



The Great Grid Upgrade

Sea Link

Sea Link

Volume 7: Other Documents

Document 7.5.7.1 Outline Landscape and Ecological Management Plan - Suffolk

Planning Inspectorate Reference: EN020026

**Version: B version 2, change request
November 2025**

**Infrastructure Planning (Applications: Prescribed Forms and
Procedure) Regulations 2009 Regulation 5(2)(q)**

nationalgrid

Page intentionally blank

Contents

Executive Summary	1
1. Introduction	2
1.1 Overview	2
1.2 Purpose of the Outline Landscape and Ecological Management Plan (oLEMP)	2
1.3 The Proposed Project	4
1.4 Structure of the oLEMP	5
1.5 Objectives of the oLEMP	6
1.6 Responsibilities	6
2. Landscape and Ecology Baseline	8
2.1 Landscape Designations Overview	8
2.2 Landscape Baseline	8
2.3 Ecology Baseline	10
3. Construction Mitigation	12
3.1 Approach to mitigation	12
3.2 Impact avoidance	12
3.3 Impact mitigation	12
3.4 Protected species licences	22
3.5 Tree Works	23
4. Landscape and Ecological Reinstatement	24
4.1 Arable and grassland field margin reinstatement	24
4.2 Acid grassland reinstatement	24
4.3 Hedgerow reinstatement	25
4.4 Ditch reinstatement	25
5. Long-term Landscape and Ecological Proposals	27
5.1 Landscape and Ecological Strategy	27
5.2 Landscape and Ecological Proposals	28
5.3 Acid grassland restoration and enhancement	32
5.4 Skylark habitat enhancement	32
5.5 Barn owl and hobby nesting opportunities	33
5.6 Bat roosting opportunities	33
5.7 Friston Substation Landscape and Ecological Proposals	34
5.8 Phasing of Landscape Proposals	35

6.	Maintenance and Management Aims, Prescriptions, and Objectives	36
6.1	Introduction	36
6.2	Management Periods	36
6.3	Existing Retained Trees and Shrubs	36
6.4	Implementation of Native Planting (General)	37
6.5	Woodland planting	37
6.6	Native hedgerow planting	39
6.7	Reinstated acid grassland	40
6.8	Species-rich neutral grassland	40
6.9	Pond creation	42
6.10	Riparian enhancement of River Fromus corridor	42
6.11	Barn owl and hobby nesting opportunities	42
6.12	Barn roosting opportunities	43
6.13	Acid grassland enhancement	43
6.14	Skylark habitat enhancement	44
7.	Monitoring	46
7.1	Pre and Post Construction Monitoring and Reporting	46
7.2	Reinstated acid grassland and acid grassland enhancement area	46
7.3	Adaptive Management Monitoring	46
7.4	Non-Compliance Procedure	47
7.5	Change Process	47
7.6	Co-ordination with National Grid Ventures Projects	47
	References	49
	Appendix A Figures	A.1

Table of Tables

Table 1.1 Structure of the oLEMP	6
Table 5.1 Native woodland mix	29
Table 5.2 Native woodland edge mix	29
Table 5.3 Native hedgerow mix	30

Table of Plates

Plate 3.1 Hedgerow connecting Important Hedgerows 3 and 5 outlined in blue	18
Plate 3.2 Example hurdle (without vegetation)	20
Plate 3.3 Example hornbeam instant hedge (source: https://www.instanthedges.co.uk/products/troughs/)	21
Plate 3.4 Example standard hornbeam trees in planters (source: https://www.instanthedges.co.uk/products/standard-trees/).	21
Plate 3.5 Heras fencing with attached textured plastic hedgerow (source: HS2/ EKFB, in Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. Charter	22

Version History

Date	Issue	Status	Description/ Changes
March 2025	A	Final	For DCO submission
July 2025	B	Final	Update to reflect Procedural Decision from the Examining Authority
<u>November 2025</u>	<u>B</u> <u>version 2</u>	<u>Final</u>	<u>Version 2, Change Request</u> <u>(Updated Figure 1, Figure 3 and Figure 5)</u>

Executive Summary

- Ex1.1.1 The purpose of this Outline Landscape and Ecological Management Plan (oLEMP), which forms **Application Document 7.5.7.1 Outline Landscape and Ecological Management Plan – Suffolk**, is to provide a framework for delivering the landscape and ecological mitigation strategy and the successful establishment and future management of the proposed landscape and ecology works associated with the Suffolk Onshore Scheme.
- Ex1.1.2 It sets out the short and long-term measures and practices that will be implemented by National Grid to establish, monitor and manage landscape and ecology mitigation and enhancement measures. It also provides a mechanism for the delivery of landscape and ecological measures to avoid, reduce or compensate for environmental effects identified in **Application Document 6.2.2.1 Part 2 Suffolk Chapter 1 Landscape and Visual**, **Application Document 6.2.2.2 Part 2 Suffolk Chapter 2 Ecology and Biodiversity** and **Application Document 6.10 Arboricultural Impact Assessment**.
- Ex1.1.3 This oLEMP has been informed by consultation with stakeholders as part of the Statutory Consultation and the landscape, ecology and arboriculture thematic meetings. It should be noted that as this is an outline document, which will be fully developed as the Proposed Project progresses into detailed design and prior to the commencement of works. National Grid will maintain a regular dialogue with statutory bodies and relevant stakeholders during this period.
- Ex1.1.4 It should also be noted that an equivalent oLEMP has been produced for the Kent Onshore Scheme (**Application Document 7.5.7.2 Outline Landscape and Ecological Management Plan – Kent**).

1. Introduction

1.1 Overview

- 1.1.1 The Sea Link Project (hereafter referred to as the 'Proposed Project') is a proposal by National Grid Electricity Transmission plc (hereafter referred to as National Grid) to reinforce the transmission network in the South East and East Anglia. The Proposed Project is required to accommodate additional power flows generated from renewable and low carbon generation, as well as accommodating additional new interconnection with mainland Europe.
- 1.1.2 National Grid owns, builds and maintains the electricity transmission network in England and Wales. Under the Electricity Act 1989, National Grid holds a transmission licence under which it is required to develop and maintain an efficient, coordinated, and economic electricity transmission system.
- 1.1.3 This would be achieved by reinforcing the network with a High Voltage Direct Current (HVDC) Link between the proposed Friston substation in the Sizewell area of Suffolk and the existing Richborough to Canterbury 400kV overhead line close to Richborough in Kent.
- 1.1.4 National Grid is also required, under Section 38 of the Electricity Act 1989, to comply with the provisions of Schedule 9 of the Act. Schedule 9 requires licence holders, in the formulation of proposals to transmit electricity, to:
- 1.1.5 Schedule 9(1)(a) '*...have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest;*' and
- 1.1.6 Schedule 9(1)(b) '*...do what [it] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects*'.

1.2 Purpose of the Outline Landscape and Ecological Management Plan (oLEMP)

- 1.2.1 This Outline Landscape and Ecological Management Plan (oLEMP) has been prepared on behalf of National Grid. It forms part of a Development Consent Order (DCO) application and provides a framework for delivering the landscape and ecological mitigation strategy and the successful establishment and future management of proposed landscape and ecology works associated with the Suffolk Onshore Scheme. It sets out the short and long-term measures and practices that will be implemented by National Grid to establish, monitor, and manage landscape and ecology mitigation and enhancement measures. It also provides a mechanism for the delivery of landscape and ecological measures to avoid, reduce or compensate for environmental effects identified in **Application Document 6.2.2.1 Part 2 Suffolk Chapter 1 Landscape and Visual**, **Application Document 6.2.2.2 Part 2 Suffolk Chapter 2 Ecology and Biodiversity** and **Application Document 6.10 Arboricultural Impact Assessment**.

- 1.2.2 The structure and scope of the oLEMP as well as the landscape and ecological mitigation principles have been discussed with statutory stakeholders through landscape and visual and ecology thematic meetings.
- 1.2.3 As set out in the draft DCO (**Application Document 3.1 draft Development Consent Order**), a requirement will necessitate the submission and approval of a LEMP, which must be in substantial accordance with the provisions set out in this oLEMP.
- 1.2.4 This oLEMP is a live document that will continue to be updated and refined based on ongoing discussions between National Grid, statutory bodies and relevant stakeholders. It will be updated by National Grid into a LEMP prior to the commencement of works, in accordance with the following requirements:
- unless otherwise agreed with the relevant planning authority, no stage of the Suffolk Onshore Scheme may commence until, for that stage, a detailed mitigation planting scheme for the planting of trees, groups of trees, woodlands, hedgerows and grassland has been submitted to and approved by the relevant planning authority;
 - the detailed planting scheme submitted must include details of:
 - location of trees, groups of trees, woodlands, hedgerows, grassland, riparian planting including numbers, species and sizes to be planted;
 - a landscape specification; and
 - a maintenance and management plan incorporating a programme of adaptive management and monitoring measures to ensure that the planting scheme achieves optimum levels of plant growth;
 - the detailed planting plan submitted must be in general accordance with the indicative landscape mitigation plans contained in this oLEMP;
 - unless otherwise agreed with the relevant planning authority, all mitigation planting must be implemented at the earliest opportunity and no later than by the first available planting season after that part of the Suffolk Onshore Scheme to which the mitigation planting works apply is first brought into operational use;
 - all mitigation planting must be carried out in accordance with the relevant mitigation scheme for that stage of the Suffolk Onshore Scheme, and to a reasonable standard in accordance with the relevant recommendations of appropriate British Standard or other recognised codes of good practice;
 - any tree or shrub planted as part of an approved mitigation planting scheme that, within a period of 5 years after planting, is removed, dies or becomes in the opinion of the relevant planning authority seriously damaged or diseased, must be replaced in the first available planting season with a specimen of the same species and size as that originally planted, unless otherwise approved by the relevant planning authority; and
 - all planting associated with the reinstatement of the landfall and HVDC/HVAC corridors will be maintained for a five year period. All mitigation planting associated with the permanent access road and Saxmundham Converter Station will be maintained for the lifetime of the asset.
- 1.2.5 This document outlines the establishment, management and monitoring of habitats and landscape features that are referenced in **Application Document 6.2.2.1 Part 2 Suffolk Chapter 1 Landscape and Visual**, **Application Document 6.2.2.2 Part 2**

Suffolk Chapter 2 Ecology and Biodiversity and Application Document 6.10 Arboricultural Impact Assessment.

- 1.2.6 Note that ecological mitigation measures related to the construction period only, such as seasonal constraints on works where appropriate, pollution controls, use of noise fencing and precautionary working methods are covered separately in **Application Document 7.5.3 Outline Onshore Construction Environmental Management Plan (CEMP)**, **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**, or **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)**.
- 1.2.7 Whilst there is currently no mandatory requirement for Biodiversity Net Gain (BNG) for Nationally Significant Infrastructure Projects (NSIP's) that are to be consented through Development Consent Orders (DCO); the Proposed Project is seeking to achieve a 10% net gain in biodiversity to align with National Grid commitments where possible. BNG considerations have fed into the development of the landscape planting proposals set out within this document. A BNG feasibility assessment of the Proposed Project has been undertaken (**Application Document 6.12 Biodiversity Net Gain Feasibility Report**) which takes account of the proposed landscape planting to the extent that it can contribute to meet BNG requirements (e.g. areas not at risk from other developments) as well as alternative routes for delivery of BNG (e.g. partnership with external organisations).
- 1.2.8 Reference should be made to **Application Document 7.5.9.1 Outline Public Rights of Way Management Plan – Suffolk** regarding to Public Rights of Way (PRoW) mitigation measures.
- 1.2.9 This document is supported by the following figures contained in Appendix A:
- **Figure 1 Saxmundham Converter Station Outline Landscape Mitigation;**
 - **Figure 2 Saxmundham Converter Station Illustrative Cross Sections;**
 - **Figure 3 Saxmundham Converter Station Outline Landscape Mitigation - Timing of Planting;**
 - **Figure 4 Saxmundham Converter Station Enhancement Areas; and**
 - **Figure 5 Friston Substation Outline Landscape Mitigation.**

1.3 The Proposed Project

- 1.3.1 The Proposed Project would comprise the following elements:

The Suffolk Onshore Scheme

- A connection from the existing transmission network via Friston Substation, including the substation itself. Friston Substation already has development consent as part of other third-party projects. If Friston Substation has already been constructed under another consent, only a connection into the substation would be constructed as part of the Proposed Project.
- A high voltage alternating current (HVAC) underground cable of approximately 1.9 km in length between the proposed Friston Substation and a proposed converter station (below).

- A 2 GW high voltage direct current (HVDC) converter station (including permanent access from the B1121 and a new bridge over the River Fromus) up to 26 m high plus external equipment (such as lightning protection, safety rails for maintenance works, ventilation equipment, aerials, similar small scale operational plant, or other roof treatment) near Saxmundham.
- A HVDC underground cable connection of approximately 10 km in length between the proposed converter station near Saxmundham, and a transition joint bay (TJB) approximately 900 m inshore from a landfall point (below) where the cable transitions from onshore to offshore technology.
- A landfall on the Suffolk coast (between Aldeburgh and Thorpeness).

The Offshore Scheme:

- Approximately 122 km of subsea HVDC cable, running between the Suffolk landfall location (between Aldeburgh and Thorpeness), and the Kent landfall location at Pegwell Bay.

The Kent Onshore Scheme:

- A landfall point on the Kent coast at Pegwell Bay.
- A TJB approximately 800 m inshore to transition from offshore HVDC cable to onshore HVDC cable, before continuing underground for approximately 1.7 km to a new converter station (below).
- A 2 GW HVDC converter station (including a new permanent access off the A256), up to 28 m high plus external equipment such as lightning protection, safety rails for maintenance works, ventilation equipment, aerials, and similar small scale operational plant near Minster. A new substation would be located immediately adjacent.
- Removal of approximately 2.2 km of existing HVAC overhead line, and installation of two sections of new HVAC overhead line, together totalling approximately 3.5 km, each connecting from the substation near Minster and the existing Richborough to Canterbury overhead line.

1.3.2 The Proposed Project also includes modifications to sections of existing overhead lines in Suffolk (only if Friston Substation is not built pursuant to another consent) and Kent, diversions of third-party assets, and land drainage from the construction and operational footprint. It also includes opportunities for environmental mitigation and compensation. The construction phase will involve various temporary construction activities including overhead line diversions, use of temporary towers or masts, working areas for construction equipment and machinery, site offices, parking spaces, storage, accesses, bellmouths, and haul roads, as well as watercourse crossings and the diversion of public rights of way (PRoWs) and other ancillary operations.

1.4 Structure of the oLEMP

1.4.1 The structure of the oLEMP is set out in Table 1.1 below. The outline contents of the oLEMP has been discussed with Suffolk County Council, East Suffolk District Council and Natural England in thematic meetings.

