methods

Desk Study

2.2 Information regarding planning policies, historic species records and protected sites was collated from a variety of sources. Sites with international designation were searched for within 10 km of the site, nationally designated sites within 5 km of the site and local designations within 2 km.

Phase 1 Habitat Survey

2.3 The updated Phase 1 Habitat was undertaken by a suitably qualified and experienced TEP Ecologist on 15th and 16th May 2023 using the standard JNCC Phase 1 habitat assessment method (2010)[3]. This method records the habitat types present in and immediately surrounding the site, based on the JNCC descriptions. Plant species are identified in accordance with Stace (2010)[4] and recorded as target notes using the DAFOR scale[5].

UK Habitat Classification Conversion

2.4 Phase 1 habitats were converted to UK Habitat classification code with reference to the UK Hab conversions provided in the 'Technical Data' button in the calculation tool of the Biodiversity Metric 3.0, the UK Habitat Classification - Habitat Definitions[6] and the UK Habitat Classification Field Key[7].

[3] JNCC (2010) Handbook for Phase 1 Habitat Survey: A technique for environmental audit. Joint Nature Conservation Committee, Peterborough.

[4] Stace, C. (2010) New Flora of the British Isles. 3rd Ed. Cambridge University Press

[5] DAFOR = Dominant, Abundant, Frequent, Occasional & Rare

[6] Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification - Habitat Definitions V1.1 at http://www.ukhab.org/

[7] UK Hab Field Key V2.1 September 2020

Condition Assessment

2.5 Condition assessment surveys of the area-based habitats present pre-development were undertaken by a suitably experienced ecologist, (FISC Level 4) in May 2022, May 2023 and April 2024. The condition assessments were undertaken using guidance presented in the Biodiversity Metric 4.0 - Technical Supplement[8].

Arboriculture Survey

2.6 An initial arboricultural survey of the site was carried out by TEP in January 2022 and subsequent report updated by AECOM[9] in December 2022. The surveys were by means of inspection from ground level in accordance with BS 5837:2012 "Trees in relation to design, demolition and construction – Recommendations (Ref 7-20)". The Standard provides a categorisation method to "identify the quality and value (in a non-fiscal sense) of the existing tree stock, to allow informed decisions to be made concerning which trees should be removed or retained in the event of development occurring".

2.7 The method places trees and groups of trees into one of four quality categories and provides guidance on the integration and protection of trees during construction.

2.8 The presence of Tree Preservation Orders, Conservation Areas, Ancient Woodland, and Veteran Trees have also been ascertained.

BNG Assessment

2.9 The Site has been assessed using Biodiversity Metric 4.0 in line with the user guide [10] and technical supplement provided, this was undertaken in June 2023.

2.10 Biodiversity Metric 4.0 is a tool designed to enable developers to measure the change in biodiversity across their site. It determines if there will be net gain, net loss or no net loss of biodiversity following completion of their development and any subsequent management regime.

2.11 In order to calculate the change in biodiversity across the site, a site survey is undertaken by a suitably qualified ecologist to determine the habitats present on site, their location, size, and condition. This information is then digitised, and the resulting information fed into Biodiversity Metric 4.0.

[8] STEPHEN PANKS A, NICK WHITE A, AMANDA NEWSOME A, JACK POTTER A, MATT HEYDON A, EDWARD MAYHEW A, MARIA ALVAREZ A, TRUDY RUSSELL A, SARAH J. SCOTT B, MAX HEAVER C, SARAH H. SCOTT C, JO TREWEEK D, BILL BUTCHER E and DAVE STONE A 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – Technical Supplement. Natural England.

[9] Proposed Extension to Minety 400kV Substation - AECOM December 2022

[10] STEPHEN PANKS A, NICK WHITE A, AMANDA NEWSOME A, JACK POTTER A, MATT HEYDON A, EDWARD MAYHEW A, MARIA ALVAREZ A, TRUDY RUSSELL A, SARAH J. SCOTT B, MAX HEAVER C, SARAH H. SCOTT C, JO TREWEEK D, BILL BUTCHER E and DAVE STONE A 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – User Guide. Natural England.

2.12 The principles of biodiversity net gain as set out in the Biodiversity Net Gain Good Practice Guidelines[11] have been considered throughout this process.

Determining Strategic Significance

2.13 Strategic significance was determined through a thorough desktop review of local planning policy and other relevant documentation. The desk-based assessment provides full details of local policy and legislation covering the site. This includes biodiversity policies and the policies map within Wiltshire Core Strategy (adopted January 2015).

2.14 For the purpose of the BNG Assessment particular reference has been paid to the relevant green infrastructure and other ecology specific policies including:

- Core Policy 50: Biodiversity and Geodiversity

2.15 Consideration has also been given to the location of Local Wildlife Sites, as well as county wide and nationally designated wildlife sites, specifically where they are referenced in local policy as providing important connectivity.

