NORTH FALLS

Offshore Wind Farm

New visualisation (VP9) from Barn Lane - Grange Road Part 1 of 2 (Clean)

Document Reference:	9.93
Volume:	9
Date:	July 2025
Revision:	1

Project Reference: EN010119

NORTH FALLS
Offshore Wind Farm

Project	North Falls Offshore Wind Farm
Document Title	New visualisation (VP9) from Barn Lane – Grange Road, Part 1 of 2 (Clean)
Document Reference	9.93
Supplier	Royal HaskoningDHV
Supplier Document ID	PB9244-LUC-ZZ-ON-DR-GS-0053

Revision	Date	Status/Reason for Issue	Originator	Checked	Approved
0	June 2025	Deadline 6	RHDHV	NFOW	NFOW
1	July 2025	Deadline 7	RHDHV	NFOW	NFOW

Contents

1 New visualisation (VP9) from Barn Lane - Grange Road..... 4

Figures

Figure 30.2.9: Viewpoint 9 - Barn Lane – Grange Road

Figure 30.2.9a: Baseline photography: Summer (173° view)

Figure 30.2.9b: Visualisation showing North Falls development, including year 1 planting – (90 degree view) (173° view)

Figure 30.2.9c: Visualisation showing cumulative development, including year 1 planting – (90 degree view) (173° view)

Figure 30.2.9d: Visualisation showing North Falls development, including year 15 planting – (90 degree view) (173° view)

Figure 30.2.9e: Visualisation showing cumulative development, including year 15 planting – (90 degree view) (173° view)

Figure 30.2.9f: Baseline photography: Summer (263° view)

Figure 30.2.9g: Visualisation showing North Falls development, including year 1 planting – (90 degree view) (263° view)

Figure 30.2.9h: Visualisation showing cumulative development, including year 1 planting – (90 degree view) (263° view)

Figure 30.2.9i: Visualisation showing North Falls development, including year 15 planting – (90 degree view) (263° view)

Figure 30.2.9j: Visualisation showing cumulative development, including year 15 planting – (90 degree view) (263° view)

Glossary of Acronyms

BESS	Battery Energy Storage Scheme
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
ExQ2	Examining Authority's Second Written Questions
LCA	Landscape Character Area
LVIA	Landscape and Visual Impact Assessment
NFOW	North Falls Offshore Wind Farm Limited
VP	Viewpoint

Glossary of Terminology

The Applicant	North Falls Offshore Wind Farm Limited (NFOW)
The Project Or 'North Falls'	North Falls Offshore Wind Farm, including all onshore and offshore infrastructure.
Temporary construction compound	Area set aside to facilitate construction of the onshore cable route. Will be located adjacent to the onshore cable route, with access to the highway where required.

New visualisation (VP9) from Barn Lane - Grange Road

1. This document contains a set of landscape and visual impact visualisations from a new viewpoint located north of the onshore substation, along Grange Road/ Barn Lane.

2. The Applicant has prepared these visualisations in response to the Examining Authority's Second Written Questions (ExQ2) **[PD-013]** Q14.0.4 (ii), which stated:

   "*Please can the applicant provide an additional VP* [viewpoint] *from the north, at Grange Road."*

3. The new viewpoint (VP9) is located at the junction of Barn Lane byway and Grange Road. The location of the viewpoint is shown on Figure 30.2.9.

4. The visualisations have been prepared in line with the visualisations prepared and submitted with the Project's Development Consent Order (DCO) application for viewpoints 1-8 as part of Environmental Statement (ES) Chapter 30 Figures **[APP-083 to APP-088]**.

5. Visualisations looking both south (173°) and west (263°) have been provided, to demonstrate both views of the North Falls onshore substation and views incorporating projects considered within the cumulative effects assessment. For each direction, the visualisations show:

   - views including baseline photography (Figure 30.2.9a (south); Figure 30.2.9f (west));
   - the North Falls onshore substation including year 1 planting (Figure 30.2.9b (south); Figure 30.2.9g (west));
   - the North Falls onshore substation and cumulative developments (where visible) including year 1 planting (Figure 30.2.9c (south); Figure 30.2.9h (west));
   - the North Falls onshore substation including year 15 planting (Figure 30.2.9d (south); Figure 30.2.9i (west)); and
   - the North Falls onshore substation and cumulative developments (where visible) including year 15 planting (Figure 30.2.9e (south); Figure 30.2.9j (west)).