Table 1.1 Structure of the oLEMP

Chapter	Content
Chapter 1: Introduction	This chapter sets out the purpose of the oLEMP and how it is structured. It references relevant Application Documents and identifies the figures which accompany the oLEMP. It also describes the features of the Proposed Project.
Chapter 2: Landscape and Ecology Baseline	This chapter sets out the baseline landscape and ecology features which have informed the mitigation commitments. It also makes reference to any existing features that will be protected as part of the Suffolk Onshore Scheme.
Chapter 3: Construction Mitigation	This chapter sets out the pre-construction ecological monitoring required and specific ecological mitigation requirements and associated licensing requirements.
Chapter 4: Landscape and Ecological Reinstatement	This chapter sets out the reinstatement of the cable corridors following construction.
Chapter 5: Long-term Landscape and Ecological Proposals	This chapter sets out the proposed outline landscape and ecological interventions, their functions and rationale. It also identifies species mixes and the phasing of the landscape proposals.
Chapter 6: Maintenance and Management Aims, Prescriptions and Objectives	This chapter sets out the maintenance and management prescriptions of the various ecological and landscape interventions. It also identifies the management periods.
Chapter 7: Monitoring	This chapter outlines the monitoring requirements pre and post construction and the requirement for adaptive management.

1.5 Objectives of the oLEMP

1.5.1 The overarching objectives of the oLEMP are to:

- integrate the Suffolk Onshore Scheme into its landscape setting and avoid or minimise adverse landscape, biodiversity, heritage and visual effects as far as practicable;
- promote the conservation, protection and improvement of the physical, natural and historic environment within the Suffolk Onshore Scheme and its setting;
- diversify ecological value of existing habitats, for example through restoration and enhancement of riparian ditches and creation of diverse habitats; and
- guide the design and management of landscape and biodiversity components that respond to and enhance the character of the landscape, local distinctiveness and sense of place.

1.6 Responsibilities

1.6.1 National Grid will establish the appropriate roles and responsibilities for site staff as set out in **Application Document 7.5.3 Outline Onshore Construction Environmental**

Management Plan. An Environmental Clerk of Works (EnvCoW) will be responsible for ensuring construction environmental mitigation measures are correctly implemented, monitored and maintained. In addition, an Ecological Clerk of Works (ECoW) will be appointed. The scope of the ECoW will be advised by the ecologist and landscape architect based on relevant environmental commitments, the findings of the pre-commencement walkovers, protected species licensing requirements and with reference to the relevant project programmes.

- 1.6.2 Relevant site staff would receive toolbox talks (summary training by environmental and ecology staff on site on specific issues over which they need to be aware) as necessary from the ECoW on the relevant ecological risks present, legal requirements, and the working requirements necessary to comply with legislation, and the final approved landscape and biodiversity management and enhancement measures. Toolbox talks would be repeated as necessary over the duration of the works.
- 1.6.3 The contractor appointed by National Grid to construct the Suffolk Onshore Scheme will be responsible for establishing, managing and monitoring the implementation and establishment of landscape and ecological mitigation within the establishment aftercare period. National Grid will inspect and report on the success of establishment during this period. For more detail, refer to Chapter 8 of **Application Document 7.5.3 Outline Onshore Construction Environmental Management Plan**.
- 1.6.4 All long-term monitoring and management requirements are specified in this document and will be carried out by National Grid and/or a contractor appointed by National Grid.

2. Landscape and Ecology Baseline

2.1 Landscape Designations Overview

- 2.1.1 The Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) is located within the study area. The boundary of the AONB is shown on **Application Document 6.4.2.1.2 Landscape Context and Designations** in **Application Document 6.4.2.1 Landscape and Visual**.
- 2.1.2 The Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Natural Beauty and Special Qualities Indicators (Suffolk and Essex Coast and Heaths National Landscape Partnership, 2016) provides indicators for each Natural Beauty criterion and each of the AONB Special Qualities of the Suffolk Coast and Heaths AONB. These are outlined within **Application Document 6.3.2.1.B ES Appendix 2.1.B Landscape Baseline**.
- 2.1.3 Further information regarding the landscape designations within the study area is provided in **Application Document 6.3.2.1.B ES Appendix 2.1.B Landscape Baseline**.

2.2 Landscape Baseline

- 2.2.1 The following is a summary of the Landscape Baseline which is provided in detail in **Application Document 6.2.2.1 Part 2 Suffolk Chapter 1 Landscape and Visual** and **Application Document 6.3.2.1.B ES Appendix 2.2.B Landscape Baseline** and on the following figures within **Application Document 6.4.2.1 Landscape and Visual**:
- **Application Document 6.4.2.1.2 Landscape Context and Designations;**
 - **Application Document 6.4.2.1.3 Landscape Character - National and Regional;**
 - **Application Document 6.4.2.1.4 Landscape Character - County;**
 - **Application Document 6.4.2.1.5 Landscape Character - District; and**
 - **Application Document 6.4.2.1.6 Seascape Character – National, Regional and District.**
- 2.2.2 The Suffolk Onshore Scheme lies partially within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB). The landfall and HVDC cable corridor extend across this nationally designated landscape as shown in **Application Document 6.4.2.1.2 Landscape Context and Designations** in **Application Document 6.4.2.1 Landscape and Visual** and **Application Document 6.3.2.1.B ES Appendix 2.1.B Landscape Baseline**.
- 2.2.3 At a national level, the Suffolk Onshore Scheme falls within National Character Area (NCA) 82: Suffolk Coast and Heaths and NCA 83: South Norfolk and High Suffolk Claylands. These are shown on **Application Document 6.4.2.1.3 Landscape Character - National and Regional** in **Application Document 6.4.2.1 Landscape and Visual** and **Application Document 6.3.2.1.B ES Appendix 2.1.B Landscape Baseline**.

- 2.2.4 At a regional scale, the Suffolk Onshore Scheme falls within the Valley Meadowlands, Forested Estate Sandlands, Wooded Plateau Claylands and Coastal Levels Regional Character Types identified in the East of England Landscape Character Typology (Landscape East, 2010). These are shown on **Application Document 6.4.2.1.3 Landscape Character - National and Regional** in **Application Document 6.4.2.1 Landscape and Visual** with further information provided within **Application Document 6.3.2.1.B ES Appendix 2.1.B Landscape Baseline**.
- 2.2.5 At a county scale, the Suffolk Onshore Scheme falls within the Valley Meadowlands, Rolling Estate Sandlands, Ancient Estate Claylands, Estate Claylands, Coastal Levels, Coastal Dunes and Shingle Ridges and the Nearshore Waters identified within the Suffolk Landscape Character Assessment (Suffolk County Council, 2011). These are shown on **Application Document 6.4.2.1.4 Landscape Character – County** in **Application Document 6.4.2.1 Landscape and Visual** and further information is provided within **Application Document 6.3.2.1.B ES Appendix 2.1.B Landscape Baseline**.
- 2.2.6 At a district scale, the Suffolk Onshore Scheme falls within a number of Landscape Character Areas (LCAs) published in the Suffolk Coastal Landscape Character Assessment (SCLCA) (East Suffolk Council, 2018). These are shown on **Application Document 6.4.2.1.5 Landscape Character – District** in **Application Document 6.4.2.1 Landscape and Visual** and include the following:
- B4: Fromus Valley;
 - D4: Thorpeness to Aldeburgh;
 - K3: Aldringham and Friston Sandlands; and
 - L1: Heveningham and Knodishall Estate Claylands.
- 2.2.7 Further information regarding the key characteristics of these LCAs is given in **Application Document 6.3.2.1.B ES Appendix 2.1.B Landscape Baseline**.

Existing Landscape Features

Saxmundham Converter Station site

- 2.2.8 The landscape across the Saxmundham Converter Station site comprises medium to large scale agricultural fields, with scattered farmsteads and properties interspersed within the landscape, some of which are set within mature tree vegetation. The field boundaries comprise hedgerows and hedgerow trees and blocks of woodland are scattered within the landscape, notably Bloomsfield's Covert to the south of the Site. The settlement of Saxmundham, which is located on lower topography to the west of the Saxmundham Converter Station site, is separated from the Site by a band of mature vegetation and trees. The B1119 extends from Saxmundham along the northern boundary of the Saxmundham Converter Station Site. Two Public Rights of Way (PRoW) cross the Site, which connect into the network of recreational routes within the wider landscape.

River Fromus area

- 2.2.9 The landscape within which the proposed permanent access route for the Saxmundham Converter Station is located comprises the shallow valley system of the River Fromus. This part of the riparian corridor of the River Fromus is characterised by willow

plantation, however it is assumed that this will have been felled prior to construction and operation. This landscape is influenced by the remnant parkland of Hurts Hall to the east of the River Fromus, which has now mostly been converted to arable land use. Large scale arable land rises to the east of the River Fromus towards mature vegetation associated with Bloomsfield's Covert. The landscape comprises the southern approach to Saxmundham along the B1121. Limited buildings on the southern edge of Saxmundham are perceptible from the landscape.

Friston Substation site

- 2.2.10 The landscape across the Friston Substation site comprises medium to large scale arable fields, bound by hedgerows and hedgerow trees. A notable woodland block comprising Laurel Covert and Grove Wood, and Grove Road, lie to the east of the Substation Site. Scattered properties and farmsteads, as well as larger agricultural buildings to the west of the Substation Site, are interspersed within the landscape, some of which are set within mature vegetation. The settlement of Friston is located to the south of the Substation Site, with scattered properties on the northern settlement edge perceptible from the Site. An existing overhead line and pylons cross the proposed Friston Substation Site. Whilst there is a network of recreational routes within the wider landscape, there is only one PRoW located within the Substation Site, connecting Friston with the wider landscape to the north.

Existing Arboriculture Features

- 2.2.11 The trees within and immediately adjacent to the Suffolk Onshore Scheme predominantly form field boundary features comprising of hedgerows, tree groups, individual trees and woodlands. Tree age varies from young to mature with a notable dominance of mature individual trees in the landscape. Common oak (*Quercus robur*) forms the dominant species across the Order Limits with the remaining species distribution considered to be relatively balanced.
- 2.2.12 A total of 51 veteran and four ancient trees were recorded in the tree survey within and immediately adjacent to the Order Limits. Surveyed veteran and ancient trees include a veteran oak (*Quercus robur*) and an ancient horse chestnut (*Aesculus hippocastanum*) adjacent to the River Fromus crossing.
- 2.2.13 Further information on the quality and condition of the trees is available in **Application Document 6.10 Arboricultural Impact Assessment**.

2.3 Ecology Baseline

- 2.3.1 The baseline ecological features present within the footprint of the Suffolk Onshore Scheme, and which would therefore be permanently lost are:
- approximately 200 m of hedgerow with trees, which are within the footprint of the Friston substation and its permanent accesses;
 - up to approximately 0.2 ha of cricket bat willow plantation;
 - approximately 0.1 ha of semi-improved neutral grassland within the footprint of the permanent access road over the River Fromus, and an associated permanent attenuation pond and drains;

- approximately 10.3 ha of arable land within the footprints of the Saxmundham Converter Station and Friston Substation and balancing ponds, and the permanent access; and
- ditch habitat within the footprint of the culvert on a ditch west of the River Fromus (the Western River Fromus tributary) required for the permanent access, as well as three permanent outfalls, one on the Western River Fromus tributary, one on the Eastern River Fromus tributary, and one on the River Fromus.

2.3.2 There are also several ecological baseline features that require mitigation in the form of protective working methods, notably ornithology (particularly nesting woodlark, barn owl and hobby) and Sandlings Special Protection Areas (SPA)/Leiston-Aldeburgh Site of Special Scientific Interest (SSSI), and commuting bats, particularly associated with a probable barbastelle roost at Bloomfield's Covert woodland, located outside of, but adjacent to, the Suffolk Onshore Scheme.

2.3.3 Finally, there are species present that require specific habitat creation away from the Saxmundham Converter Station and Friston Substation site. These are:

- breeding skylarks, which use open arable fields of which there will be a net loss due to the Saxmundham Converter Station and Friston Substation. To address this an area of habitat creation of skylark plots will be implemented; and
- acid grassland that will be temporarily lost due to the compound associated with the trenchless installation at the landfall and associated cable trench to the east of Leiston Road and north of the golf course. Although this is a temporary loss, the acid grassland will not revert to its original condition for several years post-restoration, so an existing area of acid grassland will be enhanced for a 10-year period to offset the lag-time loss.

3. Construction Mitigation

3.1 Approach to mitigation

- 3.1.1 The Proposed Project has been designed, as far as possible, following the mitigation hierarchy in order to, in the first instance, avoid or reduce impacts and effects through the process of design development, and by embedding measures into the design of the Proposed Project. Where avoidance is not possible, the next steps of minimisation, rehabilitation/restoration and ultimately offsetting, have been followed (where relevant and appropriate).
- 3.1.2 Mitigation measures typically fall into one of three categories: embedded measures; control and management measures; and additional mitigation measures. All mitigation measures for the Proposed Project are captured within **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**. Control and management measures are also captured within **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**.

3.2 Impact avoidance

- 3.2.1 Avoidance of features of landscape and ecological value has been a primary consideration throughout the development of the Proposed Project, including the design and selection of alternatives.
- 3.2.2 **Application Document 6.2.1.3 Part 1 Introduction Chapter 3 Main Alternatives Considered** sets out the main alternatives considered in relation to the Suffolk Onshore Scheme. It explains the alternative crossing points considered for the permanent access over the River Fromus.
- 3.2.3 As a result of these avoidance measures there will be no loss of veteran or ancient trees due to the Suffolk Onshore Scheme. The scheme, including the River Fromus bridge location, has been designed to retain these features. The Suffolk Onshore Scheme has also been designed to minimize losses of trees with bat roost potential and no identified bat roosts will be lost. No badger setts will require closure.
- 3.2.4 The Suffolk Onshore Scheme has been designed to avoid the temporary or permanent loss of notable habitats, as far as is practicable and will be constructed predominantly within arable habitats.

3.3 Impact mitigation

- 3.3.1 The measures outlined below will be implemented, as relevant and appropriate, prior to and during the construction phase of the Suffolk Onshore Scheme, the purpose being to minimize the impact of works on landscape and biodiversity features and to achieve legislative compliance.
- 3.3.2 Standard environmental best practice and mitigation will be implemented to ensure construction and operation of the Suffolk Onshore Scheme complies with legislation relating to protected species. It will also ensure the Suffolk Onshore Scheme does not

compromise the local conservation status of ecological receptors present within or in the vicinity of the Order limits.