2.16 Strategic significance utilises published local strategies and objectives to identify local priorities for targeting biodiversity and nature improvement. Strategic significance will be high if the habitat location is identified in local plans, strategies, or policies. Medium strategic significance should be used where habitat was deemed ecologically desirable for a particular habitat type such as acting as a wildlife corridor or buffer.

2.17 When assigning high, medium, and low strategic significance to habitats in both the baseline and the post development calculations for this development proposal, the lack of proximity to high ecological value areas such as local wildlife sites, and the lack of ecologically valuable habitats ascertains that all habitats on the site were assigned low strategic significance.

Post-Development Calculations

2.18 Post development calculations have been based on mitigation and enhancement strategy for the site and wider area, including proposed Natural England (NE) Hazel Dormouse license application[12].

2.19 The most appropriate UK Habitat Classification type for each habitat parcel was assigned based on the landscape design, and a target condition was assigned for each parcel based upon the condition assessment criteria for habitats within the Biodiversity Metric 4.0 Technical Supplement. The target condition for habitat types varied depending upon their location, likely levels of use and management measures required.

[11] CIEEM, IEMA & CIRIA (2019). Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide

[12] Dormouse Habitat Creation Strategy - Document Ref 9236.005 TEP 2024

Limitations

2.20 For the purpose of this assessment, it is assumed that the post-development habitats within the application area would not be able to achieve an equal condition to similar habitats measured during the baseline survey due to the restricted landscaping areas and the surrounding activity associated with the proposed and ongoing development within the wider area.

3.0 Baseline conditions

Important Ecological Features

3.1 There is one internationally designated site present within 10km of the site. North Meadow and Clattinger Farm Special Area of Conservation (SAC) is located approximately 3.2km north of the site and is designated for its Annex I habitat 'lowland hay meadows'.

3.2 There are nine nationally designated sites present within 5km of the site. The two that fall within 1km of the site are Cloatley Farm and Emmett Hill Meadows both Sites of Special Scientific Interest (SSSI) and located approximately 40m north and 0.4km northeast of the site respectively. Cloatley Farm SSSI supports important breeding populations of the butterfly's marsh fritillary and brown hairstreak along with species-rich neutral grassland. The site is considered in an unfavourable condition - declining. Emmett Hill Meadows SSSI supports species-rich neutral and acid grassland in a favourable condition.

3.3 There are 11 non-statutory locally designated sites within 2km of the site. Stonehill Wood Local Wildlife Site (LWS) is located within the site boundary (southeast) and extends off site. It is designated for its ancient woodland habitat.

3.4 Park Copse - Charlton LWS is located adjacent to the western site boundary and comprises hazel coppice woodland. Other sites are located over 0.4km from the site and comprise ancient woodlands, species-rich grasslands, and ponds.

On-Site Baseline

3.5 The Site was dominated by the existing operational electrical substation. Surrounding the substation on the east, south and western aspects is broadleaved woodland, mostly plantation, however ancient woodland (ASNW) has been identified to border the western boundary. Habitat to the south of the site was dominated by marshy rush dominated grassland. Several ponds have been identified within 250m of the site, however none of these ponds will impacted by the development. The wider area and landscape are dominated by agricultural and semi-rural environments and is well connected to the wider area by hedgerow and woodland corridors.

3.6 Full details of the conversion from Phase 1 habitat to the UK Habitat Classification along with the results of the condition assessment are provided in the Assessor Comments column within the completed Biodiversity Metric 4.0 (Appendix A). The following drawings are provided:

- Phase 1 Habitat Survey Results (G9236.009F); and
- UK Habitat Classification Baseline (G9236.013E).

Post Development Habitats

3.7 Details regarding post-development habitats are provided in the following documents, along with client team discussions and are displayed in the following drawing.

- 9236.005 - Dormouse Habitat Creation Strategy
- G9236.021D Figure E3 Specification for Mitigation & Compensation

3.8 Habitats to be provided within the post development proposals for the site include:

- 1.35ha of Plantation broadleaved woodland to be enhanced; and
- 0.1ha of cleared scrub to be allowed to regenerate

3.9 Through the project development process, National Grid have sought to minimise the impact as much as possible. As such, the electrical equipment in the south has been moved slightly north to allow retention of the woodland and scrub border in the south and west allowing for connectivity to the wider area.

3.10 All other remaining ecologically valuable habitats on site, including the pond, mixed woodland bund, scrub area and modified grassland are to be lost.

3.11 Full details of the conversion from the masterplan to the UK Habitat classification along with the target condition are provided in the Assessor Comments within the completed Biodiversity Metric 4.0.

