



# Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

## Outline Landscape Management Plan (Revision B) - Tracked Changes Version

February 2023

Document Reference: 9.18.1

APFP Regulation: 5(2)(q)

Title:	
<b>Sheringham Shoal and Dudgeon Offshore Wind Farm Extensions DCO Application Outline Landscape Management Plan (Revision B) (Tracked)</b>	
PINS Document no.: 9.18	
Revision: B	
Document no.: C282-LD-Z-GA-00011	
Date:	Classification
<b>February 2023</b>	<b>Final</b>
Prepared by:	
<b>LDA Design</b>	
Approved by:	Date:
<b>Sheery Atkins, Equinor</b>	February 2023



## Table of Contents

<b>OUTLINE LANDSCAPE MANAGEMENT PLAN .....</b>	<b>7</b>
1.1 Introduction.....	7
1.2 Summary of the Proposed Development and the Existing Landscape Context .....	<del>8</del> 7
1.3 Illustrative Landscape Proposals for the Onshore Substation .....	11
1.4 Management .....	<del>14</del> 13
1.5 Detailed Soft Landscape Design Proposals (post DCO consent award).....	16
<b>References .....</b>	<b>18</b>
<b>APPENDIX 1: ILLUSTRATIVE LANDSCAPE PROPOSALS FOR THE ONSHORE SUBSTATION .....</b>	<b>19</b>



## Glossary of Acronyms

DCO	Development Consent Order
DEL	Dudgeon Extension Limited
DEP	Dudgeon Offshore Wind Farm Extension Project
ES	Environmental Statement
km	Kilometre
LCA	Landscape Character Area
OEMP	Outline Ecological Management Plan
OLMP	Outline Landscape Management Plan
PEIR	Preliminary Environmental Information Report
SEL	Scira Extension Limited
SEP	Sheringham Offshore Wind Farm Extension Project



## Glossary of Terms

Dudgeon Offshore Wind Farm Extension Project (DEP)	The Dudgeon Offshore Wind Farm Extension onshore and offshore sites including all onshore and offshore infrastructure.
Grid option	Mechanism by which SEP and DEP will connect to the existing electricity network. This may either be an integrated grid option providing transmission infrastructure which serves both of the wind farms, or a separated grid option, which allows SEP and DEP to transmit electricity entirely separately.
Horizontal directional drilling (HDD) zones	The areas within the onshore cable corridor which would house HDD entry or exit points.
Jointing bays	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	The point at the coastline at which the offshore export cables are brought onshore, connecting to the onshore cables at the transition joint bay above mean high water
Landscape character	A distinct and recognisable pattern of elements in the landscape that makes one landscape different from another, rather than better or worse. (Natural England, 2014)
Landscape Character Areas	These are single unique areas which are the discrete geographical areas of a particular landscape character type. Each has its own individual character and identity, even though it shares the same generic characteristics with other types. (Natural England, 2014)
Offshore export cables	The cables which would bring electricity from the offshore substation platform(s) to the landfall. 220 – 230kV.
Onshore cable corridor	The area between the landfall and the onshore substation sites, within which the onshore cable circuits will be installed along with other temporary works for construction.



Onshore export cables	The cables which would bring electricity from the landfall to the onshore substation. 220 – 230kV.
Onshore Substation	Compound containing electrical equipment to enable connection to the National Grid.
Order Limits	The area subject to the application for development consent, including all permanent and temporary works for SEP and DEP.
PEIR boundary	The area subject to survey and preliminary impact assessment to inform the PEIR.
Sheringham Shoal Offshore Wind Farm Extension Project (SEP)	The Sheringham Shoal Offshore Wind Farm Extension site as well as all onshore and offshore infrastructure.
Study area	Area where potential impacts from the project could occur, as defined for each individual Environmental Impact Assessment (EIA) topic.
The Applicant	Equinor New Energy Limited.