3.3.3

Commitments embedded within the Suffolk Onshore Scheme design that will contribute to the avoidance of and/ or reduction of potential effects on landscape and visual amenity which are included within **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice** and **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)** include:

- GG02: A CEMP, Landscape and Ecological Management Plan (LEMP) and Construction Traffic Management and Travel Plan (CTMTP) will be produced and submitted to the relevant authority for approval prior to construction of the relevant stage of the Proposed Project to which it relates. The plan produced will be substantially in accordance with the outline versions submitted as part of the application for development consent. In accordance with the Requirement 6 of Schedule 3 of the draft DCO, the contractor will need to comply with the approved plans (including any amendments to the plans subsequently approved);
- GG04: A suitably experienced Environmental Manager will be appointed for the duration of the construction phase. In addition, a qualified and experienced Environmental Clerk of Works (ECoW) will be available during the construction phase to advise, supervise and report on the delivery of the mitigation methods and controls outlined in the CEMP. The ECoW will monitor that the works proceed in accordance with relevant environmental DCO requirements and adhere to the required good practice and mitigation measures. The ECoW will be supported as necessary by appropriate specialists, including ecologists, soil scientists and arboriculturists;
- GG06: A full photographic/aerial footage and descriptive record of condition (pre-condition survey) will be carried out of the working areas that may be affected by the construction activities prior to these works commencing. This record will be available for comparison following completion of reinstatement works to ensure that the standard of reinstatement at least meets that recorded in the pre-condition survey, or as agreed in the LEMP or if the DCO provides otherwise, then in accordance with the DCO;
- GG07: Land used temporarily will be reinstated (bearing in mind restrictions on planting and land use) to its pre-construction condition and use, unless agreed otherwise, save where the DCO provides otherwise, in which case such reinstatement will be in accordance with the DCO. This is subject to the provisions of Article 27 of the draft DCO. Hedgerows, fences and walls (including associated earthworks and boundary features) will be reinstated to a similar style and quality to those that were removed where possible, with landowner consultation;
- GG08: Where sensitive features will be retained within or immediately adjacent to the Order Limits, an appropriate protective area will be established using appropriate fencing and signage and will be inspected, repaired and replaced as necessary. The protective areas will be shown on the Retention and Reinstatement Plans contained within the LEMP;
- GG19: Earthworks and stockpiled soil will be protected by covering, seeding or using water suppression where appropriate;
- GG21: Construction lighting will be of the lowest levels necessary to safely perform each task. It will be designed, positioned and directed to reduce the intrusion into adjacent properties, protected species and habitats e.g. watercourses;

- GG26: Where working areas are fenced, the type of fencing installed will depend on the area to be fenced and will take into consideration the level of security required in relation to the surrounding land and public access, rural or urban environment and arable or stock farming. Consultation on the type of fencing will be undertaken with the relevant landowner and tenant where required. For some locations the fence used may also serve to provide acoustic and visual screening of the work sites and reduce the potential for disturbance of users in the surrounding areas. Fencing will be regularly inspected and maintained and removed as part of the demobilisation unless otherwise specified;
- LV01: The contractor(s) will retain vegetation where practicable. Where vegetation is lost and trees cannot be replaced in situ due to the restrictions associated with land rights required for operational safety, native shrub planting approved by National Grid will be used as a replacement, in accordance with the outline vegetation reinstatement plans included within the Outline Landscape Environment Management Plan;
- LV02: The contractor(s) will apply the relevant protective principles set out in British Standard (BS) 5837:2012: Trees in relation to design, demolition and construction. This will be applied to trees within the Order Limits which will be preserved through the construction phase, and to trees outside of the Order Limits where such measures do not hinder or prevent the use of the relevant working width for construction. All works to high grade trees, including trees under Tree Preservation Orders and veteran trees, will be undertaken or supervised by a suitably qualified arboriculturist;
- LV05: Subsoil and topsoil will be separated and stored to ensure no degradation in quality and reinstatement undertaken as soon as possible after completion of construction of each section/area of works;
- LV06: Temporary and separate placement of topsoil and subsoil will be stored adjacent to the trench where possible with the additional height of the subsoil storage used on whichever side requires greater screening benefit, where practicable. In some locations stockpiles will be remote from the trench, such as at pinch points where the corridor has been narrowed, and the additional height of the storage will be sensitively placed as far as possible;
- B04: To control the spread of invasive weeds in accordance with the Wildlife and Countryside Act 1981, any plant or machinery that has been used in areas infested with invasive species (both terrestrial and aquatic), such as Japanese knotweed and Himalayan balsam, will be thoroughly cleaned. Water used to clean vehicles will be controlled to prevent the spread of the plant (through seeds, rhizomes, fragments, etc.). The area will be cordoned off to prevent any inadvertent spreading;
- B07: Where the works require the crossing or removal of hedgerows, the gap will be reduced to a width required for safe working. Where hedge removals are necessary, 'dead hedging' should be used, where practicable, in the interim periods to retain connectivity during construction. Dead hedging can comprise vegetation arisings or artificial provision, such as willow screening panels or Heras fencing covered in camouflage netting. New hedgerow planting will contain native, woody species of local provenance;
- B11: Minimising the width of the cable corridor at ditch and hedgerow crossings to 20 m where possible (between the Saxmundham Converter Station and Friston

Substation the HVAC and HVDC cables will both be in trench resulting in a minimum gap of 39m);

- B12: Mature vegetation removed from hedgerows and ditches will be retained as close to the area of removal as possible, retaining intact root balls, where feasible and desirable, such that it can be re-used;
- W03: Riverbank and in-channel vegetation will be retained where not directly affected by installation works. Where ditches retaining seasonal flows are crossed, culverts in waterbodies will either preserve the natural bed or be box culverts with inverts sunk a minimum of 300 mm below the hard bed of the watercourse and natural / existing bed material placed across the inside of the culvert, to maintain existing channel gradients and habitat for aquatic invertebrates, as well as to ensure continued passage for in channel species;
- TT03: All designated Public Rights of Way (PRoWs) will be identified, and any potential temporary and/or permanent diversions applied for/detailed in the DCO. All designated PRoWs crossing the working area will be managed with access only closed for short periods while construction activities occur. Any required diversions will be clearly marked at both ends with signage explaining the diversion, the duration of the diversion (for temporary diversions) and a contact number for any concerns. This is outlined in the Outline Public Rights of Way Management Plans;
- A01: All tree work will follow the principles of BS3998:2010 Treework – Recommendations (BS3998:2010) (British Standards Institute) and will be carried out by suitably qualified and insured contractors;
- A02: A pre-construction check will be undertaken of trees within the Order Limits and remedial works actioned where appropriate (e.g. where they pose an unacceptable risk to people or property). Trees will be monitored during the construction period, and during operation where they pose a risk to infrastructure constructed as part of the Proposed Project. All staff operating on the Site are to be made aware of the need to look out for obvious signs of tree defects and to report them to the Site Manager who will seek further advice as necessary;
- A03: A banksman will be used where the movement of plant or long reach machinery occurs within 5m of any part of a retained tree to ensure no damage is sustained;
- A04: All storage or mixing of materials will take place in agreed allocated areas at least 5 m from the edge of the RPA of retained trees and at least 5 m from the edge of an ancient woodland buffer zone;
- A05: Retention of all veteran and ancient trees within or immediately adjacent to the Order Limits; and
- A06: All tree works required which are not identified within the Arboricultural Method Statement and final Tree Protection Plans will require consent from the relevant local planning authority.

3.3.4 Commitments embedded within the Suffolk Onshore Scheme design that will contribute to the avoidance of and/ or reduction of potential effects on biodiversity include:

- trenchless installation drilling equipment to avoid direct impacts on Sandlings SPA or Leiston-Aldeburgh SSSI (Commitment B21 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);

- measures for avoiding stuck trenchless installation drilling equipment (Commitment B22 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- Best practical means such as noise fencing or similar effective noise reduction methods around works areas, where required, to avoid significant disturbance of ecological receptors (Commitment B23 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- seasonal restrictions on some works:
 - the assumption will be that vegetation with the potential to support breeding birds will not be removed during the breeding bird season (March to August inclusive). If any works become necessary during the breeding bird season, works will be supervised by an Environmental Clerk of Works. Appropriate protection measures will be put in place should active nests be found. These will include exclusion zones around active nests until chicks fledge or nests become inactive as determined by monitoring by the Environmental Clerk of Works (Commitment B02 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
 - to avoid disturbance of nesting woodlark works close to known nesting areas will be commenced during the winter so there is already activity before the nesting season, the birds will then choose alternative nesting locations (Commitment B35 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
 - seasonal restriction on compound set-up for the HDD such that it occurs outside the nesting season (February to August) (Commitment B27 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
 - where the proposed works are to take place within arable fields or acid grassland, one of two approaches would be applied to the Suffolk Onshore Scheme to ensure no likely significant effects. First would be to clear crops from the fields between October and February before works commence and then ensure that vegetation is kept clear from those areas until construction starts in that area as any regrowth of vegetation could attract ground-nesting birds such as skylark and woodlark. The second approach is to agree with the landowner and/or tenant to leave the previous crop in the ground so that there is already a tall, dense crop in spring, which would deter ground-nesting birds from utilising that field. Where works are to take place in areas of acid grassland, the first of the two approaches would be utilised (Commitment B24 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
 - a watching brief would be introduced during vegetation clearance in the ditch west of the River Fromus. Displacement of water voles if any are encountered would occur under a Class Licence. This would restrict clearance of any locations where water voles are present to either 15 February to 15 April or 15 September to 31 October (Commitment B25 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- control of dust generation (CoCP measures GG17, GG18, GG19, GG20, AQ02, AQ03, AQ05 and AQ08 in **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**);

- water quality controls (CoCP measures W02, GH05, GG14, GG15, GG16, W06 and W11 in **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**);
- measures to manage risk of frac out (Commitment B09 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- minimising the cable corridor at ditch and hedgerow crossings to 20 m, or 39m where HVDC and HVAC cables must both cross (Commitment B11 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- the foundations of the bridge across the River Fromus would use soft-start non-percussive piling techniques to limit disturbance, which would assist in allowing sounds to increase gradually allowing fish in the immediate vicinity to swim away (Commitment B10 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- while the haul road will be fenced this fence will not go entirely to ground level so mammals such as badger will be able to pass (Commitment B15 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- there will be no lighting near any badger setts and a 40m setback between the identified badger sett and the construction compounds S04 and S08 (Commitment B26 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- a minimum 20 m setback of construction compounds from the hedge used by barbastelle which connects Important Hedgerows 3 and 5 as shown in **Application Document 6.4.2.2.A.7 Suffolk Important Hedgerows** within **Application Document 6.4.2.2.A Extended Phase 1 Habitat Survey Report - Figures** and in Plate 3.1 below, will be instituted (commitment B30 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);

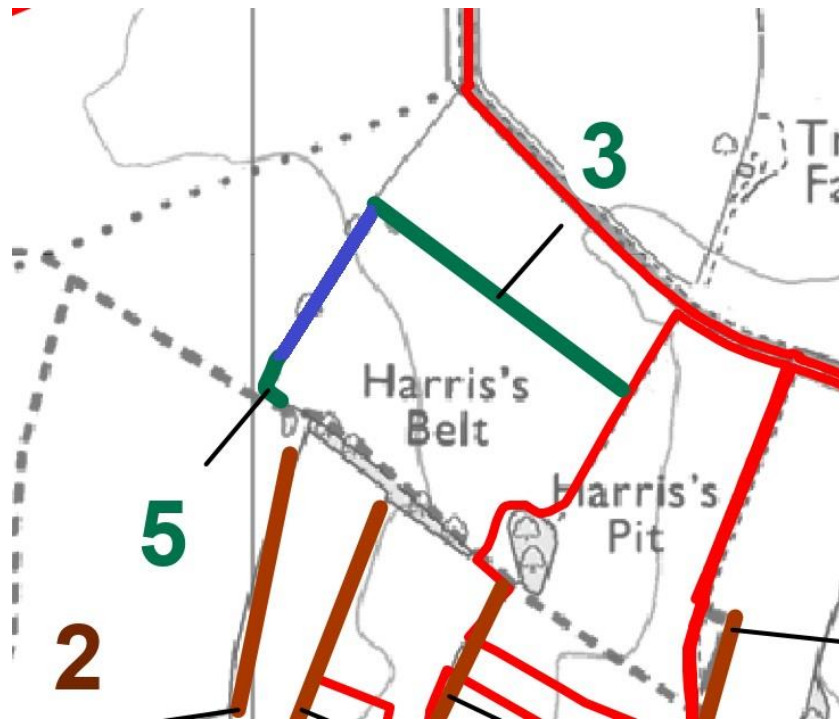


Plate 3.1 Hedgerow connecting Important Hedgerows 3 and 5 outlined in blue

- for Important Hedgerows (and particularly Hedgerows 3 and 5 as shown in **Application Document 6.4.2.2.A.7 Suffolk Important Hedgerows** within **Application Document 6.4.2.2.A Extended Phase 1 Habitat Survey Report - Figures** if compound options S04 and S05 are selected and Hedgerow 23 adjacent to Friston Substation) the hedgerows would need to be fenced to avoid incidental damage (commitment B31 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- as far as possible, trenches and excavations should not be left open overnight. Where there will be a risk of animal entrapment, a means of escape (such as a plank that can be used as a ladder) will be installed into all excavations that are left open overnight (Commitment B03 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- to avoid killing and injury of reptiles a two-stage strimming displacement technique will be used in key areas that may harbour reptiles (Commitment B05 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- where ditches retaining seasonal flows are crossed, culverts in waterbodies will either preserve the natural bed or be box culverts with inverts sunk a minimum of 300 mm below the hard bed of the watercourse and natural / existing bed material placed across the inside of the culvert, to maintain existing channel gradients and habitat for aquatic invertebrates, as well as to ensure continued passage for in channel species (Commitment W03 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);

- the culverts will also avoid narrowing of the natural channel width. Where bank materials cannot be preserved within the culvert (due to the weight or levels) they will also include a minimum 150 mm wide mammal ledge (with 600 mm headroom where ditch depth allows) to ensure continued passability by water voles (Commitment B17 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- to avoid disturbance of nesting woodlark outside the SPA, works close to known nesting areas will be commenced during the winter so there is already activity before the nesting season; the birds will then choose alternative nesting locations (Commitment B35 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- around construction compounds and the converter station and substation works areas, direct illumination of boundary features will be avoided. Lighting will be designed to comply with published guidelines (Commitment B38 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**); and
- during works in the broadleaved plantation east of the proposed Saxmundham Converter Station the cable route will be micro-sited to avoid the orchid population wherever possible, using an ecologist providing guidance on the ground (Commitment B29 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**).

3.3.5 Commitments embedded within the Suffolk Onshore Scheme design that will contribute to the avoidance of and/ or reduction of potential impacts to trees include:

- retention of all veteran and ancient trees within or immediately adjacent to the Order Limits (Commitment A05 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- all tree work will follow the principles of BS3998:2010 Tree work – Recommendations (BS3998:2010) and will be carried out by suitably qualified and insured contractors (Commitment A01 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- all tree works required which are not identified within the Arboricultural Method Statement and final Tree Protection Plans will require consent from the relevant local planning authority (Commitment A06 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- the final alignment of the permanent attenuation outfall pipe will avoid the area of constraint associated with T876S (Category A tree) (see **Application Document 6.10 Arboricultural Impact Assessment**) (Commitment A07 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
- the final alignment of the high voltage cable will avoid the area of constraint associated with T821S (Category A tree) (see **Application Document 6.10 Arboricultural Impact Assessment**) (Commitment A08 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**); and
- the final alignment of a temporary clean water drain will avoid the areas of constraint associated with T821S (Category A tree) and T822S (veteran tree) (see **Application**

Document 6.10 Arboricultural Impact Assessment) (Commitment A09 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**).

Ensuring continued connectivity for bats during works

- 3.3.6 Where hedgerow gaps or gaps in woodland belts exceed 10 m these will be closed at night (or reduced to a maximum of 10 m) through the use of mobile structures such as:
- hurdles (Plate 3.2), which could be interwoven with vegetation such as evergreen climbers (Commitment B36 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**);
 - temporary native hedges in troughs, such as ‘instant hedges’ (Plate 3.3). This could comprise single native species such as hornbeam (*Carpinus betulus*) or a native species mix;
 - native trees in planters, such as hornbeam or holly (*Ilex aquifolium*) (Plate 3.4); or
 - Heras fencing with attached shade mesh, plastic hedge or camouflage windbreak (Plate 3.5) (Commitment B07 of **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments**).
- 3.3.7 The most suitable method may vary by location and width of the gap to be closed.