4.0 Change in Ecological Value

4.1 A biodiversity assessment has been undertaken, using the Biodiversity Metric 4.0 calculator to quantify the change in biodiversity units for the planning application area between the pre-development baseline and post-development retained, enhanced, and created habitats. Detailed results of the assessment are provided in the Biodiversity Metric 3.1 in Appendix A.

Summary of Biodiversity Impact

4.2 The application area totals 7.46ha of which 5.59ha will be retained, the majority of which will be existing substation infrastructure and access (3.43ha), 0.44ha of derelict land/Bare Ground, 0.28ha of Ruderal/Ephemeral and 0.05ha of cleared hazel scrub. Temporary losses include 0.05ha of other woodland, broadleaved (semi-natural), and 0.06ha of other woodland, broadleaved (Plantation). Permanent losses account for 1.84ha and include the following habitats.

- 0.01ha - Lowland Mixed deciduous woodland (W2)
- 0.07ha - Other woodland, broadleaved (semi-natural) (W3)
- 0.24ha - Other woodland, broadleaved (Plantation) (W3 and W1)
- 0.45ha - Hazel scrub (G4)
- 0.62ha - Mixed Scrub (G2 and G3)
- 0.02ha - Bramble Scrub
- 0.29ha - Modified Grassland (GR1), and
- 0.02ha - Developed Land/Sealed Surface

4.3 Based on the above figures and impacts the headline results, prior to off-site assessment, taken from the metric, are provided in Figure 1 below.

On-site baseline	*Habitat units*	22.02	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	13.70	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	*Habitat units*	-8.32	-37.78%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Figure 1: Headline results on Application baseline and post intervention.

4.4 Based on the application area alone, the results indicate a loss of -37.78% which equates to -8.32 Biodiversity Units (BU) for area-based habitats. There is no net loss of linear features including hedgerows and water courses.

Off-Site Habitat Strategy

4.5 An off-site biodiversity strategy has been developed to meet the shortfall in trading rules and achieve net gain. Existing off-site land in ownership of NG and additional land in the process of being acquired, will be used to provide units to deliver biodiversity net gain and to endeavour to satisfy the trading rules that on-site landscaping cannot.

4.6 For detailed view of the mitigation areas please refer to Drawing G9236.012D.

4.7 Initially, 2.17ha of land in existing NG ownership identified for enhancement (1.91ha) for proposed Hazel Dormouse Mitigation was included as off-site habitat creation and included the following habitats.

- 0.10ha - Lowland Mixed deciduous woodland (W2)
- 1.12ha - Other woodland, broadleaved (Plantation) (W1, W2, W3 and H1)
- 0.01ha - Hazel scrub (G1)
- 0.21ha - Mixed Scrub (G2)
- 0.24ha - Modified grassland (GR3 and areas to southwest of site)
- 0.07ha - Bare Ground
- 0.04ha - Developed Land/Sealed Surface

4.8 However, these areas alone would not satisfy the BU shortfall of 8.32 BU to attain no net loss, with a net gain of only 4.47 BU (a net loss of -3.87 BU). See Figure 2

Off-site baseline	*Habitat units*	10.18	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	14.65	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Habitat units*	4.47	43.92%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-3.87	
	Hedgerow units	1.17	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

Figure 2: Headline Results for Offsite Mitigation within NG Land ownership

4.9 As these areas for off-site gain are attributed to mitigation for protected species (Hazel Dormouse), an additional 10% of units are required which must come from additional activities other than mitigation for protected species, therefore habitat units to achieve no net loss will be 9.15 BU.

4.10 Additional land is in the process of being purchased by the Client, which will be secured by legal agreement, mostly in part for dormouse mitigation but also for habitat enhancement within the wider area.

4.11 For the purposes of this assessment 1.5ha of additional off-site area habitats are included, adjacent to the site:

- 0.81ha of modified grassland, enhanced to mixed scrub (GR4)
- 0.48ha of modified grassland, enhanced to mixed scrub (GR5)
- 0.06ha of mixed scrub, enhanced to hazel scrub (S2)
- 0.13ha of mixed scrub, enhanced to hazel scrub (S1)
- 0.07ha of bramble scrub, enhanced to mixed scrub (S2)
- Planting of 20x small oak trees within new mixed scrub woodland buffer at GR4

4.12 All habitats are illustrated in drawing G9236.013E - Existing UK Habitats.

4.13 The final off-site and combined unit changes based on the additional off-site areas are illustrated below in Figure 3.

Off-site baseline	*Habitat units*	13.02	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	30.92	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Habitat units*	17.90	137.45%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	9.58	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

Figure 3: Combined net unit change based on additional off-site areas.

4.14 The final net combined unit change of 9.58 BU satisfies the additional 10% net unit gain for additional activities based on habitat mitigation in respect of hazel dormouse protected species mitigation.