6. Viewpoints 1-8, assessed in the ES Chapter 30 Landscape and Visual Impact Assessment (LVIA) **[APP-044]** are considered to provide a representative spread and were agreed through consultation with the relevant planning authorities (see Table 30.1 in ES Chapter 30 LVIA **[APP-044]**). Views from Barn Lane are represented by Viewpoint 2 in ES Chapter 30 LVIA **[APP-044]**. Viewpoint 9 is therefore presented for information only. However, in response to Q14.0.5 in the Examining Authority's Written Questions 3 (ExQ3) [**PD-017**], a written narrative in line with those provided in Section 30.6.5.1 of ES Chapter 30 LVIA **[APP-044]** has been provided for Viewpoint 9. The following table (Table 1) presents this written narrative. The conclusions presented are in line with the findings of the LVIA as summarised in paragraph 144 of ES Chapter

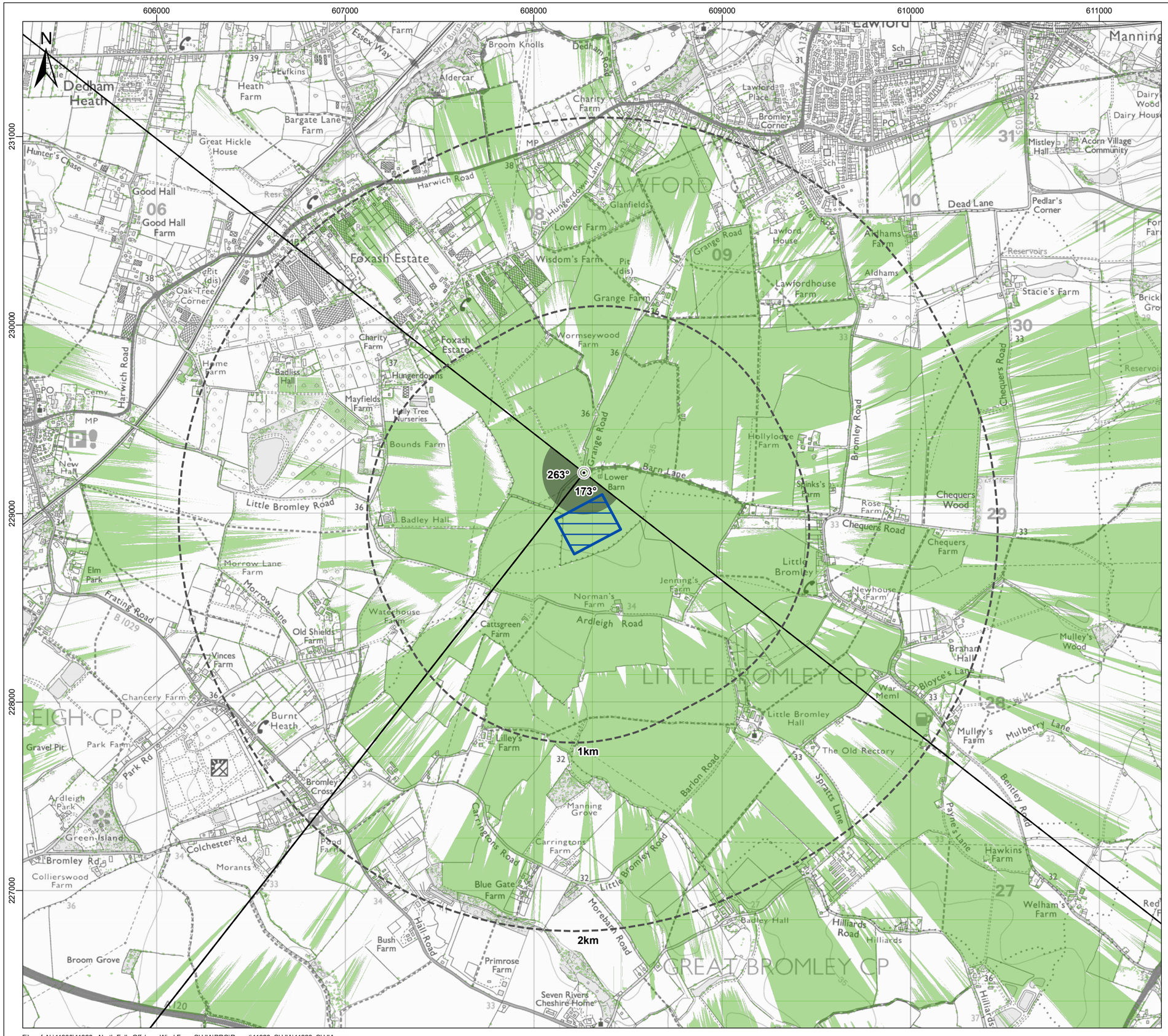
30 LVIA **[APP-044]**, i.e. that higher sensitivity receptors within 1km of the proposed onshore substation will experience significant effects on views.