Plate 3.2 Example hurdle (without vegetation)



Plate 3.3 Example hornbeam instant hedge



Plate 3.4 Example standard hornbeam trees in planters



Plate 3.5 Heras fencing with attached textured plastic hedgerow (source: HS2/ EKFB, in Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. Charter

- 3.3.8 The gaps in woodland belts are all in areas of plantation which would be cleared in the normal manner if the Suffolk Onshore Scheme did not proceed.
- 3.3.9 Structures utilised for connectivity for bats would need to be able to resist wind (for example Herras fencing may require triangular layout for bracing), be easily portable and sufficiently robust to withstand movement on a daily basis. Troughs or planters would need to be able to withstand movement, or be placed on a trailer that could be moved in and out of place. Instant hedges or trees in planters would be kept watered in order to maintain live vegetation during construction. The hedges or trees could then be used in planting once construction has ceased.
- 3.3.10 These measures are all set out in either **Application Document 7.5.3 Outline Onshore Construction Environmental Management Plan**, **Application Document 7.5.3.1 CEMP Appendix A Outline Code of Construction Practice**, **Application Document 6.10 Arboricultural Impact Assessment** or **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)**.

3.4 Protected species licences

- 3.4.1 Based on surveys and impact assessment, no protected species licences are expected to be required for the Suffolk Onshore Scheme.
- 3.4.2 Based on the survey undertaken for the Suffolk Onshore Scheme, dormice are assumed to be likely absent from the construction footprint, since no confirmed records of dormouse were identified from the nest tubes on site. However, due to some records of 'possible' dormouse nests (some of which were later confirmed to be other species i.e. wood mouse) and anecdotal information from landowners regarding possible dormouse presence, a precautionary method statement will be followed.
- 3.4.3 Vegetation clearance will be undertaken in two stages. The first stage will comprise an initial cut to 150-300 mm, with a second cut at least 24 hours later to ground level. Prior to each stage of clearance commencing, the Suitably Qualified Ecologist (SQE) will carry out a fingertip search of the area. The SQE will hold (or be accredited to work under) a WML-CL10a Natural England hazel dormouse class licence (Class 1 survey licence). They will check the area for signs of hazel dormouse, including nests. Clearance will only proceed if hazel dormouse is confirmed to be absent.

- 3.4.4 The SQE will remain on site until the vegetation suitable for hazel dormouse is cleared. All clearance works of vegetation that is suitable for dormouse must be undertaken using hand-held tools such as strimmers and chainsaws. In the unlikely event that a hazel dormouse or signs of hazel dormouse are encountered during the search it will be left in situ, works will cease, and a European Protected Species Mitigation Licence obtained from Natural England.

3.5 Tree Works

- 3.5.1 The Suffolk Onshore Scheme has been designed to minimise the removal of mature trees across the Order limits. Some removal and pruning of mature trees will be required to facilitate vehicle access, attenuation features, and for cabling works.
- 3.5.2 Where works in close proximity to retained trees cannot be practicably avoided, these works will be undertaken in accordance with the Arboricultural Method Statement and final Tree Protection Plan. All works will be undertaken in accordance with the current best practice in January 2025, which is defined in:
- a) British Standard (BS) 5837: 2012 Trees in relation to design, demolition and construction – Recommendations;
 - b) National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees; and
 - c) BS 3998: 2010 Tree works – Recommendations (British Standards Institution, 2010).
- 3.5.3 All necessary protective fencing would be installed prior to the commencement of any construction works. This would be set out in the Arboricultural Method Statement, the CEMP and a final Tree Protection Plan to be prepared pre-construction, pursuant to the DCO.
- 3.5.4 Where part of a group of trees is to be removed the final extent of tree loss will be determined on site by an arboriculturist who will assess the stability and suitability of retained trees.

4. Landscape and Ecological Reinstatement

4.1 Arable and grassland field margin reinstatement

- 4.1.1 Soils will be removed in sequence. Topsoil and subsoil will be stockpiled separately and will be restored in reverse sequence of removal (subsoil first, topsoil last) to retain the original soil profile. These fields could then be immediately returned to agricultural use following ploughing and in accordance with **Application Document 7.5.10.1 Outline Soil Management Plan - Suffolk**.
- 4.1.2 Arable field margins across the Suffolk Onshore Scheme can support uncommon annual arable plants such as common cudweed (*Filago germanica*), field gromwell (*Lycopsis arvensis*), common poppy (*Papaver rhoeas*), spurry (*Spergula arvensis*) and corn marigold (*Glebionis segetum*). The nature of these plants is that they persist in the seedbank and re-grow each year from seed. Therefore, preservation of the seedbank and suitable management (i.e. not cutting the margins until they have had an opportunity to set seed, and avoiding herbicide, fertilizer or lime use on, or spray drift into, the field margins) are key to the preservation of the populations. The nature of windblown seed spread means that the plants will not necessarily occur in the same locations every year. They could establish in any areas of suitable field margin.
- 4.1.3 To preserve these features, soil from grassland field margins will be kept separately from that in the arable areas. This will enable the seed bank topsoil to be restored following works, after which the seeds will germinate in the normal manner in the autumn following restoration, under the same favourable farm management that created the suitable conditions. Since existing farm practices created these conditions, the Proposed Project will not take on any management responsibility for these margins, which will be returned to the control of the relevant landowners and secured by agreement.
- 4.1.4 Grassland field margins will be returned to a grassland condition. The bare ground will be harrowed to raise a tilth of c. 5-10 cm and grass and wildflower seed mix then either broadcast or slot-seeded into the soil. The ground will then be rolled to maximise contact between seeds and soil.

4.2 Acid grassland reinstatement

- 4.2.1 Consideration was given to lifting the acid grassland as turfs so that they could then be stored and directly replaced. However, the acid grasslands have a shallow and very friable soil profile on sand. As such any attempt to lift turfs would be likely to be unsuccessful. Taking turfs also introduces the issue of keeping the turfs alive and watered during storage.
- 4.2.2 Given the shallow nature of the soil and the presence of an acid grassland seedbank within it, there is a high likelihood of acid grassland re-establishing in areas from the existing seed bank, and from the extensive areas of acid grassland and heathland in Sandlings SPA. This will commence in the first growing season following replacement of

the soil, and it is likely that by the second growing season following replacement a closed turf will exist.

- 4.2.3 Soils will be removed in sequence. Topsoil and subsoil (if there is subsoil) will be stockpiled separately and will be restored in reverse sequence of removal (subsoil first, topsoil last) to retain the original soil profile.
- 4.2.4 Once re-laid and rolled the bare ground will be lightly harrowed to raise a tilth of c. 5-10 cm. The area will then be left to recolonise from the seedbank and windblown seed from adjacent acid grassland but this will be monitored and managed (see later sections).

4.3 Hedgerow reinstatement

- 4.3.1 Where temporary gaps are to be created in hedgerows for construction, these will vary from approximately 7 m (if only haul road access is required) to approximately 20m or 39 m where the HVDC and HVAC cables will run parallel (where the cable corridor must traverse the hedgerow).
- 4.3.2 Wherever feasible and desirable, and particularly for Important Hedgerows, mature material will be removed from hedgerows in as large sections as possible and retained as close to the area of removal as possible. These will be watered until such time as they are reinstated. However, even if hedgerow material dies during this process, it can still be of value ecologically in helping to quickly re-establish a natural structure in the gap for purposes of (in particular) bat commuting along the hedgerow.
- 4.3.3 Once works are complete, temporary hedgerow gaps will be planted in the first available planting season post construction, with a combination of whips where hedgerows are reinstated over the cable corridor and whips and light standards or feathered trees beyond the cable corridor. The species mix will comprise species typically found in adjacent hedgerows and will likely comprise the following species:
- field maple (*Acer campestre*);
 - common hazel (*Corylus avellana*);
 - common hawthorn (*Crataegus monogyna*);
 - blackthorn (*Prunus spinosa*); and
 - dog rose (*Rosa canina*).
- 4.3.4 For Important Hedgerows, it will be ensured there is no reduction in the number of woody species from the pre-construction situation. For Important Hedgerows soil material will also be kept separately from that for other hedgerows to enable the same soil to be restored (thus containing the same seedbank).

4.4 Ditch reinstatement

- 4.4.1 Temporary habitat losses from ditches will be reinstated in the Winter following cable installation in that section, although a 12 m gap for the haul road (including culverts) will have to be retained until the end of the construction programme. Gaps in ditch marginal vegetation will either be planted with mature emergent vegetation purchased from nurseries or left to recolonize naturally from the adjacent ditch vegetation.

4.4.2 The emergent vegetation species mix¹ will comprise 20% common reed and 80% using 13 plants from the following palette:

- wild angelica (*Angelica sylvestris*);
- articulated rush (*Juncus articulatus*);
- blue water speedwell (*Veronica anagallis-aquatica*);
- common sedge (*Carex nigra*);
- lesser spearwort (*Ranunculus flammula*);
- meadowsweet (*Filipendula ulmaria*);
- purple loosestrife (*Lythrum salicaria*);
- ragged robin (*Silene flos-cuculi*);
- square stalked st Johns wort (*Hypericum tetrapterum*);
- valerian (*Valeriana officinalis*);
- water avens (*Geum rivale*);
- water forget me not (*Myosotis scorpioides*); and
- yellow flag iris (*Iris pseudacorus*).

¹ <https://www.habitataid.co.uk/products/wildflower-plug-plants-wet>

5. Long-term Landscape and Ecological Proposals

5.1 Landscape and Ecological Strategy

- 5.1.1 Good design has been a key consideration from the outset. The Environmental Impact Assessment (EIA) has informed the iterative design process, guided by design principles developed specifically to address the opportunities and constraints presented by the Suffolk Onshore Scheme. These principles have been developed in response to policy requirements, published landscape character assessment guidance and fieldwork analysis. The Design Principles are contained within **Application Document 7.12.1 Design Principles – Suffolk** Tables 3.1 and 4.1. The design commitment for the River Fromus bridge is contained in **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC) - LV14**.
- 5.1.2 With reference to **Figure 1 Saxmundham Converter Station Outline Landscape Mitigation** and **Figure 5 Friston Substation Outline Landscape Mitigation** (for Friston Scenario 2) in Appendix A of this document, the following design mitigation has been embedded in the Suffolk Onshore Scheme to minimise effects on the environment, including landscape character, visual amenity, biodiversity, and heritage assets (note that details relating to the Friston Substation are provided later in this chapter).
- 5.1.3 In developing the landscape design strategy, particular consideration was given to:
- Suffolk Coast & Heaths AONB Management Plan (Suffolk and Essex Coast and Heaths National Landscape, 2023), Suffolk Coast & Heaths AONB Nature Recovery Plan (Suffolk and Essex Coast and Heaths National Landscape, 2022), Suffolk Coast & Heaths AONB Guidance (Suffolk and Essex Coast and Heaths National Landscape, 2025) on the selection and use of colour in development;
 - the recommendations contained within relevant landscape guidelines, including the Natural England Statements of Environmental Opportunity (SEO) (Natural England, 2025) (Natural England, 2025), outlined in the profiles for NCA 82 and 83 and the Suffolk Coastal Landscape Character Assessment (Alison Farmer Associates, 2018); and
 - guidance contained within the Landscape Institute's Infrastructure Technical Guidance Note (TGN) 04/20 (Landscape Institute, 2020).
- 5.1.4 The overall objective of the landscape design is to integrate the Suffolk Onshore Scheme into its landscape setting and to avoid or minimise adverse landscape and visual effects as far as practicable. Accordingly, the landscape design aims to achieve the following:
- to integrate the Suffolk Onshore Scheme into the existing landscape pattern as far as practicable by utilising and following existing features, including vegetation;
 - to replace habitat lost as a result of construction of the Suffolk Onshore Scheme and enhance habitats through the creation of woodland, hedgerow, grassland and riparian habitats;

- to protect existing vegetation wherever possible, including the veteran and ancient trees at the River Fromus bridge crossing;
- to strengthen the existing landscape framework of the site, extending and enhancing the woodland planting along the western and southern boundaries with native woodland planting to provide structural screening to the Saxmundham Converter Station;
- to introduce native hedgerow and tree planting along sections of the B1119 to create vegetative layers within the landscape and partially screen views of the Saxmundham Converter Station, whilst maintaining some views of the planted edge of Saxmundham (identified in the Saxmundham Neighbourhood Plan as an important aspect of the setting and in views when approaching along the B1119 from the east);
- to consider opportunities for providing permissive access across the Saxmundham Converter Station site and establishing an attractive amenity value for users of the permanent PRoW diversions should this not conflict with safety, security or operational requirements for the Converter Station;
- to provide an integrated drainage solution with attenuation ponds planted with marginal wetland species set within a wider context of native scrub planting to improve the biodiversity value across the site;
- to strengthen areas of existing planting to provide greater biodiversity and screening function around the River Fromus Bridge;
- to establish native woodland planting within the areas previously planted with willow plantation to integrate and partially screen views of the River Fromus Bridge within the valley landscape;
- to integrate the permanent access route within the historic parkland landscape with hedgerow and occasional tree planting;
- to consider opportunities for advanced planting to provide early establishment of woodland planting; and
- monitoring and maintenance of new planting and seeding to ensure successful establishment.

5.2 Landscape and Ecological Proposals

- 5.2.1 The core habitat creation proposals are illustrated on **Figure 1 Saxmundham Converter Station Outline Landscape Mitigation** and **Figure 5 Friston Substation Outline Landscape Mitigation** (for Friston Scenario 2) in Appendix A of this document and are described below. Species mixes are also identified for the different planting interventions which have been agreed with stakeholders through the landscape and visual thematic meetings.
- 5.2.2 The result of these proposals is that there will be a permanent net increase in woodland, wetland and semi-natural grassland creation around the Saxmundham Converter Station and Friston Substation, and through the planting of hedgerows along the permanent access road. This habitat creation will require design, management, and monitoring. It is the purpose of this oLEMP to address those issues.

Woodland planting

- 5.2.3 New woodland will be planted around Saxmundham Converter Station and the River Fromus, primarily as mitigation to help screen sensitive receptors and soften views, but also to provide increased structure, ecological connectivity, and interest within the landscape. Species will be appropriate to the particular requirements of the geographical area, but also take account of climate change and potential pest and pathogen threats. Where practicable, woodland will include varied heights, spacing and species mix to maximise habitat diversity.
- 5.2.4 There will be a long-term net increase in woodland habitat due to the Suffolk Onshore Scheme with a total area of 214,931 m².
- 5.2.5 The species mixes for these areas of woodland are shown in Table 5.1 and Table 5.2 below.