Total BNG Unit Net Change

4.15 Figure 4 below illustrates the final headline result in unit net change combining both the application area and off-site compensation.

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	9.58
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	43.49%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

Figure 4: Final Unit Net Change.

4.16 The total net unit change results show that there will be an overall area-based unit net gain of 9.58 BU (43.49%).

Trading Rules Summary

4.17 All trading rules have been satisfied.

Biodiversity Net Gain

4.18 The Local Authority are committed to attaining at least 10% net gain on all development. National Grid has a corporate commitment to attain at least 10% biodiversity net gain on all new developments. This scheme aims to go above and beyond that target to achieve 15% net gain. Figure 5 identifies that the 15% net gain target has been met.

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	15.00%	22.02	25.33	0.00
Hedgerow units	15.00%	0.00	0.00	0.00
Watercourse units	15.00%	0.00	0.00	0.00

Figure 5: BNG Target (based on 15%)

5.0 Implementation, Management and Monitoring

5.1 This BNG assessment has been undertaken in support of a full planning application and details of the proposed landscape design have also been provided by TEP. These have been assessed to indicate the condition of habitats that is expected to be achieved following completion of the development.

5.2 To fully meet BNG requirements, a detailed 30-year management and monitoring plan will be necessary. It is assumed that this information can be secured by a suitably worded condition attached to the application's decision notice.

5.3 The plan will need to include management prescriptions which aim to achieve the specific target condition for each habitat, based on the Biodiversity Metric 4.0 condition criteria. The plan will also need to include the methods and reporting processes to be used for monitoring the success of habitat enhancement and creation along with options for remedial intervention where needed if a habitat is not achieving its targeted condition. Roles and responsibilities, along with financial and legal requirements should also be included.

6.0 BNG Good Practice Principles

6.1 An appraisal of the scheme against the 10 good practice principles for development is set out in Table 2.

Table 2: Appraisal against Ten Good Practice Principles

Good Practice Principle		Commentary
1.	Apply the mitigation hierarchy.	Due to the nature of the development, it has not been possible to retain all habitats within the site, although the Client have sought to minimise the losses as far as practically possible. The landscaping scheme contributes to mitigating for these losses, and the offsetting strategy utilises the off-site area to achieve 15% net gain.
2.	Avoid losing biodiversity that cannot be offset by gains elsewhere.	There are no irreplaceable habitats within the habitat baseline.
3.	Be inclusive and equitable.	Conversations have been undertaken with the client and we have worked closely to maximise new landscape features which can be enjoyed by a variety of site end users and to enhance biodiversity in the area.
4.	Address risks.	A precautionary approach to habitat condition assessment in both the baseline and post development baseline has been adopted due to the seasonality of surveys and the likely moderate/high public use of retained areas. Management and monitoring, to be included within the LHMP will ensure remedial action is taken to enable target conditions to be achieved.
5.	Make a measurable Net Gain contribution.	The combined headline results show that there will be an overall area-based unit net gain of 9.58 BU (43.49%).
6.	Achieve the best outcomes for biodiversity.	TEP and the Client have had ongoing discussions with Natural England to maximise the opportunities at the site. The enhancement of retained habitats and creation of new habitats, both on site and off, will enhance connectivity and strengthen important strategic wildlife corridors for the area.
7.	Be additional.	There are no existing nature conservation outcomes on the site. Therefore, the enhancement of retained habitats and creation of new habitats and their management for biodiversity for the next 30 years add value to this strategic wildlife corridor.
8.	Create a Net Gain legacy.	Discussions have been held between TEP and the client regarding Biodiversity Net Gain and this has been a key consideration during the design of the landscaping scheme. A net gain legacy will be achieved through creation of a 30-year management plan which will ensure biodiverse and high-quality habitats remain on-site and off-site, and offer foraging, commuting, nesting and hibernation potential to a range of local wildlife.
9.	Optimise sustainability.	The habitat enhancements on site and near environs will improve ecological corridors and semi-natural habitats within the local area, with benefits for connectivity to the wider area.

Good Practice Principle		Commentary
10.	Be transparent.	This report provides a transparent method for the BNG assessment ensuring that all stakeholders can follow the process through.