## OUTLINE LANDSCAPE MANAGEMENT PLAN

### 1.1 Introduction

1. This Outline Landscape Management Plan (OLMP) has been prepared on behalf of the Applicant, 'Equinor New Energy Limited', in support of the application for a Development Consent Order (DCO) for the proposed Sheringham Shoal Offshore Wind Farm Extension Project (SEP) and Dudgeon Offshore Wind Farm Extension Project (DEP).
2. As the owners of SEP and DEP, Scira Extension Limited (SEL) and Dudgeon Extension Limited (DEL) are the named undertakers that have the benefit of the DCO. References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of SEL and DEL as the undertakers of SEP and DEP.
3. This OLMP is the framework from which to agree the detailed plans and operations for the soft landscape proposals (planting and seeding) for the onshore cable corridor and onshore substation site to ensure that the design and mitigation intent is realised. The landscape proposals and management prescriptions provide information to help ensure successful establishment and growth of proposed planting and seeding following the construction works.
4. This OLMP describes the landscape management measures that will be carried out during the first ten years following planting or seeding [along the onshore cable corridor and for the lifetime of the onshore substation](#).
5. Local planning authorities (and any other relevant stakeholders, such as the Norfolk Coast Area of Outstanding Natural Beauty (AONB) Partnership, [and the National Trust as a conservation organisation with inalienable rights in relation to Weybourne Woods](#)) will be consulted on this OLMP after submission of the DCO application, prior to the construction of the onshore cable corridor and onshore substation site. The final Landscape Management Plan will be submitted for discharge of relevant DCO requirement relating to the OLMP.
6. This OLMP should be read in conjunction with the **Outline Ecological Management Plan** (OEMP) (Document reference 9.19), which also accompanies the DCO application, and describes the onshore ecological mitigation measures that will be implemented prior to, during and post construction of the onshore elements of SEP and DEP, and the long-term management measures to be set in place for reinstated and enhanced habitats, including hedgerows, trees and woodlands.
7. [An arboricultural survey and assessment will also be undertaken prior to the commencement of construction, to inform the detailed soft landscape design proposals post DCO consent award \(described in Section 1.5\).](#)



## 1.2 Summary of the Proposed Development and the Existing Landscape Context

~~7.8.~~ Landscape considerations have been taken into account as an integral part of the design process for SEP and DEP. These are described in further detail in the Environmental Statement (ES) **Chapter 4 Project Description** (document reference 6.1.4) and in the **Onshore Design and Access Statement** (document reference 9.3); and form the basis of assessment within **ES Chapter 26 Landscape and Visual Impact Assessment** (document reference 6.1.26).

### 1.2.1 Onshore Cable Corridor

~~8.9.~~ The onshore cables would be buried underground for the entire length of the onshore cable corridor, which totals 60km, between the landfall site at Weybourne in North Norfolk District and the Norwich Main Substation to the south of Norwich City within South Norfolk District. The onshore cable corridor runs across a primarily rural landscape incorporating farmland with fields (mostly enclosed by hedgerows and areas of woodland), roads, river valleys and frequent small settlements.

~~9.10.~~ As described in **Chapter 4 Project Description** (document reference 6.1.4), the total cable corridor width requirements set out within the DCO application are as follows:

- 45m for SEP or DEP built in isolation;
- 60m for SEP and DEP (built together either concurrently or sequentially);
- 100m for all scenarios at trenchless crossings; and
- 250m for SEP and/or DEP HDD crossings at the landfall.

~~10.11.~~ However, an approximate working easement – the extents that the construction activities would require temporary access to install the cables – would be accommodated within the Order Limits and be narrower in most cases. The working easements would be as follows:

- An approximate 27m working easement for SEP or DEP built in isolation;
- An approximate 38m working easement for SEP and DEP if built concurrently;  
or
- An approximate 45m working easement for SEP and DEP if built sequentially.

~~11.12.~~ Working easements at trenchless crossings along the cable corridor and at the landfall would remain as per the Order Limits (i.e. 100m and 250m).

~~12.13.~~ The purpose of the wider Order Limits is to allow enough room for micro-siting of the working easement during the detailed design stage of the SEP and/or DEP, and for onward connection to the existing surface water drainage network for the proposed construction drainage. This means the installation of the onshore cable in reality could affect landscape and/or visual resources to a lesser degree than the full Order Limits width suggests.

~~13.14.~~ A commitment has also been made to further reduce the working easement at hedgerow crossings to minimise the temporary loss of hedgerows and trees. The working easement at hedgerow crossings would typically be as follows:



- 12m for either SEP or DEP in isolation; or
- 20m for SEP and DEP (concurrently or sequentially).