Table 1 Viewpoint 9 – Barn Lane/ Grange Road

Receptor	Viewpoint 9 – Barn Lane/ Grange Road			
Grid Reference	608267	229217	Figure Number	30.2.9
Landscape Character Area (LCA)	7A Bromley Heaths		Landscape Designation	N/A
Direction of View	South		Distance to the onshore substation	0.15km
Baseline Description	This viewpoint is located at the junction of Barn Lane and Grange Road, to the immediate north of the onshore substation works area. It is representative of views experienced by recreational receptors on Barn Lane, which is a bridleway. Similar views will be experienced by recreational and road users on Grange Road. The view looks south over flat arable farmland, which includes the onshore substation works area. Hedgerows along Barn Lane and Grange Road largely contain views to the north and west. Norman's Farm and its associated outbuildings are visible beyond the field to the south. Woodland and hedgerows contribute to the horizon. Some larger scale vertical elements, including steel tower electricity pylons, are also apparent on the skyline in middle to longer distance views. Mature vegetation around the existing substation at Ardleigh Road screens views of this feature, to the south-west.			
Sensitivity	Recreational users of the bridleway are considered to be of medium-high susceptibility. The viewpoint is not located in a designated landscape, indicating a lower value. The sensitivity of receptors at this viewpoint is judged to be medium.			
Construction/ Decommissioning Effects	During construction, close proximity views of construction activity and plant will be available to the south. The foreground of the view will change from open arable farmland to a construction site. The scale of change is judged to be high. The geographical extent is judged to be small, as this represents close proximity views from relatively short sections of Barn Lane/Grange Road. The magnitude of impact during construction is judged to be high. Taking account of the medium sensitivity, effects are judged to be major adverse, which is significant in Environmental Impact Assessment (EIA) terms.			
Operational Effects (year 1)	Once operational, close proximity views (0.15km) of the onshore substation will be available to the south (see Figure 30.2.9b (south) and Figure 30.2.9g (west)). This will include views of security fencing and substation infrastructure which will be seen in the foreground, obscuring the wooded horizon. As well as the taller substation elements, the lower buildings will also clearly be visible across the field.			