Appendix A: Biodiversity Metric 4.0

(provided under separate cover)

Drawings:

G9236.009F: Phase 1 Habitat Survey

G9236.013E: UK Habitat Classification Baseline

G9236.014D: Existing Habitats Condition and Significance

G9236.015D: Habitat Impacts Plan

G9236.021D: Figure E3 Specifications for Mitigation & Compensation

PDD-101488-LAY-302-REV-3: Proposed Site Application

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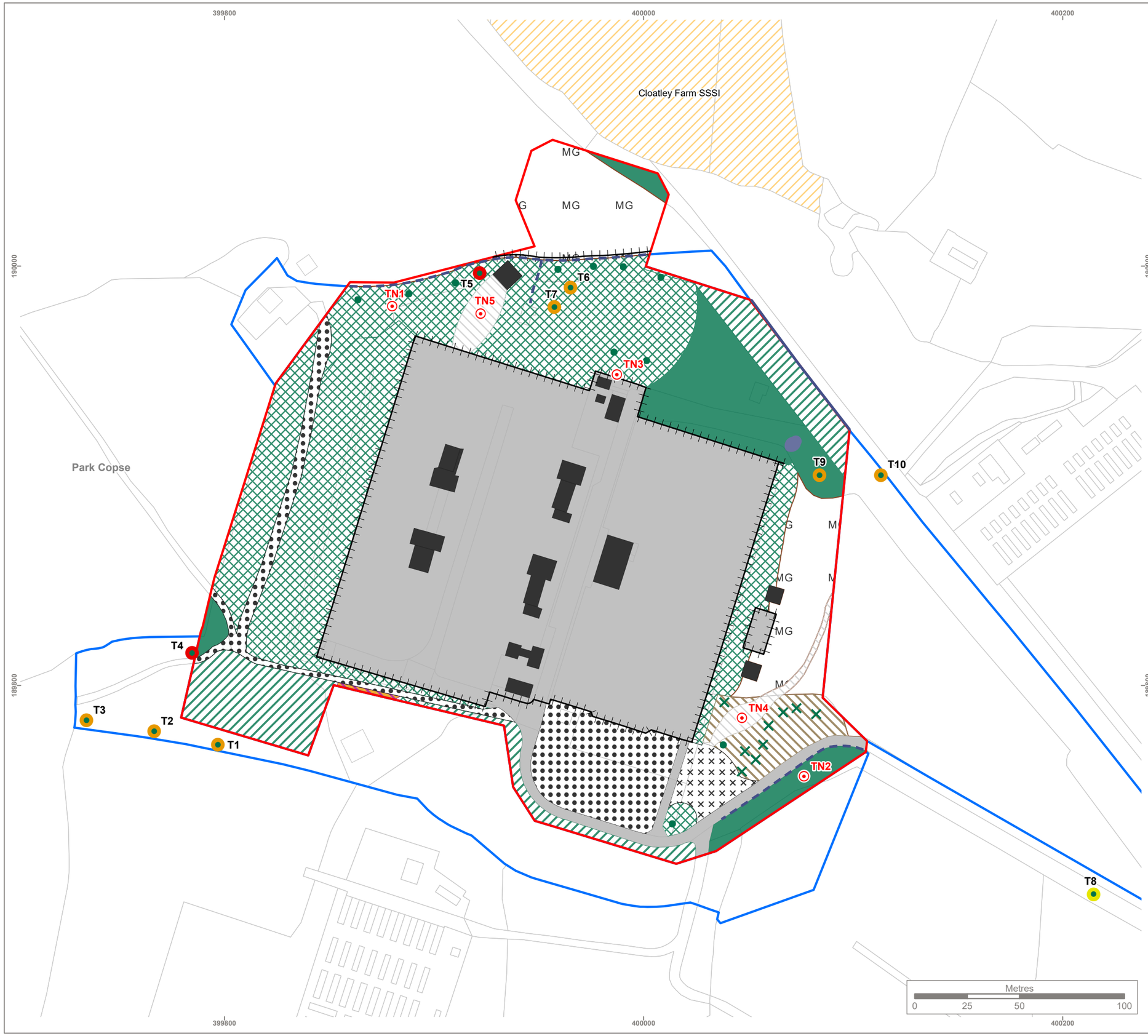
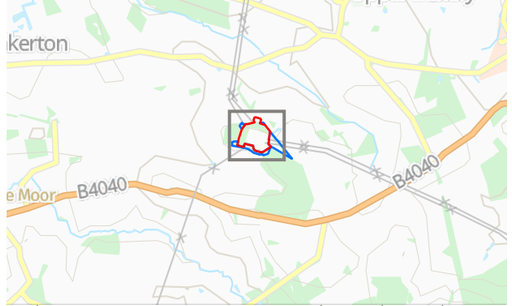


KEY

- Site application boundary
- Client ownership boundary
- Site of Special Scientific Interest (SSSI)
- Target note
- Scattered scrub
- Scattered broad-leaved tree
- Broad-leaved tree with low bat suitability
- Broad-leaved tree with moderate bat suitability
- Broad-leaved tree with high bat suitability
- Standing water
- Fence
- Dry ditch
- Semi-natural broad-leaved woodland
- Plantation broad-leaved woodland
- Dense/continuous scrub
- Species-poor modified neutral grassland
- Marsh/marshy grassland
- Tall ruderal
- Standing water
- Dense/continuous ephemeral/short perennial
- Building
- Bare ground
- Other habitat
- Hardstanding

Note:
The locations of habitats and habitat features are indicative.