~~14.~~15. Where hedgerows and individual trees are present within the working easement of the onshore cable corridor (and where cables are not installed by trenchless techniques), they would need to be removed. All trees with bat roosting potential will be soft-felled as a precautionary measure, as detailed in the Outline Ecological Management Plan (document reference 9.19). The process of soft felling of trees typically involves the removal of the tree's limbs, which would subsequently be left grounded overnight to allow any bats present to emerge and depart.

~~15.~~16. Where access junction bellmouths or cross-over points<sup>1</sup> are required as part of a trenchless crossing, the following length of hedgerow would be removed:

- Bellmouth access: 20m either side of the crossing for SEP and/or DEP (all scenarios).
- Cross-over point: 12m either side of the crossing for SEP and/or DEP (all scenarios).

### 1.2.2 Onshore Substation

~~16.~~17. The site of the onshore substation lies within an area of predominantly arable farmland, with fields enclosed by hedgerows, trees and woodland. It lies adjacent to areas of woodland to the south and north, and arable fields enclosed by hedgerows and blocks of woodland to the west. The site lies adjacent to the Norwich-Stowmarket main railway line to the east, beyond which lies the A140 and the broad valley of the River Tas. A line of 400kV overhead power lines and pylons run north-south to the west of the site. The existing Norwich Main substation lies beyond woodland to the north of the site.

~~17.~~18. The A47 Norwich southern bypass lies approximately 1.6km north of the site, beyond which lies the City of Norwich.

~~18.~~19. There are numerous settlements within the wider rural landscape south of Norwich, ranging from hamlets to large villages.

~~19.~~20. Landform within approximately 5km of the onshore substation site gently undulates, with two distinct river valleys of the Yare to the north (beyond the A47) and the Tas to the east.

~~20.~~21. Two onshore substation site options were assessed at the Preliminary Environmental Information Report (PEIR) stage following initial feasibility studies and a site selection process, which considered a number of potential sites. The preferred option has been selected following further site option, feasibility studies, and feedback received during public consultation. Landscape and visual considerations fed into the studies, and the final onshore substation site has been identified as the most suitable site from a landscape and visual perspective for a number of reasons including:

---

<sup>1</sup> Cross-over points are where it necessary for the construction haul road to pass through an existing landscape feature (such as a field boundary hedgerow) within the extent of the Order Limits.



- It lies within an area of arable fields enclosed by woodland, tree belts and hedgerows which restricts potential visibility and effects to a relatively small area of landscape.
- The existing woodlands and tree belts provide a context where further tree and woodland planting to integrate the onshore substation into the landscape and provide further screening would be appropriate.
- The site lies within an area already influenced by existing electrical infrastructure including the Norwich Main substation and lines of pylons and overhead wires. Other existing infrastructure lies to the east – the Norwich-Stowmarket main railway line and A140. Grid and other infrastructure are already characteristic of this location.
- The onshore substation lies west of landscape character area (LCA) A1 Tas Rural River Valley. Policy DM 4.5 of the South Norfolk Development Management Development Document (adopted October 2015) states *“Particular regard will be had to protecting the distinctive characteristics, special qualities and geographical extents of the identified Rural River Valleys and Valley Urban Fringe landscape character types”*. Assessment identified that the site would not affect this LCA due to the presence of existing tree and woodland vegetation that would largely screen the onshore substation from the LCA.
- There are relatively few sensitive visual receptors within close proximity to the site that have potential to have clear views of the onshore substation, or to be significantly affected.
- There are no residential receptors that would have clear or close views of the onshore substation.

~~24-22~~ Site selection is therefore a key part of the embedded mitigation proposals.

### 1.2.3 Onshore Cable Corridor – Trees and Hedges

~~22-23~~ The route of the onshore cable corridor has been designed to avoid crossing woodlands and areas of groups of trees, where possible. Where this is not possible, all significant woodlands, and many smaller woodlands and areas of trees and scrub, would be retained where they lie within the cable corridor by utilising trenchless crossing techniques. Protection and re-planting of hedgerows would be implemented to minimise adverse landscape, visual and other potential effects. Furthermore, enhancement of hedgerows that are retained, and currently in poor condition (i.e. they are species-poor and/or defunct), provides an opportunity to achieve long term benefits.



**23:24.** **Appendix 20.6** of the **ES Chapter 20 Onshore Ecology and Ornithology** (document reference 6.3.20.6) describes that approximately 22km of hedgerows occur within the 60km onshore cable corridor. Many of these would be retained by methods including trenchless crossing techniques such as Horizontal Direct Drilling (HDD). In total, up to approximately 4km of existing hedgerows would be temporarily removed to allow construction of the onshore cable corridor. Some of these hedges contain trees which would also be removed.