Table 5.1 Native woodland mix

Common Name	Botanical Name	Proposed Mix %
common oak	<i>Quercus robur</i>	15
downy birch	<i>Betula pubescens</i>	15
small-leaved lime	<i>Tilia cordata</i>	10
field maple	<i>Acer campestre</i>	10
common beech	<i>Fagus sylvatica</i>	10
rowan	<i>Sorbus aucuparia</i>	10
common alder	<i>Alnus glutinosa</i>	10
common holly	<i>Ilex aquifolium</i>	5
common privet	<i>Ligustrum vulgare</i>	5
silver birch	<i>Betula pendula</i>	5
whitebeam	<i>Sorbus subg. Aria</i>	5

Table 5.2 Native woodland edge mix

Common Name	Botanical Name	Proposed Mix %
common hawthorn	<i>Crataegus monogyna</i>	20
common dogwood	<i>Cornus sanguinea</i>	10
common hazel	<i>Corylus avellana</i>	10
common crab apple	<i>Malus sylvestris</i>	10
blackthorn	<i>Prunus spinosa</i>	10

Common Name	Botanical Name	Proposed Mix %
goat willow	<i>Salix caprea</i>	10
common elder	<i>Sambucus nigra</i>	10
guelder rose	<i>Viburnum opulus</i>	10
common spindle tree	<i>Euonymus europaeus</i>	5
common holly	<i>Ilex aquifolium</i>	5

Native hedgerow planting

- 5.2.6 A section of native hedgerow and tree planting is proposed along the B1119 and the permanent access road (15,866 m²). The new sections of hedgerow will provide both a valuable habitat, forming important wildlife corridors as well as a visual screening function by creating additional vegetation layers within the landscape.
- 5.2.7 The tree planting along the permanent access road will comprise occasional tree planting to reflect the historic parkland landscape. In the long-term this will create new habitat for wildlife including nesting birds and commuting bats, particularly since the permanent access road will only be subject to light traffic and will not be lit. The hedgerow and tree planting will contain the following species mix shown in Table 5.3 below.

Table 5.3 Native hedgerow mix

Common Name	Botanical Name	Proposed Mix %
field maple	<i>Acer campestre</i>	20
common hornbeam	<i>Carpinus betulus</i>	5
common hazel	<i>Corylus avellana</i>	2
common hawthorn	<i>Crataegus monogyna</i>	55
common dogwood	<i>Cornus sanguinea</i>	5
common privet	<i>Ligustrum vulgare</i>	5
blackthorn	<i>Prunus spinosa</i>	2
common buckthorn	<i>Rhamnus catharticus</i>	2
dog rose	<i>Rosa canina</i>	2
holly	<i>Ilex aquifolium</i>	2

Grassland planting

- 5.2.8 New species-rich neutral grassland will be implemented around the Saxmundham Converter Station site, focused along service corridors and the HVDC and HVAC cable

corridors. Open areas of grassland will also be established within pockets of woodland creating open glades and along the permanent PRow diversions. Grassland will also be established along the permanent access road and around the attenuation ponds between the riparian planting and woodland areas. There will be a long-term net increase in semi-natural grassland habitat due to the Suffolk Onshore Scheme. A total area of 69,414 m² of neutral grassland will be created.

- 5.2.9 The species mix for the species-rich neutral grassland is the EM3 Special General Purpose Meadow mix² or similar approved.

Pond and wetland habitat creation

- 5.2.10 An attenuation pond is proposed to the south of the Saxmundham Converter Station along with an open channel connecting the pond to an outlet pipe to the south. A further two permanent attenuation ponds are proposed adjacent to the permanent access road either side of the River Fromus Bridge. Whilst the attenuation ponds have primarily a drainage attenuation function, they will be designed such that they integrate positively within the landscape and provide improved biodiversity and habitat for riparian mammals. There will be a long-term net increase in wetland habitat due to the Suffolk Onshore Scheme with an anticipated total area of 8543 m². This equates to an increase of 500m of perimeter due to the permanent attenuation ponds.
- 5.2.11 These ponds will be designed to be organic in shape and to be of value for riparian mammals by retaining an earth ledge and sloping bank above a shallow (e.g. minimum 10 cm) permanent water level. The ledge will be planted with emergent riparian vegetation.
- 5.2.12 The riparian planting species mixes are identified below:
- Wetland Plug Mix - The wetland plug mix³ will comprise 20% common reed and 80% using thirteen plants from the following palette wild angelica, articulated rush, blue water speedwell, common sedge, lesser spearwort, meadowsweet, purple loosestrife, ragged robin, square stalked st Johns wort, valerian, water avens, water forget me not, yellow flag iris; and
 - riparian grassland seed mix - The riparian grassland seed mix is EM8 Meadow Mixture for Wetlands⁴.

Riparian enhancement of River Fromus corridor

- 5.2.13 The Proposed Project will deliver enhancement of an approximately 500 m stretch of the riparian corridor along the River Fromus from approximate grid references TR 30665 62754 to TR 31176 62863. Within this stretch (although not for its entire length) there will be reprofiling of selected areas of the banks of the River Fromus at specific locations (where it would not, for example, require displacement of water voles) to create an approximately 50 cm wide berm just above the typical summer water level. This berm will be planted with riparian vegetation. This will enhance the value of the River Fromus since this stretch of the river has little riparian emergent vegetation. The

■ _____

■ _____

■ _____

■ _____

replanting will be focused on the new bridge, partly in order to improve connectivity beneath the bridge structure; however, other stretches will also be diversified.

- 5.2.14 Riparian planting species mixes are identified above in paragraph 5.2.12.

5.3 Acid grassland restoration and enhancement

- 5.3.1 Since acid grassland is a priority habitat under the Natural Environment and Rural Communities (NERC) Act 2006 and the Suffolk Biodiversity Action Plan, and is nationally and regionally scarce, the Suffolk Onshore Scheme proposes c. 6 ha of acid grassland creation and/or enhancement, as identified on **Figure 4 Saxmundham Converter Station Enhancement Areas** in Appendix A of this document. This area will be secured by agreement with the landowner or by compulsory acquisition powers included within the DCO. The objective will be to secure well-structured acid grassland which will in turn provide nesting habitat for skylarks and foraging (and potentially nesting) habitat for woodlarks. The southern part of the parcel contains woodland; acid grassland adjacent to woodland can be particularly suitable for woodlarks. Acid grassland is not typically botanically diverse, but characteristic acid grassland plants will be part of the objectives for the management.
- 5.3.2 This management will commence delivery prior to the loss of acid grassland east of Leiston Road and will be secured for 10 years to offset the lag time in restoration of the existing acid grassland that can be expected once the cable trench works are complete, and the HDD compound and haul road are removed. The plot identified in the Order Limits for this enhancement is on suitable, relatively shallow, sandy, free-draining soils with a low pH 6, and is close to existing areas of acid grassland. To help meet the strengthened duty “seek to further the purpose of” AONBs, introduced by the Levelling-up and Regeneration Act 2023, the parcel of land selected is also within the AONB. For further information regarding the strengthened duty refer to **Application Document 7.1 Planning Statement**. The parcel identified within the Order Limits is much larger than 6 ha; this is to provide flexibility over how and where enhancement can be delivered as part of the detailed design.
- 5.3.3 The overall objective would be that during the spring and early summer, the grassland will have a good cover of flowering grass species and wildflower species and may also contain scattered areas of scrub. Grazing or cutting will ensure a variety of plant heights. Bare ground will be very limited. By autumn, the sward will vary in height with tussocks of grass. Some grasses and wildflowers will be allowed to go to seed.

5.4 Skylark habitat enhancement

- 5.4.1 The Environmental Statement identifies that there will be a net loss of skylark nesting habitat as a result of the Suffolk Onshore Scheme; some of this will be temporary while other areas will be addressed through the aforementioned acid grassland enhancement and management. However, there will also be loss of arable land which is used by nesting skylark (and other ground nesting birds in lesser numbers). A 12 ha area of arable land has therefore been included within the Order Limits, south of the construction access and east of the River Fromus, to secure suitable nesting habitat for skylark for forty years (this being the lifetime of the Saxmundham Converter Station). The arable land identified is shown on **Figure 4 Saxmundham Converter Station Enhancement Areas** in Appendix A of this document. This area will be secured by agreement with the landowner or by compulsory acquisition powers included within the DCO.

- 5.4.2 The field has been chosen as it provides a large open field which is sheltered but also provides large areas that are not close to sources of predators such as woodland blocks.
- 5.4.3 The field(s) will be available for skylark plots prior to the establishment of construction compounds north of Saxmundham Converter Station, or the Saxmundham Converter Station or Friston Substation (i.e. from winter 2026) and will be secured for the lifetime of the scheme. The lifetime of the Saxmundham Converter Station and Friston Substation is intended to be 40 years.
- 5.4.4 Management prescriptions for how this land will be managed for skylark are provided in the management section (Chapter 7).

5.5 Barn owl and hobby nesting opportunities

- 5.5.1 The old crow/rook nest that was used in 2024 by nesting hobby (see **Application Document 6.2.2.2 Part 2 Suffolk Chapter 2 Ecology and Biodiversity**) fell out of its tree naturally; however, in order to provide a net increase in resource for nesting hobby, three wicker baskets will be placed in trees at least 200 m from construction works, to provide undisturbed nest locations for hobby before the breeding season commences. The precise locations will be decided on the ground by an ornithologist and are therefore not shown on maps. However, the commitment (B33) to the mitigation is made in **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)**. The baskets will be retained for five years following construction, since by that time the risk of any disturbance due to the Suffolk Onshore Scheme will have ceased.
- 5.5.2 The relocation of the proposed River Fromus Bridge further north from previously proposed locations means that the veteran tree that contains a barn owl nest box will now be retained. However, the tree will still be relatively close to the construction works for the River Fromus bridge. Disturbance of nesting barn owls would be an offence under the Wildlife & Countryside Act 1981 (as amended). Therefore, to ensure this does not occur, the existing barn owl nest box will be relocated to another tree within the Order Limits further south of the bridge, and two additional nest boxes added to provide a net enhancement. These nest boxes will be retained for five years following construction, since by that time the risk of any disturbance due to the Suffolk Onshore Scheme will have ceased.
- 5.5.3 The wicker baskets do not have a particular prescription or design as they are not fundamentally designed for birds. However, baskets large enough to be used by nesting hobby will be chosen. The barn owl boxes will be of a standard design such as the design presented on the website of the Barn Owl Trust.
- 5.5.4 Prescriptions for monitoring and replacing these baskets and boxes are presented in Chapter 7.

5.6 Bat roosting opportunities

- 5.6.1 Three trees with PRF-I (potential for individual bats) would be removed to facilitate the construction of the proposed Suffolk Onshore Scheme: trees 1-2, 162-2 and 285. No bats were recorded using these trees during the baseline surveys; therefore, there are no confirmed roosts. However, the potential remains for bats to colonise the trees before these are removed. Bats are protected from killing or injury under the Wildlife

and Countryside Act 1981 (as amended) (HM Government, 1981). Therefore, these trees would be required to be removed under a precautionary working method prior to the start of construction works to ensure no bats are killed or injured as follows, under the supervision of a suitably qualified ecologist who holds at least a Natural England WML-CL18 (Bat Survey Level 2):

- The felling contractors will be notified that the trees have been assessed for bats by way of a toolbox talk, and that although no signs of roosts have been identified, potential for bat occupancy was identified;
- Trees will be subject to an aerial inspection of features by an ecologist who holds a Natural England WML-CL18 (Bat Survey Level 2) licence where possible;
- Where aerial inspection is not possible, trees will be soft felled (sections of the tree will be carefully lowered to the ground for inspection by an ecologist) under an ecological watching brief;
- Trees will be felled using hand tools; and
- The removal of the trees should be undertaken at a time of year least likely to impact on bats.

5.6.2 Should bats be discovered, clearance should stop immediately, and a Natural England licence should be obtained before works continue.

5.6.3 Three replacement bat boxes would be installed on trees nearby within the Order Limits for each tree with potential to support bats that is to be removed. The replacement boxes should be constructed of woodcrete to ensure longevity and be suitable for use by a range of species. Suitable examples include the Schwegler 2F bat box that is suitable for the smaller UK bat species, Schwegler 1FF bat box suitable for both smaller and larger UK species and Schwegler 1FD bat box with internal panels suitable for small crevice dwelling species. Bat boxes should be fitted at a height of 3m to 5m, facing south-east to south-west, with a clear flightline (with the absence of clutter, such as branches, within a drop zone beneath the box entrance for access and to increase the chance of bats finding the bat boxes.

5.6.4 The precise locations will be decided on the ground by an experienced bat worker and are therefore not shown on maps. However, the commitment (B06) to the mitigation is made in **Application Document 7.5.3.2 CEMP Appendix B Register of Environmental Actions and Commitments (REAC)**.

5.7 Friston Substation Landscape and Ecological Proposals

5.7.1 Under Friston Substation Scenario 1 as explained in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**, where Friston Substation is installed under the current consent sought by Scottish Power Renewables (SPR), there is the potential for conflict between SPR's proposed woodland and tree mitigation planting and the HVDC and HVAC cable corridors of the Proposed Project. In order to ensure that the SPR mitigation planting can maintain its required function, the Order Limits have been extended to allow future design details to be developed with SPR to ensure their planting is not subsequently removed by the Proposed Project.

5.7.2 Under Friston Substation Scenario 2 as explained in **Application Document 6.2.1.4 Part 1 Introduction Chapter 4 Description of the Proposed Project**, where Friston Substation is built as part of the Proposed Project, landscape and ecological mitigation will be required. Under this scenario, the following mitigation proposals will be

implemented as shown in **Figure 5 Friston Substation Outline Landscape Mitigation** in Appendix A of this document.

Woodland Planting

- 5.7.3 New woodland will be planted to the south of Friston Substation linking Grove Wood and Friston House, with the intention of separating Friston Substation from Friston and Grove Road. The woodland belt will be located north of Friston so as to retain the open rural setting of the village while providing screening of Friston Substation. The woodland will not only have a screening function but will provide increased structure, ecological connectivity and interest within the landscape.
- 5.7.4 The species mixes for the woodland are shown in Table 5.1 and Table 5.2.

Native hedgerow planting

- 5.7.5 Hedgerow planting is proposed around the Friston Substation with a focus on strengthening existing hedgerows and supplementing these with new ones along historic field boundaries to provide a layered screening in views. The hedgerows provide connectivity with existing and proposed woodlands and hedgerows in the surrounding landscape.
- 5.7.6 The species mixes for the hedgerow are shown in Table 5.3.

Grassland planting

- 5.7.7 Existing agricultural land use will be retained around the Friston Substation site, or land will be returned to agricultural use following the construction period where possible. Species-rich neutral grassland will be established in areas immediately around the Friston Substation and in small fields not viable for agricultural use. This will provide a low maintenance ground cover which enhances local biodiversity in areas that are not to be returned to agricultural use or planted as woodland.
- 5.7.8 The species mix for the species-rich neutral grassland is the EM3 Special General Purpose Meadow mix⁵ or similar approved.
- 5.7.9 A riparian grassland seed mix (EM8 Meadow Mixture for Wetlands⁶) will be sown around the attenuation ponds and open swales.

5.8 Phasing of Landscape Proposals

- 5.8.1 Where planting areas do not conflict with construction compounds and activities, advanced planting will be undertaken in the first available planting season prior to construction commencing. These areas will be developed in detail as part of the detailed LEMP but, subject to contractor discussions, could include the areas identified on **Figure 3 Saxmundham Converter Station Outline Landscape Mitigation - Timing of Planting** in Appendix A of this document.

■ [REDACTED]

[REDACTED]

■ [REDACTED]

[REDACTED] ■

6. Maintenance and Management Aims, Prescriptions, and Objectives

6.1 Introduction

- 6.1.1 This section describes how existing and proposed habitats will be protected or implemented during construction, maintained during the first five years following implementation, and managed in the long term for the lifetime of the Suffolk Onshore Scheme.
- 6.1.2 As the detailed design progresses, further details will be provided, particularly in relation to plant species selection, specification of seed mixes, management prescriptions and timescales, and site-specific mitigation and enhancement elements.
- 6.1.3 Implementation and monitoring works will be supervised by the ECoW.