Site Map



Rev	Description	Drawn	Approved	Date
F	Updated Phase 1 habitats	BJ	PB	29/05/2024
E	Added ownership boundary	BJ	CK	12/06/2023

THE ENVIRONMENT PARTNERSHIP

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Project
Minety Substation Extension, Minety

Title
Phase 1 Habitat Survey

Drawing Number
G9236.009F

Drawn	Checked	Approved	Scale	Date
SP	CW	CK	1:1,800 @ A3	07/02/2022

399700 399800 399900 400000 400100 400200 400300

190100 190000 189900 189800 189700 189600

GR1 GR4 G4 S1 GR5 S2 W3 G3 G2 W4 Park Copse G5 GR3 GR2 G1 W2 G1 G5 H1 Area included under existing planning app 20/07390/FUL W1 W5

Metres
0 25 50 100

KEY

- Site application boundary
- Client ownership boundary
- Off-site mitigation area
- Tree group and woodland outlines
- Urban tree

Grassland
- Modified grassland
- Other neutral grassland

Heathland and Shrub
- Bramble scrub
- Hawthorn scrub
- Hazel scrub
- Mixed scrub

Lakes
- Ponds (non-priority habitat)

Sparsely Vegetated Land
- Ruderal/ephemeral

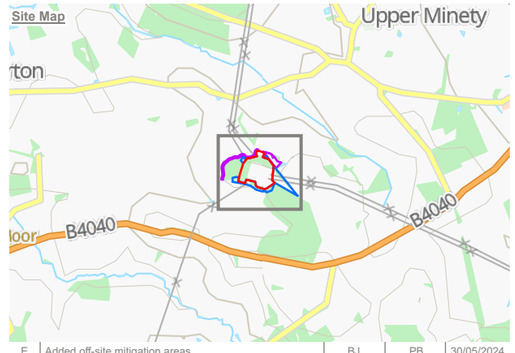
Woodland and Forest
- Lowland mixed deciduous woodland
- Other woodland, broadleaved

Urban
- Developed land, sealed surface
- Vacant/derelict land/ bareground

Note:
The locations of habitats and habitat features are indicative.

N

Site Map



Rev	Description	Drawn	Approved	Date
E	Added off-site mitigation areas	BJ	PB	30/05/2024
D	Tree groups and woodland IDs added	BJ	PB	03/07/2023

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Project
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Title
Existing UK Habitats

Drawing Number
G9236.013E

Drawn	Checked	Approved	Scale	Date
BJ	MK	PB	1:2,500 @ A3	11/08/2022

399700 399800 399900 400000 400100 400200 400300

190100 190000 189900 189800 189700 189600

KEY

- Site application boundary
- Client ownership boundary
- Off-site mitigation area

Habitat Condition

- Moderate
- Poor
- Condition assessment not applicable

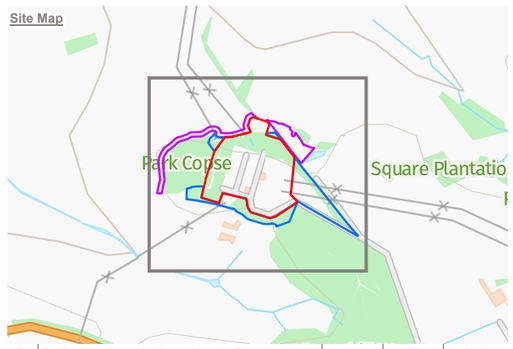
Strategic Significance

- Formally identified in local strategy
- Area/compensation not in local strategy/no local strategy

Note:
The locations of habitats and habitat features are indicative.

Metres
0 25 50 100

Site Map



Rev	Description	Drawn	Approved	Date
D	Site boundaries and habitats updated, offsite areas added	BJ	PB	31/05/2024
C	Site boundaries and habitats updated	BJ	PB	03/07/2023

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Project
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Title
Existing Habitat Condition and Strategic Significance

Drawing Number
G9236.014D

Drawn	Checked	Approved	Scale	Date
BJ	MK	PB	1:2,500 @ A3	11/08/2022

399700 399800 399900 400000 400100 400200 400300

190100 190000 189900 189800 189700 189600

KEY

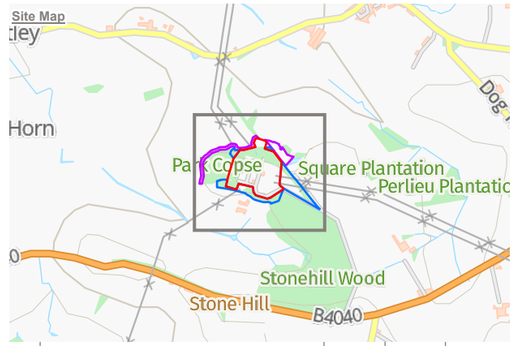
- Site application boundary
- Client ownership boundary
- Off-site mitigation area

Habitat Impact

- Enhanced
- Retained
- Temporary loss
- Lost

Note:
The locations of habitats impacts are indicative.