**24:25.** All sections of hedgerow removed to enable construction of the onshore cable corridor would be replanted in the first planting season following the completion of duct installation and haul road removal. Replacement planting would comprise native shallow-rooting hedgerow species typical of the area, planted as 40 – 60cm high transplants, protected with biodegradable (non-plastic) rabbit guards or other forms of protection from grazing. To prevent future root damage to cables, no trees would be planted within the permanent cable easement. In addition to the reinstatement of hedgerows removed by the onshore cable corridor, where practicable and as agreed with the landowner, hedgerow enhancement would be undertaken within the order limits. The aim of enhancement would be to increase native species diversity and/or improve habitat structure and connectivity across the landscape.

**25:26.** Trees and woodland that are removed to construct the onshore cable corridor would be replanted within the Order Limits but outside the final permanent cable corridor easement. Where both SEP and DEP are built (sequentially or concurrently), the permanent easement would be 20m. Where only SEP or DEP is constructed, the permanent easement would be 10m. Within this permanent easement, tree planting would be prohibited. In addition, where practicable and as agreed with the landowner, broadleaved native trees could be planted along hedgerows elsewhere within the wider landholding.

**26:27.** Where the cable corridor passes through the Norfolk Coast AONB (the AONB), trenchless crossing techniques (such as HDD) are proposed to minimise the loss of trees and vegetation. However, due to the length trenchless crossing, it is necessary to install a launch and reception pit within Weybourne Wood (approximately 50m x 100m area) which would result in the clearance of existing vegetation. Where coniferous plantation trees would be permanently removed, the land will be reinstated to a suitable habitat agreed with the land owner and that accord with the objectives of the wider AONB.

**27:28.** Where hedgerows and trees are crossed using open cut trenching techniques, measures would be taken to minimise vegetation removal and damage. These measures are likely to include reducing the length of hedgerow removed and avoiding trees at crossing points, where this is possible.

### **1.3 Illustrative Landscape Proposals for the Onshore Substation**

**28:29.** Illustrative landscape proposals for the onshore substation are shown on **Figure 1** in **Appendix 1**.



### 1.3.1 Design Objectives

~~29~~30. The landscape proposals for the proposed onshore substation are based on the following objectives, which are designed to:

- Reduce the potential impacts on landscape and visual receptors that would arise as consequence of the onshore substation's built infrastructure. During the operational phase, the proposed planting aims to filter/screen views of the components of the substation and integrate it into its landscape context.
- Retain and protect all existing trees, hedgerows and other vegetation except where removal is necessary to install, construct and maintain the components of the onshore cables and substation.
- Enhance existing landscape features within the immediate context of the onshore substation site, by planting up gaps in hedgerows with native species hedgerow plants and trees.
- Compliment, extend and join existing landscape elements and habitats including hedgerows, trees and woodlands to enhance the green infrastructure and landscape fabric within and around the onshore substation site in line with local and regional Green Infrastructure strategies.
- Use appropriate native (and of local provenance) species to contribute towards habitat enhancements and in turn to promote biodiversity to achieve Biodiversity Net Gain and bolster the diversity of native species that are present locally.
- Minimise where possible offsite deposition of spoil by sensitive incorporation within the locality. Soil will be suitably stored prior to re-use, and topsoil and subsoil may be incorporated to allow for successful establishment of proposed vegetation.
- Introduction of a suitable operational drainage system that works with the existing and proposed landscape structure and would not result in any harm to existing water resources or increased risk of flooding.

### 1.3.2 Illustrative Landscape Proposals

~~30~~31. Key principles followed during the design of the illustrative proposals for the onshore substation shown on **Figure 1** in **Appendix 1** were as follows and would be maintained during the preparation of the final landscape plans:

- The onshore substation would be contained within a single arable field, retaining existing field boundaries comprising hedges and woodlands, and the railway line lined with vegetation. This existing vegetation would help to limit the spread of effects on landscape character beyond the site and provide some filtering and screening of views.