6.2 Management Periods

- 6.2.1 All planting associated with the reinstatement of the landfall and HVDC and HVAC corridors will be maintained for a five-year period. All mitigation planting associated with the permanent access road, River Fromus bridge, Saxmundham Converter Station and Friston Substation under Scenario 2, will be maintained for the lifetime of the asset.
- 6.2.2 For the parcel of acid grassland enhancement located within the AONB, the management period will be ten years.
- 6.2.3 The skylark nesting habitat will be maintained for the lifetime of the Saxmundham Converter Station.
- 6.2.4 The barn owl and hobby nesting baskets will be retained for five years following construction, since by that time the risk of any disturbance due to the Suffolk Onshore Scheme will have ceased.

6.3 Existing Retained Trees and Shrubs

- 6.3.1 During construction the retained hedgerows, woodland and trees will be protected in accordance with the Arboricultural Method Statement and final Tree Protection Plan which will be secured via the DCO Schedule 3 Requirement 8. The measures to be employed will include the use of clearly defined stand-offs (secured with temporary protective fencing), managing the structure and integrity of the retained vegetation and the soil upon which it relies, and undertaking any pruning outside of the bird breeding season.
- 6.3.2 Retained trees will be periodically inspected by an arboriculturist during construction to ensure that the tree protection measures detailed in the Arboricultural Method Statement and the final Tree Protection Plans are adhered to. Where sensitive operations are required within Root Protection Areas (RPA) of retained trees, works will be undertaken under the supervision of an arboriculturist to ensure that agreed methodologies are fully implemented, to record any root pruning and to recommend

further arboricultural remedial works where required. All works requiring arboricultural supervision will be detailed within the Arboricultural Method Statement.

- 6.3.3 Retained trees will require periodic inspection to assess their structural condition and safety. Occasional removal of dead wood or other remedial works to address significant defects may be required in areas of frequent access and will be the responsibility of the tree owner.
- 6.3.4 During the construction and operation of the Proposed Project, all staff operating on site are to be made aware of the need to look out for obvious signs of tree defects and to report them to the Site Manager who will seek further advice as necessary.

6.4 Implementation of Native Planting (General)

- 6.4.1 Planting will take place in the first available planting season following consent being granted, ideally during November and December for bare root stock, to reduce losses incurred during recent dry springs.
- 6.4.2 Plants will be inspected at the nursery and on delivery, prior to planting. Plants will be protected from strimming damage and animals through guards, preferably biodegradable; although consideration will be given to methods of avoiding excessive use of guards and the use of other measures including deer fencing of larger woodland areas. Trees will be staked in line with industry standard specifications.
- 6.4.3 All tree planting will adhere to BS:8545 Trees: from nursery to independence in the landscape – Recommendations (2014) and the UK Forestry Standard: The governments' approach to sustainable forest management (2023) (Forest Research, 2023).

6.5 Woodland planting

Function

- 6.5.1 Woodland belts are proposed in areas to provide a more substantial visual screen. Proposed woodland and tree planting will increase tree cover and provide ecological value and habitat connectivity. Trees will be managed to achieve their maximum mature height for the species.

Implementation

- 6.5.2 The locations of proposed woodland are illustrated on **Figure 1 Saxmundham Converter Station Outline Landscape Mitigation** and **Figure 5 Friston Substation Outline Landscape Mitigation** in Appendix A of this document.
- 6.5.3 Woodland areas will comprise, woodland and woodland edge mix. Areas will be pit planted in cultivated ground to accommodate the full depth of roots, then levelled and the soil firmed. Woodland and shrub plants will be planted in single species groups of 5no. minimum and protected against mammalian pests.

Establishment Maintenance

- 6.5.4 A detailed plan for the establishment and management of new trees and shrubs will be developed for the five-year establishment maintenance period.

- 6.5.5 The aim of establishment maintenance will be to support the early stages of growth to encourage bushy growth and the canopy to close, reducing future management requirements to address competition from weeds. The trees and shrubs will be maintained in line with the recommendations of a ECoW.
- 6.5.6 Establishment maintenance will be based on the following principles and outline prescriptions:
- maintain a 1 m weed-free circle around trees and shrubs through mechanical control;
 - water new plants to minimise failures in periods of drought;
 - remove litter, rubbish, and debris from planted areas throughout the year at each inspection visit;
 - re-firm soil around roots to ensure plants are supported and upright in spring;
 - inspect and adjust guards, ties and stakes in spring and autumn and after strong wind events;
 - check and record failed or defective plants annually in September;
 - replace failed or defective plants with matching species of the same size during the next planting season after failure; and
 - undertake quarterly check of plants to record their growth and condition.

Long-Term Management

- 6.5.7 The long-term management of new tree and shrub belts will focus on the following interventions within the Order limits:
- all woodland, woodland buffer and native tree belt planting plots will undergo an annual condition assessment, and an appropriate programme of works will be developed to address changes in condition and site requirements;
 - from year five onwards, guards, ties and stakes will be removed from plants;
 - between years seven and ten, planted areas will be reviewed and thinned out as necessary to remove any poor or weak specimens, which will help other specimens to flourish and provide space for trees and shrubs to further establish;
 - the understorey of woodland, woodland buffers and native tree belts will be coppiced in stages to minimise disturbance to wildlife, as required, as part of good woodland management;
 - management of bramble will be carried out to prevent encroachment into adjacent areas; and
 - arisings from thinning or other woodland management functions will be retained on site in the form of dedicated brash and wood piles or wind-rows, for the benefit for fungi, lichen, and invertebrates.

6.6 Native hedgerow planting

Function

- 6.6.1 New hedgerow and tree planting will be established along the B1119 and along the permanent access road and at Friston Substation under Scenario 2. Hedgerows will be maintained to a height between 2.5 m and 3.5 m and 'infilled' where there are gaps in the existing hedgerows that the new hedgerow is connecting to.

Implementation

- 6.6.2 The location of the hedgerow and tree planting is shown on **Figure 1 Saxmundham Converter Station Outline Landscape Mitigation** and **Figure 5 Friston Substation Outline Landscape Mitigation** in Appendix A of this document.
- 6.6.3 Hedge trenches shall be dug 450 mm wide by 450 mm deep, the base of which shall be broken up prior to returning backfill mixture. All stock to be supplied bare root if in season and container grown if planted out of season.

Establishment Maintenance

- 6.6.4 A detailed plan for the establishment and management of new hedgerows will be developed for the five-year establishment maintenance period.
- 6.6.5 The aim of establishment maintenance will be to support the early stages of growth to encourage thick, bushy growth and good form. This is based on the following principles and outline prescriptions:
- maintain a 0.5 metre weed free strip either side of hedgerow through chemical and mechanical control;
 - first cut in spring to 45-60 cm above ground level taking care to exclude hedgerow trees;
 - water new plants to minimise failures in periods of drought;
 - remove litter, rubbish, and debris from planted areas throughout the year;
 - re-firm soil around roots to ensure plants are supported and upright in spring each year;
 - inspect and adjust stakes, guards, and ties in spring and autumn;
 - check and record failed or defective plants annually in September;
 - replace failed or defective plants with matching species of the same size during the next planting season after failure; and
 - ECoW to undertake a quarterly check of plants to record their growth and condition.

Long-Term Management

- 6.6.6 The long-term management of new hedgerows will focus on the following interventions:
- hedgerows will be managed and maintained at a height of between 2.5 m and 3.5 m (allowing for individual trees within the hedgerow to establish and reach maturity);

- cutting will be carried out at the end of the winter in February, thereby retaining berries through the winter months for wildlife and avoiding the bird breeding season;
- overgrowing or overhanging branches will be removed from any pathways to keep them unobstructed;
- dead, over-mature or dying hedgerow trees will be subject to removal where they are considered dangerous on health and safety grounds, and in accordance with any protected species constraints; and
- monitoring will be undertaken to detect any significant changes in hedgerow and tree health and condition (maintenance and condition checks will be made every three years).

6.7 Reinstated acid grassland

- 6.7.1 The reinstatement of the existing acid grassland areas will be monitored by a suitably experienced ecologist on a biannual (twice yearly) basis for the five-year post-restoration period to ensure that no issues have arisen and to introduce remedial action if needed.
- 6.7.2 For the first year or two years after soil reinstatement (or any resowing, see below) there would be no grazing to allow the vegetation to establish (although there may need to be some spot treatment of weeds). For the second year the site would be subject to a low-intensity mowing regime (e.g. cutting to a height of c. 10cm in autumn and using arisings in stockpiles as habitat for reptiles). There would be a restriction on topping/flailing during the bird ground-nesting season (i.e. avoiding March to August). From year three it should be possible to reintroduce the existing pre-development management regime including any grazing.
- 6.7.3 If the acid grassland redevelopment is not proceeding according to the success criteria agreed with the local planning authority, then acid grassland seed will be obtained from a nearby suitable source (such as within Sandlings SPA) by agreement with the landowner and then sown on the field at a rate of c. 1-2 grams per square metre (10-20 kg per hectare) in September/October, using a seed drill or slot seeder. Alternatively, the seed could be sown broadcast, but this will require the raising of a shallow tilth (c. 5-10cm) and rolling post-sowing to maximise seed contact with the soil.

6.8 Species-rich neutral grassland

Function

- 6.8.1 Species-rich neutral grassland will be established across Saxmundham Converter Station site and Friston Substation under Scenario 2.
- 6.8.2 Where practicable, seed will be obtained from a local source for the purpose of maintaining continuity with local species-rich grasslands.
- 6.8.3 Receiving soils will be prepared to reduce nutrients where practicable. This could include incorporating a substrate to reduce nutrient levels or removing topsoil to expose the sub-soil. Herbicide use can be beneficial but the risks of using across a large area, or close to a sensitive receptor will need to be considered.
- 6.8.4 Once the nutrient level is reduced, all clods will be broken up and alien material (such as plastics and metals) above 50 mm in size will be removed. The top 50 mm of the soil

will then be raked to prepare a fine tilth for the seedbed. The raking will occur immediately before sowing.

- 6.8.5 Seeding will be completed in either autumn or spring and only once the receiving soils have been tilled and adequately prepared.

Implementation

- 6.8.6 The locations of species-rich neutral grassland area shown on **Figure 1 Saxmundham Converter Station Outline Landscape Mitigation** in Appendix A of this document.
- 6.8.7 The species mix will provide a self-sustaining, low maintenance species-rich neutral mixture that brings environmental benefits to pollinators and birds, whilst reinforcing positive landscape character features. However, this may be subject to change based on the needs of the site's biodiversity and prevailing soil types.

Establishment Maintenance

- 6.8.8 A detailed plan for the establishment and management of grassland areas will be developed for the five year establishment maintenance period.
- 6.8.9 The aim of establishment maintenance will be to encourage development of a diverse sward of grasses and herbs. Establishment maintenance will be based on the following principles and outline prescriptions:
- immediately after sowing, the ground will be left undisturbed and un-watered to allow the grassland to establish naturally;
 - mowing (where required) will be carried out in either August or September in the first year with subsequent cuts in March and September;
 - visual inspections will be made during the growing season;
 - control of undesirable species (e.g. arable weeds) and injurious weeds will be undertaken to prevent colonisation and domination of the grassland through the use of additional cuts during the growing season or if essential, a selective herbicide (where appropriate and managed in accordance with locality e.g. applying appropriate buffers to watercourses or grasslands managed for invertebrates);
 - botanical surveys will be carried out in late spring to confirm that the establishment of the grassland mosaic has been successful in achieving their intended aims and objectives. Spot checks will be undertaken at locations within each grassland area by a suitably qualified ecologist during years 1, 3 and 5, the purpose being to record plant species, their distribution, and the overall condition of the grassland. Other relevant indicators relating to the sward that may require remedial action during the contract period or in the future will also be recorded; and
 - if remedial action is required, the ECoW will agree action with a suitably qualified ecologist and areas identified will be re-seeded.

Long-Term Management

- 6.8.10 The long-term management of grasslands within the site will be undertaken to maintain a relatively stable grassland community in the long-term, and to avoid areas naturally progressing into tall, dense, grass-dominated areas to perform the function as described for each grassland type listed below.

6.8.11 Measures for the grassland mosaic will focus on a regime of:

- species-rich and flower-rich grassland will receive one cut annually in September. Cuttings will be removed to appropriate storage areas on site;
- grassland within visibility splays will be maintained at the required height where necessary, with less frequent management to allow a taller and more diverse sward at the back of the verges behind the required visibility splays;
- visual inspections during the growing season. Where any areas not already subject to removal of cuttings, are identified as having a decline in habitat condition or species diversity, a targeted cut and collect management regime will be implemented on a temporary basis;
- control of undesirable species (e.g. arable weeds) and injurious weeds to prevent colonisation and domination of the grassland using a selective herbicide (where appropriate and managed in accordance with locality e.g. applying appropriate buffers to watercourses or grasslands managed for invertebrates);
- riparian margins adjacent to grassland areas may be left for a year or more between cuts to provide dense ground level cover for fauna, including amphibians, small mammals, and invertebrates; and
- for marginal areas (species-rich grassland), if ground nesting birds are absent, plots may be scarified or 50% cut between mid-June and mid-July, with arisings removed to appropriate storage areas on site.

6.9 Pond creation

6.9.1 The ponds will require periodic (e.g. every five years) maintenance to retain the necessary storage volume, but this is not incompatible with water vole interest; it is standard to have to undertake some management of features supporting water voles. If water voles did colonise the balancing ponds a licence from Natural England might be needed each time the works were undertaken, depending on where the nests/burrows were precisely located compared to the clearance works.

6.10 Riparian enhancement of River Fromus corridor

6.10.1 Riparian vegetation needs little management and as such no long-term management is proposed. However, there will be annual checks for the first five years following planting to ensure that the desired species have established, to undertake any remedial planting, and to identify and, if necessary, eradicate any invasive species that colonise, such as Himalayan balsam (*Impatiens glandulifera*). During baseline surveys this species was recorded along the River Fromus. This is a Wildlife and Countryside Act (WCA) Schedule 9 invasive species and measures would be introduced to prevent its spread.

6.11 Barn owl and hobby nesting opportunities

6.11.1 Barn owl boxes and wicker baskets for hobby will be checked on an annual basis for the five years of the management commitment by an ornithologist to ensure that they remain in place and to replace any that have been damaged.

6.12 Barn roosting opportunities

- 6.12.1 Bat boxes will be checked on an annual basis for the five years of the management commitment by a Suitably Qualified Ecologist to ensure that they remain in place and to replace any that have been damaged.