Metres
0 25 50 100



Rev	Description	Drawn	Approved	Date
D	Updated boundaries, added off-site mitigation areas	BJ	PB	31/05/2024
C	Temporary loss area added, boundaries added	BJ	PB	03/07/2023

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Project
Minety Substation Extension, Minety

Title
Habitat Impact

Drawing Number
G9236.015D

Drawn	Checked	Approved	Scale	Date
BJ	MK	PB	1:2,500 @ A3	11/08/2022

399800
400000
400200
190000
189800
189600

Area included under existing planning app 20/07390/FUL

Metres
0 50 100 200

KEY

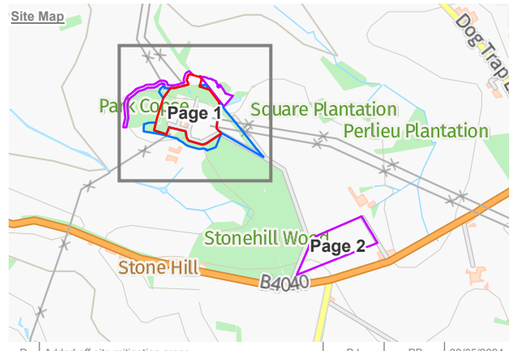
- Site application boundary
- Client ownership boundary
- Off-site mitigation areas
- Permanent loss

Mitigation/Compensation

- Box location
- Log/brash piles
- Proposed rural tree planting
- Dead hedge
- Created hedge
- Proposed new native hedgerow under planning app: 20/07390/FUL
- Enhanced woodland
- Enhanced scrub
- Natural regeration
- Scrub creation
- Retained scrub
- Retained woodland

Note:
The locations of habitats and habitat features are indicative.

Site Map



Rev	Description	Drawn	Approved	Date
D	Added off-site mitigation areas	BJ	PB	30/05/2024
C	Existing planning application information added	BJ	PB	06/07/2023

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Project
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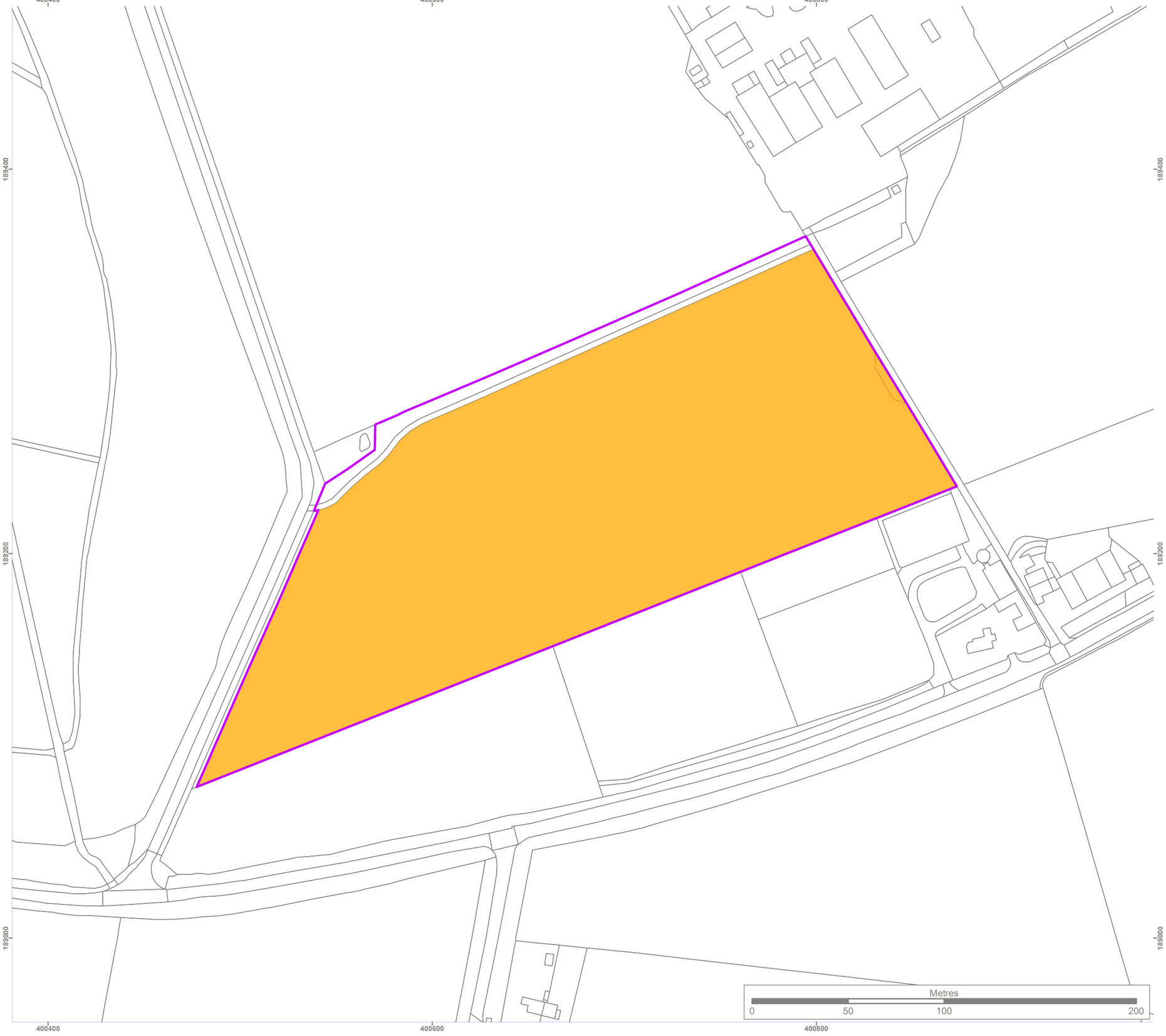
Title
Figure E3: Specifications for Mitigation/Compensation