- Existing woodlands, hedgerows and hedgerow trees would be retained to the south, where the onshore cable accesses the substation, and to the north, where the cables associated with the onward connection to the Norwich Main substation by use of trenchless techniques (e.g. HDD). Some removal of woodland to the north of the onshore substation would be necessary to allow construction and operation access. Indicative areas of vegetation which may potentially be removed are shown on **Figure 1** in **Appendix 1**.
- Strengthen existing hedgerows by planting gaps with new native (and of local provenance) species hedge plants and hedgerow trees that would provide further screening and filtering of views, enhance landscape character and provide enhanced habitats and habitat connectivity for wildlife.
- Retention and enhancement of landscape structure planting. New areas of woodland, tree belts, scrub and scrubby grassland planting is proposed around the onshore substation site. This would be appropriate to local landscape character improving the green infrastructure network (as identified within the South Norfolk District Ecological Network Summary Map 2007), helping to screen and filter views of the onshore substation from surrounding landscape and visual receptors, and integrate it into its landscape context.
- Woodland and tree planting would comprise native (and of local provenance) species including *Prunus spinosa* (blackthorn); *Crataegus monogyna* (hawthorn); *Corylus avellana* (hazel); *Viburnum opulus* (guelder rose); *Euonymus europea* (spindle); *Ilex aquifolium* (holly); *Malus sylvestris* (crab apple); *Sorbus aucuparia* (rowan); *Frangula alnus* (alder); *Prunus avium* (cherry); *Quercus robur* (oak); *Acer campestre* (field maple); *Betula pendula* (birch); *Salix Alba* (willow). Native scrub planting would include *Prunus spinosa* (blackthorn), *Crataegus monogyna* (hawthorn), *Corylus avellana* (hazel), *Viburnum opulus* (guelder rose), *Euonymus europea* (spindle), *Ilex aquifolium* (holly), *Malus sylvestris* (crab apple) and *Rosa canina* (dog rose).
- New and retained planting in close proximity to the railway line should not impede the function and maintenance requirements of the railway, and proposals will be discussed with Network Rail before being implemented. Suitable offsets and mix of native species suitable to lineside railway functioning as identified in Network Rail's Recommended Planting Species (2015) document shall be referred to. In accordance with this guidance no planting shall be undertaken within 5m of the railway line.
- Planting alongside existing pylons and overhead lines will be discussed with National Grid before being implemented and shall be maintained in accordance with the requirements of National Grid, to ensure no interference with power lines.



## 1.4 Management

~~31~~32. This section sets out the landscape management prescriptions (regimes) for proposed vegetation, to be carried out during the first ten years following planting along the onshore cable corridor and for the lifetime of the onshore substation, in accordance with 'BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces)'; and 'BS 8545:2014 Trees: from nursery to independence in the landscape'.

~~32~~33. Work will be planned and carried out in a manner and at times to minimise unnecessary disturbance to local residents, as well as taking into account the correct timing of seasonal works such as pruning and hedge cutting to comply with good horticultural practice and any restrictions imposed by ecological constraints.

### 1.4.1 Woodland and Scrub

~~33~~34. Woodland and scrub are key components of the landscape proposals for the onshore substation. The aim of the management prescriptions is to guide the creation of a well-balanced, naturalistic landscape including woodland/woodland copses, scrub and tree belts, with a varied woodland edge and a dense canopy to provide screening at appropriate locations.

- Adjust stakes and ties at the end of each growing season or as necessary to maintain support and avoid chafing damage and thus minimise the possibility of infection taking hold within any wounds.
- Inspect and if necessary, repair deer, livestock and rabbit protection fencing regularly to ensure that it is effective in preventing browsing of plants by deer, livestock and rabbits.
- Maintain the ground around plants weed free for the first ten years to minimise competition allowing plants to grow unimpeded.
- Replace all plants that die annually at the end of each growing season during the first ten years, or when it is agreed that the woodland or scrub has established effectively, and individual plant replacement is unnecessary. In addition to this, planting at the substation will be maintained for the lifetime of the projects (40 years).
- By year three woodland and scrub may need to be thinned. When choosing the specimens to be retained, it should be remembered that the primary functions of the woodland and scrub are to lessen landscape and visual impacts of the onshore substation and help to integrate it into its setting.
- Remove stakes and ties in year five, or when each plant is deemed firm and self-supporting.
- If used, plant shelters and guards should be removed once the trees/shrubs reach a level of maturity where they can withstand browsing wildlife and livestock.