6.13 Acid grassland enhancement

- 6.13.1 Any archaeological or historic features will be protected under a grass cover, with no increase in scrub cover, no bare ground present, and no damage incurred due to machinery use.
- 6.13.2 In order to maintain a relatively low i.e. approximately pH 6 or below, any liming would stop to allow the soil to revert to its natural slight acidity.
- 6.13.3 The soil will be rendered low in nutrients. If currently fertilised, that activity will cease, and over time without further addition of fertiliser the nutrient regime will decline. This could be accelerated by continuous cropping (i.e. several seasons of cropping and removal of arisings, without fertiliser to deliberately deplete the nutrient status).
- 6.13.4 For those parts of the site that are already degraded acid grassland, detailed management prescriptions will be reviewed and amended as part of the ongoing management regime. However, the key management prescriptions will be:
- removal of vigorous weedy species (e.g. thistles) and a programme of bracken removal;
 - diversify selected areas where more neutral grassland vegetation is dominant to return to an acid grassland sward. This could involve collecting seed from one of the nearby acid grassland areas and then sow it on the field at a rate of c. 1-2 grams per square metre (10-20 kg per hectare) in September/October, using a seed drill or slot seeder. Alternatively, the seed could be sown broadcast, but this will require the raising of a shallow tilth (c. 5-10cm) and rolling post-sowing to maximise seed contact with the soil;
 - in addition the land parcel is close to existing areas of acid grassland or heathland, so providing suitable conditions will enable acid grassland to develop and diversify naturally through windblown seed and possibly from the existing residual seedbank;
 - for the first year or two after any resowing there would be no grazing to allow the vegetation to establish (although there may need to be some spot treatment of weeds);
 - areas that had not been resown, and the resown areas after the first or second year, would either be lightly grazed as pasture under a low stocking regime (e.g. 0.5 cattle or 2.5 sheep per hectare/year, although that is flexible). This is likely to involve a reduction in stocking regime for most of the site;
 - where overgrazing has been a concern, the site will be subject to a low-intensity mowing regime (e.g. cutting to a height of c. 10cm in autumn and using arisings in stockpiles as habitat for reptiles) could also be used. This could also serve as supplementary feeding for livestock;
 - where undergrazing had been a concern there may be value in locally increasing stocking density;

- there would be a restriction on topping/flailing during the bird ground-nesting season (i.e. avoiding March to August);
- there would be cessation of liming or fertilization;
- creation of brash piles from cut scrub as refuges for reptiles and habitat for invertebrates;
- there will be localized scrub removal although no tree felling will occur. Large blocks of scrub will not be removed because this would create large bare areas which are likely to colonise with weeds; and
- consideration will also be given to creating a 2ha plot suitable for nesting woodlarks within 45m of the area of woodland to the south of the land parcel, in line with published research⁷.

6.14 Skylark habitat enhancement

6.14.1 The 12 ha of arable land at Saxmundham would be managed in the following manner:

- spring crops will be sown by preference (particularly spring cereals) as these are suitably short for skylark nesting during spring/early summer, and lead to suitably bare soils in the winter, which are favoured by golden plover and other wintering birds;
- when spring cereals are sown, stubble will be retained in the fields until end of November to render it favourable for grain-eating birds and small mammals, and the land then ploughed to render it favourable for golden plover;
- where winter crops are to be sown, skylark plots will be created in winter for nesting during the spring/summer, at a rate of four plots per hectare. The creation process will follow government guidance on the Countryside Stewardship pages of the .Gov.uk website for Countryside Stewardship Grant AB4.
- during the autumn/winter fallow plots would be created within the winter cereal crop. There would be 4-5 plots per ha (twice the rate required by Countryside Stewardship) and each plot would be at least 3 metres (m) wide and will have a minimum area of 16 square metres. These plots would be retained until the crop is harvested;
- in line with Countryside Stewardship guidance, skylark plots would be:
 - located away from tramlines (choosing a middle spot between two sets of tramlines works best).
 - at least 50 m from field boundaries and margins.
- the plots would be created by either:
 - Turning off the drill during sowing to leave an unsown plot.
 - Sowing the crop as normal and spraying with herbicide to create the plot by 31 December.

- after drilling, the plots can be managed with the same treatments as the remainder of the field;
- there is no need to keep the plots weed-free but spot-treating with herbicide in April will help skylarks to access their nesting sites; and
- mechanical weeding of crops containing skylark plots will destroy any nests present and is not recommended.

6.14.2 The above management measures are to be secured by a management agreement with the landowner/farmer or, if an agreement cannot be reached with the landowner/farmer, the DCO includes compulsory acquisition powers that would allow National Grid to 'step in' to ensure the required management is delivered.

7. Monitoring

7.1 Pre and Post Construction Monitoring and Reporting

- 7.1.1 Monitoring and reporting is required in order to determine that the functions documented within this oLEMP are being achieved and to determine whether any remedial management action may be required. The baseline against which the effects of the actions resulting from the monitoring can be compared against comprises the pre-construction baseline data. This baseline data was collected in 2023/2024 and will therefore require updating prior to construction, as by operation (from 2027 at the earliest) this data will be over four years old and out of date. Updates would require a similar set of surveys to be undertaken as those undertaken to inform the baseline where relevant ecological receptors have been identified. These surveys will include surveys of breeding and non-breeding birds, bats, riparian mammals, and badgers.
- 7.1.2 A post-construction monitoring programme and reporting procedures will be formalised, agreed with the relevant planning authority and included within the detailed LEMP, prior to construction works commencing.
- 7.1.3 Post-construction monitoring and reporting programmes will be established for some habitats and species following completion of construction works, where agreed with the relevant planning authority.
- 7.1.4 Results from the post-construction monitoring will feed into the management plan and, if required, management may be amended accordingly.

7.2 Reinstated acid grassland and acid grassland enhancement area

- 7.2.1 A monitoring protocol to determine successful restoration will be agreed with the local planning authority. This will be based on a combination of botanical survey data for the existing pre-construction habitat, and the guidance provided by the Joint Nature Conservation Committee in their Common Standards Monitoring documentation, specifically regarding conservation objectives for monitoring lowland dry acid grasslands⁸. That guidance provides a series of targets for determining a high-quality acid grassland including presence of positive indicator species, extent of bare ground, sward height, presence of negative indicator species (both arable weeds and rank grasses) and percentage scrub cover.

7.3 Adaptive Management Monitoring

- 7.3.1 The adoption of an adaptive management programme for the landscape planting is proposed to achieve optimum levels of plant growth and growing conditions and ultimately provide greater confidence that effective screening will be achieved by the tree planted areas. It will also allow flexibility to adapt to future climate changes and trends with regard to species selection and maintenance requirements. Monitoring will

be undertaken throughout the implementation and maintenance and management periods to ascertain progress of tree growth to inform the subsequent steps to be taken as part of the adaptive management programme.

- 7.3.2 The species mixes and recommended height of species at year 15 which has been agreed with stakeholders is contained in Table 2.1 of **Application Document 6.3.3.1.A ES Appendix 3.1.A Landscape and Visual Impact Assessment and Photomontage Methodology**.
- 7.3.3 The LEMP will define the adaptive management programme in agreement with the relevant planning authority. New activities or adaptations to the management and maintenance regime will respond to the results of monitoring and changes as a result of climate change. It will comprise a landscape aftercare supervision structure that specifically addresses the quality and annual growth of different planting areas, with monitoring against agreed objectives. It will provide mechanisms to target specific measures to improve any areas where planting is not establishing satisfactorily. These measures could include, replacement of failed trees and shrubs with different species if repeated failure of species is occurring and other remediation measures to improve growth including but not limited to watering, targeted weeding and soil analysis.

7.4 Non-Compliance Procedure

- 7.4.1 The ECoW will be responsible for undertaking the inspections during and post construction to check compliance with the LEMP. All incidents and non-conformance with the LEMP, will be reported and investigated, with the necessary procedures identified in the LEMP.

7.5 Change Process

- 7.5.1 The LEMP will identify the process if in the future it is necessary to amend aspects of the LEMP once it has been approved. Changes would not alter any underlying commitments, mitigation or methodologies which would be set out in the LEMP. An example may be where a preconstruction survey identifies that a measure already committed to is no longer required in the LEMP. This change process will be fully set out in the LEMP in discussion with stakeholders.

7.6 Co-ordination with National Grid Ventures Projects

- 7.6.1 **Application Document 7.10.1 NGV Coordination Suffolk Masterplan** explores the potential solutions for the colocation of the Saxmundham Converter Station with Lion Link and Nautilus converter stations (National Grid Ventures (NGV) projects). It considers the optimum placement of three converter stations within the wider site, with the Suffolk Onshore Scheme occupying the most southerly location (identified as Bay 1), Lion Link occupying Bay 2 to the north of the Saxmundham Converter Station and Nautilus occupying Bay 4 (though noting the announcement in late 2024 that Nautilus is now proposed to connect at the Isle of Grain, Medway).
- 7.6.2 The landscape and ecological proposals shown on **Figure 1 Saxmundham Converter Station Outline Landscape Mitigation** in Appendix A of this document have been developed to be complementary to the potential NGV projects, thereby allowing a further two converter stations to be sited in the north of the site, whilst maintaining the proposed areas of woodland screen planting. Nonetheless, due to the differing stages of

design development between the Suffolk Onshore Scheme and the NGV projects, there is the potential risk in the future that the NGV HVAC cable corridors and access requirements could conflict with the Saxmundham Converter Station planting.

7.6.3

To ensure that the function of the outline landscape mitigation for the Saxmundham Converter Station is delivered and that a cohesive overall landscape design for the wider site is established, the detailed landscape and ecological design contained in the LEMP will deliver the following:

- a coordinated landscape design for the wider site which, as far as is reasonably practicable, enables a cohesive landscape, ecological, and recreational framework to be achieved;
- a detailed landscape and ecological design for the Saxmundham Converter Station site which is developed collaboratively with the NGV project teams to ensure that the function of the outline landscape mitigation contained in this oLEMP is maintained; and
- areas of post construction planting (**Figure 3 Saxmundham Converter Station Outline Landscape Mitigation - Timing of Planting** in Appendix A of this document) will be phased in response to the NGV projects such that Suffolk Onshore Scheme planting is not unnecessarily removed by subsequent NGV construction activity.

References

- Alison Farmer Associates. (2018). *Suffolk Coastal Landscape Character Assessment: Final Report*.
- British Standards Institution. (2010). *BS 3998: 2010 Tree Work - Recommendations*.
- East Suffolk Council. (2018). *Suffolk Coastal Landscape Character Assessment*. Retrieved October 23, 2024, from <https://www.eastsuffolk.gov.uk/assets/Planning/Suffolk-Coastal-Local-Plan/First-Draft-Local-Plan/SCDC-Landscape-Character-Assessment.pdf>
- HM Government. (1981). *Wildlife and Countryside Act 1981*. Retrieved July 11, 2024, from Legislation.gov.uk: <https://www.legislation.gov.uk/ukpga/1981/69/contents>
- Landscape East. (2010). *East of England Landscape Typology*. Retrieved October 23, 2024, from <http://www.landscape-east.org.uk/east-england-landscape-typology>
- Landscape Institute. (2020). *Infrastructure Technical Guidance Note 04/2020*.
- Natural England. (2025). Retrieved from Suffolk Coast and Heaths - Summary and Headline Statements of Environmental Opportunity: <https://nationalcharacterareas.co.uk/suffolk-coast-and-heaths/summary/>
- Natural England. (2025). Retrieved from South Norfolk and High Suffolk Claylands - Summary and Headline Statements of Environmental Opportunity: <https://nationalcharacterareas.co.uk/south-norfolk-and-high-suffolk-claylands/summary/>
- Suffolk and Essex Coast and Heaths National Landscape. (2022). *Coast and Heaths Area of Outstanding Natural Beauty Nature Recovery Plan*.
- Suffolk and Essex Coast and Heaths National Landscape. (2023). *2023-2028 Suffolk Coast & Heaths Area of Outstanding Natural Beauty (AONB) Management Plan*.
- Suffolk and Essex Coast and Heaths National Landscape. (2025, 01 16). *Guidance for Planning in the Area*. Retrieved from <https://coastandheaths-nl.org.uk/managing/planning/guidance-for-planning-in-the-aonb/>
- Suffolk and Essex Coast and Heaths National Landscape Partnership. (2016). *Suffolk Coast and Heaths Area of Outstanding Natural Beauty and Special Qualities Indicators*. Retrieved October 23, 2024, from <https://coastandheaths-nl.org.uk/wp-content/uploads/2021/01/Natural-Beauty-and-Special-Qualities-of-the-Suffolk-Coast-and-Heaths-2016.pdf>
- Suffolk County Council. (2011). *Suffolk Landscape Character Assessment*. Retrieved October 23, 2014, from <https://suffolklandscape.org.uk/links/>

Appendix A Figures

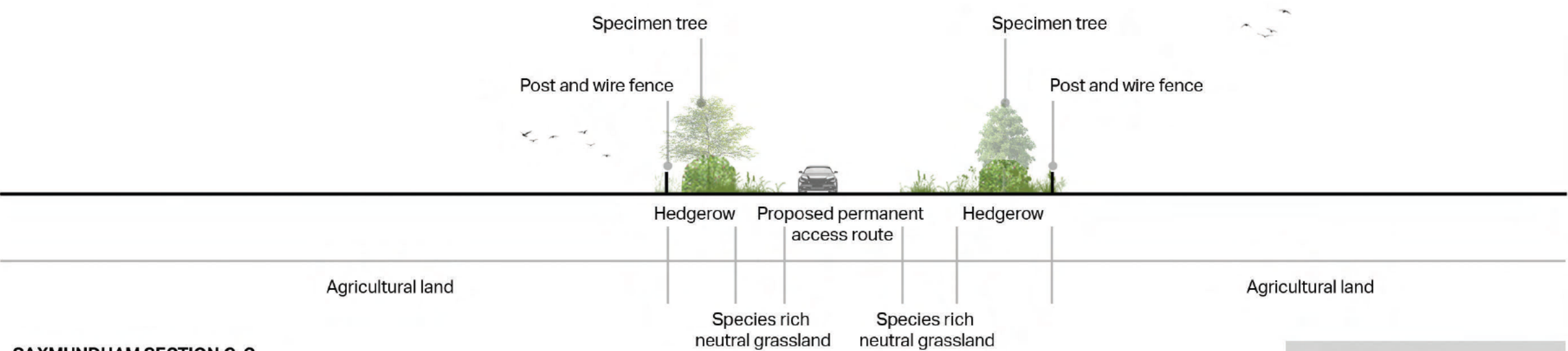


- Legend
- Order Limits
 - Saxmundham Converter Station Limits of Deviation
 - Permanent Access Route
 - Attenuation ponds
 - Existing Public Right of Way
 - Diverted Public Right of Way
 - Native Woodland Planting
 - Native Hedgerow
 - Native Hedgerow Trees
 - Species Rich Neutral Grassland
 - Riparian Planting
 - Existing vegetation to be strengthened with native woodland species