Drawing Number				
G9236.021D.1				Page 1 of 2
Drawn	Checked	Approved	Scale	Date
AR	MH	CK	1:2,500 @ A3	22/03/2023

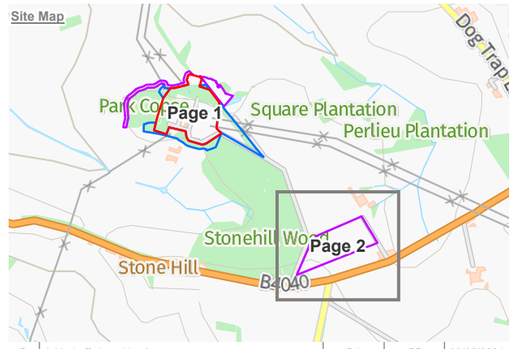


KEY

- Off-site mitigation areas
- Woodland planting

Note:
The locations of habitats and habitat features are indicative.

Site Map



Rev	Description	Drawn	Approved	Date
D	Added off-site mitigation areas	BJ	PB	30/05/2024
C	Existing planning application information added	BJ	PB	06/07/2023

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Project
Minety Substation Extension, Minety

Title
Figure E3: Specifications for Mitigation/Compensation

Drawing Number				
G9236.021D.2				Page 2 of 2
Drawn	Checked	Approved	Scale	Date
AR	MH	CK	1:2,000 @ A3	22/03/2023

SHEQ NOTES

1. THIS IS A PLANNING PERMISSION DRAWING AND IS FOR DEVELOPMENT CONSENT ONLY.

LEGEND:

- EXISTING EQUIPMENT
- NEW EQUIPMENT (NG OWNED) SCHEME NO 101488
- EQUIPMENT TO BE REMOVED
- TRANSFORMER FIRE DAMAGE ZONE
- RED LINE BOUNDARY

SGT6
400/132kV

400kV COMPOUND

132kV COMPOUND

ACCESS ROAD

ACCESS ROAD

PRELIMINARY DESIGN
NOT TO BE USED FOR
CONSTRUCTION

0 7.5 1:750 MILLIMETERS 75

THIS DRAWING NEEDS TO PRINTED IN COLOUR

Rev	Description	Cre'd	Chk'd	App'd	Date
3	NG COMMENTS IMPLEMENTED	BG	VB	VK	13.10.2022
2	NG COMMENTS IMPLEMENTED	BK	VB	VK	28.09.2022
1	NG COMMENTS IMPLEMENTED	BK	VB	VK	13.09.2022
0	ISSUED FOR COMMENTS	BK	JP	VK	08.09.2022

nationalgrid

Master Scheme No:	Sub-Scheme No:	Site:
101488	101488	MINETY 400kV SUBSTATION

Scheme Name:
MINETY SUBSTATION GENERATION CONNECTIONS FEASIBILITY

Document Title:
PROPOSED INFRASTRUCTURE
PLANNING LAYOUT

Created by:	Date:	Checked by:	Date:	Approved by:	Date:
BK	02.09.2022	JP	02.09.2022	VK	08.09.2022

Development Eng:	Document Type:	Scale:	Format:	Sheet(s):	Rev:
MIKE HALES	DWG	1:750	A1	1 OF 1	3

National Grid Document Number:
PDD-101488-LAY-302

FEED Document Number:
5211464-ATK-XX-ZZ-DR-E-1302