- If the thinned specimens are intended to grow back as coppice the cut needs to be angled to ensure water will not pool on the cut.
- Brushwood and other vegetative arisings will be stacked within the woodland or scrub as small habitat piles, or disposed of offsite as instructed.
- Deadwood is a particularly important woodland habitat and is of value to bats, birds, invertebrates and fungi. To ensure the woodland has the requisite deadwood habitat, dead and dying trees, where they do not present a significant safety risk, should be retained in a variety of situations. This may include creating eco-stick monoliths, a process of severe pollarding that removes all but the trunk of the tree to create standing deadwood.
- Plants that pose a health and safety risk will be managed appropriately.

### 1.4.2 Longer Term Management

~~34~~35. The duration of the longer-term management period will last for the lifetime of the onshore substation, and 10 years for all other areas. Beyond the first ten years the woodland and scrub, where not acting primarily as screening, may require thinning, starting a coppicing process. Cuts will be made on a cyclical rotation to ensure that the screening benefits are not compromised. Coppice cuts should be made to the same level as the previous cut, without stumps proud of the knob. Cuts should be made at an angle, to direct water away from the knob and stop it pooling.

~~35~~36. As the woodland matures it is important to identify and develop a plan of succession. The age structure should be diversified through considered management of regeneration to benefit the widest range of wildlife, the highest level of resilience, and long-term effectiveness of screening.

### 1.4.3 Hedges

~~36~~37. For all areas, new and replacement hedges, and existing hedges with gaps bolstered with new planting, will be managed as described below.

~~37~~38. The objective is to increase the habitat potential and functioning of the hedges, some of which may contain mature hedgerow trees, whilst maintaining them as key features of the landscape, and to provide screening of proposed infrastructure.

- Adjust stakes and ties of hedgerow trees at the end of each growing season or as necessary to maintain support and avoid chafing damage and thus minimise the possibility of infection taking hold within any wounds.
- Maintain the ground around each plant weed free for the first ten years to minimise competition allowing plants to grow unimpeded.
- Replace all plants that die annually at the end of each growing season for the first 10 years
- Remove stakes and ties in year five, or when the trees are deemed firm and self-supporting.



- If used, plant shelters/guards should be removed once the trees/shrubs reach a level of maturity where they can withstand browsing wildlife.
- Cut hedges annually between September and February to approximately 2m height, or the height of existing hedges as appropriate. The hedgerows should be managed to create a thick base with a good density of stems.
- Plants that pose a health and safety risk will be managed appropriately.

#### 1.4.4 Grassland

~~38.~~39. Open areas shall be seeded and enhanced with diverse grassland species-rich mixes appropriate to the soil types and conditions to promote biodiversity. These shall be cut annually in late September and cuttings removed off-site. These areas may include scattered scrub, and shallow scrapes to allow for ecological enhancements (refer to the **OEMP** (document reference 9.19) for details).

### 1.5 Detailed Soft Landscape Design Proposals (post DCO consent award)

40. A detailed landscape scheme will be provided post DCO consent award and include detailed soft landscape design proposals which accords with principles set out in the illustrative landscape proposals presented within this OLMP.

~~39.~~41. The detailed soft landscape proposals to be provided shall include the following:

- Precise location and canopy spread of all trees, hedgerows and other significant areas of vegetation to be removed, information which will be derived from the arboricultural survey and assessment undertaken post DCO consent;
- Precise location and canopy spread of all trees, hedgerows and other significant areas of vegetation to be retained (including species), together with measures for their protection during the construction phase in accordance with 'BS 5837 (2012) – Trees in Relation to Design, Demolition and Construction'. Information will be derived from the arboricultural survey and assessment undertaken post DCO consent;
- Details of all new planting including (though not necessarily limited to) species, seed mixes, location, size, planting density, number and protection measures during establishment;
- Earthworks and ground profiling (including proposed finish levels and contours) if they are to be different to the existing;
- Full details of the management activities, to include appropriate monitoring to inform these activities, –that will be undertaken at any location with proposed planting to ensure successful establishment of the new planting, including but not limited to ground preparation, planting methods, irrigation, weed control, monitoring, replacement and removal of sundries;