0 50 150 300

nationalgrid

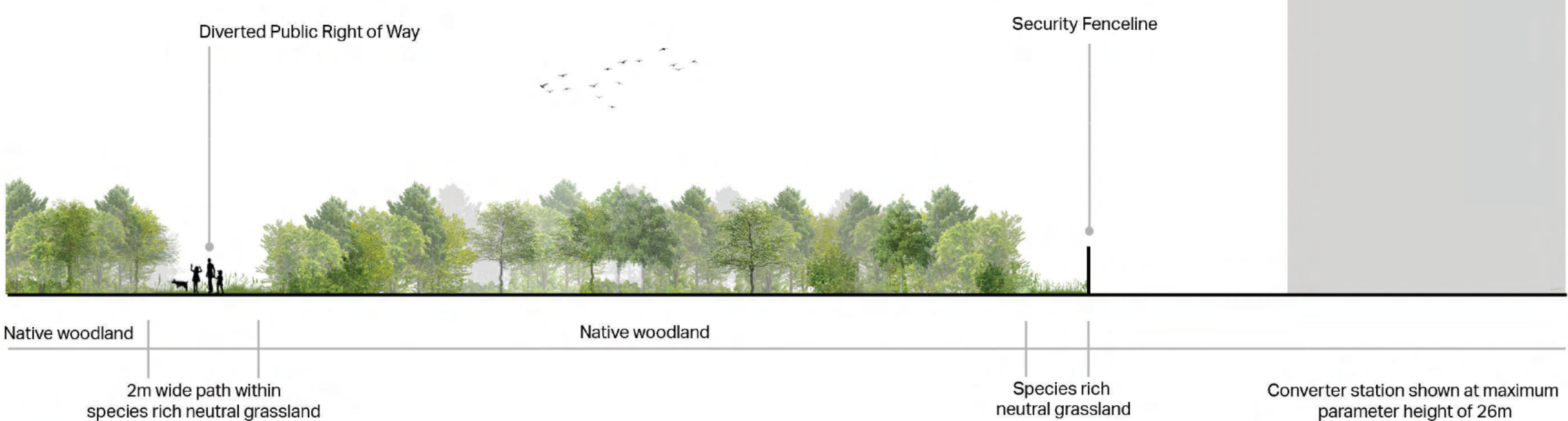
Scheme: SEA LINK					
Document Title: Figure 1 Saxmundham Converter Station Outline Landscape Mitigation					
Creator: SG	Date: 13/09/2024	Checker: RM	Date: 13/09/2024	Approver: BS	Date: 13/09/2024
Document Ref: 7.5.7.1.1	Scale: 1:7500	Format: A3	Sheets: 1	Rev: A	Ver 2



SAXMUNDHAM SECTION C-C

Illustrative section through proposed permanent access route at year 15

1:250 @A3



SAXMUNDHAM SECTION D-D

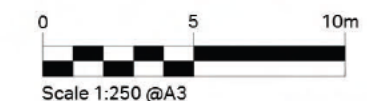
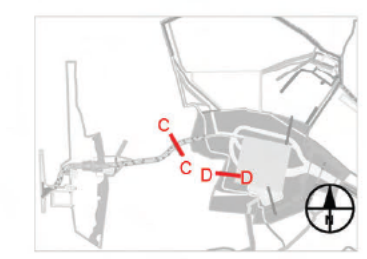
Illustrative section through diverted Public Right of Way within woodland at year 15

1:250 @A3

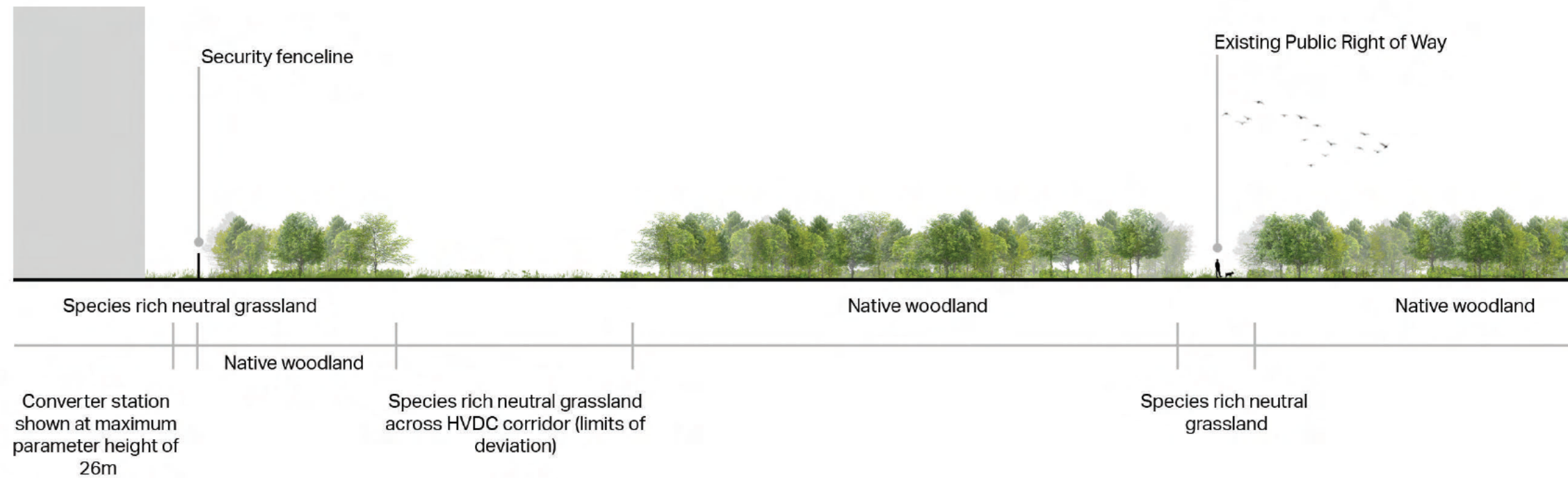
Legend

Notes

Refer to application document
7.5.7.1.1 Saxmundham Converter
Station Outline Landscape Mitigation
for planting areas



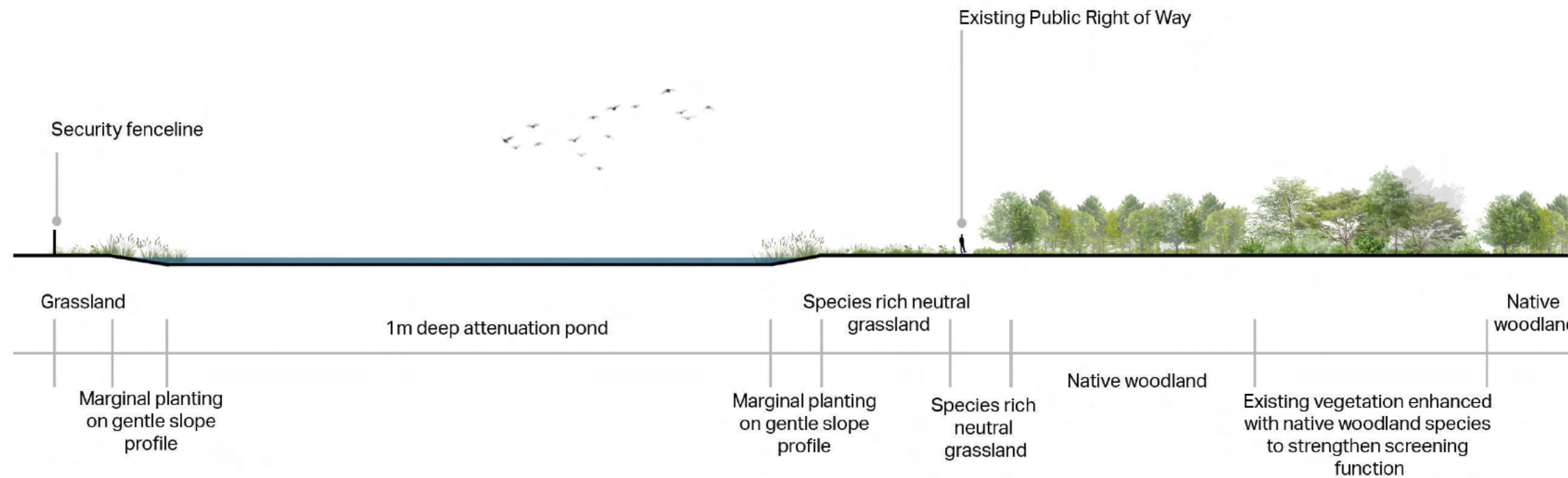
1	18/09/24	LANDSCAPE	SS	CW	RM
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: SEA LINK					
Document Title: FIGURE 2 SAXMUNDHAM CONVERTER STATION ILLUSTRATIVE CROSS SECTIONS (SHEET 1 OF 2)					
Creator: SS	Date: 18/09/24	Checker: CW	Date: 18/09/24	Approver: RM	Date: 18/09/24
Document Ref: 7.5.7.1.2	Scale: 1:250	Format: A3	Sheets: 2	Rev: 1	



SAXMUNDHAM SECTION E-E

Illustrative section through existing Public Right of Way at year 15

1:500 @A3



SAXMUNDHAM SECTION F-F

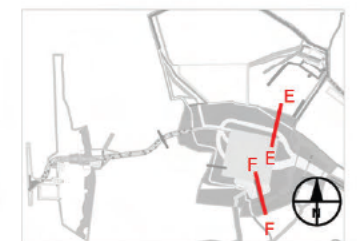
Illustrative section through attenuation pond at year 15

1:500 @A3

Legend

Notes

Refer to application document
7.5.7.1.1 Saxmundham Converter
Station Outline Landscape Mitigation
for planting areas



Scale 1:500 @A3

1	18/09/24	LANDSCAPE	SS	CW	RM
Rev	Date	Description	GIS	Chk	App
nationalgrid					
Scheme: SEA LINK					
Document Title: FIGURE 2 SAXMUNDHAM CONVERTER STATION ILLUSTRATIVE CROSS SECTIONS (SHEET 2 OF 2)					
Creator: SS	Date: 18/09/24	Checker: CW	Date: 18/09/24	Approver: RM	Date: 18/09/24
Document Ref: 7.5.7.1.2	Scale: 1:500	Format: A3	Sheets: 2	Rev: 1	



Legend

- Order Limits
- Saxmundham Converter Station Limits of Deviation
- Permanent Access Route
- Attenuation ponds
- Potential Early Planting
- Post Construction Planting
- Existing Public Right of Way
- Diverted Public Right of Way

Notes

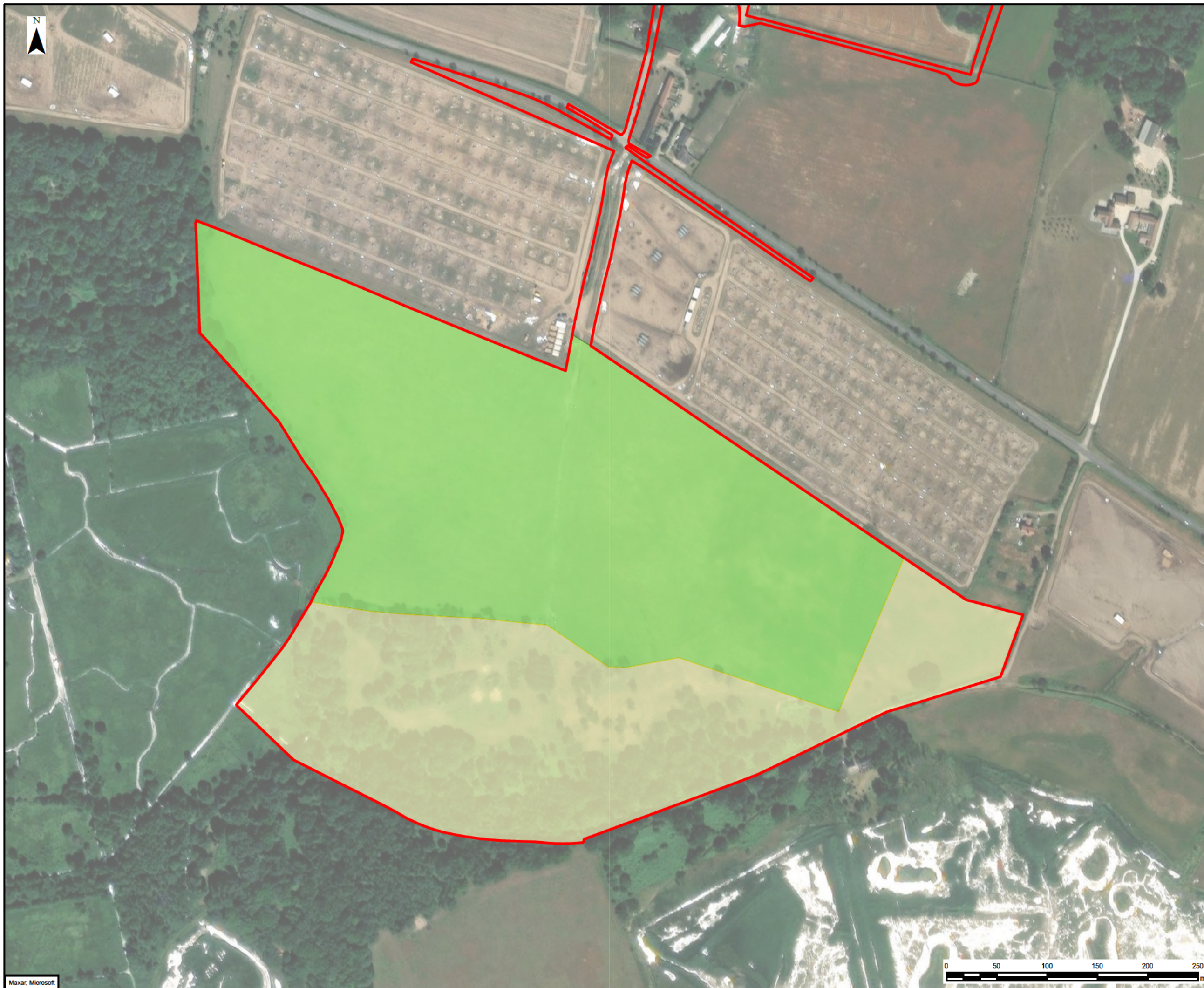
Areas of early planting to be agreed as part of the detailed LEMP with contractor and relevant stakeholders

nationalgrid

Scheme: SEA LINK

Document Title: Figure 3 Saxmundham Converter Station Outline Landscape Mitigation- Timing of Planting

Creator: SG	Date:	Checker: RM	Date:	Approver: BS	Date:
Document Ref: 7.5.7.1.3	Scale: 1:2500	Format: A3	Sheets: 1	Rev: A ver 2	



Legend

-  Suffolk Onshore Scheme Boundary
- Acid Grassland Enhancement Areas¹**
 -  Area 1 - Acid grassland restoration
 -  Area 2 - Acid grassland enhancement

1: The parcels shown are much larger than the actual area of acid grassland enhancement / creation required as mitigation, in order to provide flexibility.

0	10/02/2025	OUTLINE LANDSCAPE AND ECOLOGY MANAGEMENT PLAN	EB	DF	JR
Rev	Date	Description	GIS	Chk	App

nationalgrid

Scheme: SEA LINK					
Document Title: SAXMUNDHAM CONVERTER STATION ENHANCEMENT AREAS					
Creator: EB	Date: 10/02/2025	Checker: DF	Date: 10/02/2025	Approver: JR	Date: 10/02/2025
Document Ref: FIGURE 4	Scale: 1:3,500	Format: A3	Sheets: 1	Rev: 0	



Legend

- Order Limits
- Friston Substation Limits of Deviation
- Proposed Friston Substation Footprint
- Species Rich Neutral Grassland
- Native woodland and tree planting

0 50 150 250

nationalgrid

Scheme: SEA LINK

Document Title: Figure 5 Friston Substation Outline Landscape Mitigation

Creator: SG	Date: 07/01/25	Checker: RM	Date: 07/01/25	Approver: BS	Date:
Document Ref: 7.5.7.1.5	Scale: 1:7500	Format: A3	Sheets: 1	Rev: A ver 2	2025.11.14

Page intentionally blank

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com