- Full details of the management activities, [to include appropriate monitoring to inform these activities](#), that will be undertaken during the first ten years of the operational lifetime of the onshore cable corridor and the full operational lifetime of the substation. The details are to include, but are not necessarily limited to, height and width parameters for hedges, thinning and coppicing regimes, frequency of activities, removal and appropriate reuse/recycling/disposal of redundant planting sundries;
- Details of the implementation timetable for all soft landscape works, including any mitigation planting that is to be undertaken prior to and/or during the construction works at substation and along the onshore cable corridor;
- All works will be in accordance with appropriate British Standards, which would include (not be limited to) the following:
  - 'BS 3936-1 (1992) – Nursery stock. Specification for trees and shrubs';
  - 'BS 3936-10 (1990) – Nursery stock. Specification for ground cover plants';
  - 'BS 4428 (1989) – Code of practice for general landscape operations (excluding hard surfaces) (AMD 6784)';
  - 'BS 5236 – Cultivation and planting of trees in the advanced nursery stock';
  - 'BS 5837 (2012) – Trees in Relation to Design, Demolition and Construction';
  - 'BS 8545 (2014) – Trees: from nursery to independence in the landscape – Recommendations'; and
  - BS 3882 (2015) – Specification for topsoil.



## References

Network Rail (9 July 2015). *Network Rail's Recommended Planting Species Matrix (2015) Tree Council Update* [online]. Accessed 6 December 2021. [Online] Available at: [REDACTED]df. [Accessed 6 December 2021]

Norfolk Wildlife Trust on behalf of the Econet Topic Group (January 2007) *South Norfolk District Ecological Network Summary Map* [online] Accessed 6 December 2021. [Online] Available at: [REDACTED] [Accessed 6 December 2021]

South Norfolk District Council (Adopted October 2015) *South Norfolk Local Plan Development Management Policies Document*. [Online] Available at: [REDACTED] [online]. [Accessed 6 December 2021]

## **APPENDIX 1: ILLUSTRATIVE LANDSCAPE PROPOSALS FOR THE ONSHORE SUBSTATION**



# Sheringham Shoal and Dudgeon Extension Projects

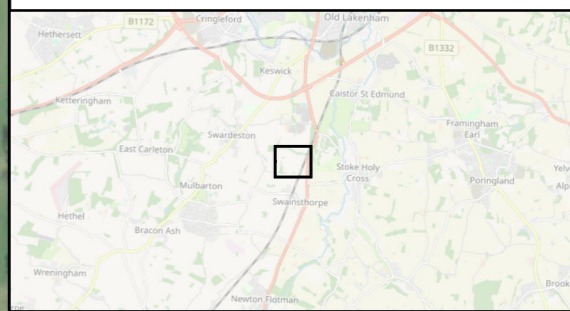
Title: Figure 1  
Illustrative Landscape Proposals

Document: Outline Landscape Management Plan

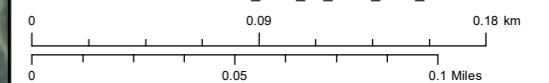
Application Doc. no.: 9.18

### Legend:

- Order Limits
- Onshore Substation Site
- Extent of substation earthworks
- Onshore cable corridor
- Onshore substation access road (indicative location)
- 400kV Cable Easement
- Bridleway
- Byway Open to All
- Footpath / bridleway (assumed to be permissive bridleway)
- Category A tree (high quality)
- Category B tree (moderate (B2/B3))
- Category C tree (low quality) (C2/C3)
- Category U tree (very quality) (U)
- Existing trees RPZ
- Existing woodland trees RPZ
- Existing hedgerows
- Existing trees removed
- Enhanced hedgerow
- Removed hedgerow
- Proposed native tree planting
- Proposed native scrub planting
- Proposed grassland planting and habitat creation



Coordinate Reference System: WGS 1984 UTM Zone 31N  
Transformation WGS84: OSGB\_1936\_To\_WGS\_1984\_7



Scale: 1:3,000      Scale at size: A3

Equinor Doc. no.: C282-LD-Z-GA-00011  
RHDHV Doc. no.: PB8164\_LDA\_ZZ\_ON\_DR\_Z\_0107

REV	DATE	STATUS	DRW	CHK	APR
A	27/07/2022	First Issue	NA	PB	PB



Data Sources: © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right 2020. Dark Sky Discovery.  
Base Map: © British Crown and OceanWise, 2021. All rights reserved. License No. EMS-EK001-627782. Not to be used for Navigation; Crown copyright and database rights 2020, Ordnance Survey 0100031673; © OpenStreetMap (and) contributors, CC-BY-SA