Receptor	Viewpoint 9 – Barn Lane/ Grange Road
	This will change the character of the view, from open arable farmland to that of a more industrial character. Landscape mitigation will offer little screening, at year 1. The scale of change is judged to be large. The geographical extent is judged to be small. The magnitude of impact is judged to be high at year 1. Taking account of the medium sensitivity, effects are judged to be major adverse, which is significant in EIA terms.
Operational Effects (year 15)	By year 15, landscape mitigation planting around the onshore substation will have become established (see Figure 30.2.9d (south) and Figure 30.2.9i (west)). This viewpoint is located adjacent to the proposed planting to the north of the onshore substation works area, and hedgerows and trees will screen views towards the proposed infrastructure during summer. It is also acknowledged that this screen planting will itself have an impact on the currently open view. During winter, there is likely to be some visibility of the substation. The scale of change is judged to be medium. The geographical extent is judged to be small. The magnitude of impact is judged to be medium at year 15. Taking account of the medium-high sensitivity, effects at year 15 are judged to be moderate adverse, which is significant in EIA terms. These effects largely relate to the change in character of the view, from open farmland to close proximity views of established landscape mitigation.
Cumulative Effects (North Falls + Five Estuaries)	The proposed North Falls onshore substation will be seen in front of the proposed Five Estuaries onshore substation, which will be located in close proximity to the south-west of this location. Their appearance side by side will intensify the industrialising effects of electricity infrastructure on the view (see Figure 30.2.9c (south)). The contrast in form of the two substations will be apparent, with the complex open infrastructure of North Falls seen alongside the bulky main buildings of Five Estuaries. As the joint landscape mitigation proposals mature, they will help to screen views of these features, from this location (see Figure 30.2.9e (south)). It is also acknowledged that the screen planting itself will have an effect on the view. Under this scenario, cumulative effects are judged to be major adverse (significant in EIA terms) at construction and year 1, reducing to moderate adverse (significant in EIA terms) at year 15.
Cumulative Effects (North Falls + All Projects)	Views of the proposed Norwich to Tilbury substation (and its associated overhead lines) will be largely screened by existing intervening vegetation, in views to the west from this location (see Figure 30.2.9h (west)). Views of Little Bromley Battery Energy Storage Scheme (BESS), to the south-west, will also be screened by vegetation.

Receptor	Viewpoint 9 – Barn Lane/ Grange Road
	As such, cumulative effects will reflect those as identified in the North Falls + Five Estuaries Scenario, assessed above. Under this scenario, cumulative effects are judged to be major adverse (significant in EIA terms) at construction and year 1, reducing to moderate adverse (significant in EIA terms) at year 15.



Legend

- North Falls Substation Operational Footprint
- Substation Operational Footprint 1km Interval Buffer
- Theoretical Visibility of Substation Components
- Viewpoint
- 90° Field of View

Notes

The ZTV is calculated to a height of 18m (lightning masts) for the substation operational footprint, from a viewing height of 1.5m above ground level.

The digital surface model (DSM) used is LIDAR 1m (2022) data (obtained from DEFRA in December 2023). A DSM includes a surface model of trees, buildings and hedges. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcGIS Pro 3.2 software.

0 1 1 km

Data Source: OS, LUC, RHDHV

Drawing Title

Viewpoint 9 - Barn Lane – Grange Road

Rev	Date	Remarks	Drwn	Chkd
01	20/06/2025	First issue	JN	PM

Drawing Number	Figure Number
PB9244-LUC-ZZ-ON-DR-GS-0053	30.2.9

Scale	Plot Size	Datum	Projection
1:20,000	A3	OSGB36	BNG

LUC

NORTH FALLS
Offshore Wind Farm

File ref: N:\11300\11328 - North Falls Offshore Wind Farm SLVIA\PRO\Report\11328_SLVIA\11328_SLVIA.aprx

LUC

OS reference:	608267 E 229217 N
AOD (Above Ordnance Datum):	35.7 m
Direction of view:	173°
Distance to proposed substation :	148 m

Horizontal field of view:	90° (cylindrical projection)
Vertical field of view:	27°
Paper size:	841 x 297 mm (half A1)
Correct printed image size:	820 x 250 mm

Camera:	NIKON D750
Lens:	Nikkor AF 50mm f/1.8D
Camera height:	1.5 m (above AOD)
Date and time:	27/05/2025 12:00

North Falls - Onshore Substation

Figure 30.2.9a:
Barn Lane - Grange Road

Visualisation showing North Falls development, including year 1 planting - (90 degree view)

LUC

OS reference:	608267 E 229217 N
AOD (Above Ordnance Datum):	35.7 m
Direction of view:	173°
Distance to proposed substation :	148 m

Horizontal field of view:	90° (cylindrical projection)
Vertical field of view:	27°
Paper size:	841 x 297 mm (half A1)
Correct printed image size:	820 x 250 mm

Camera:	NIKON D750
Lens:	Nikkor AF 50mm f/1.8D
Camera height:	1.5 m (above AOD)
Date and time:	27/05/2025 12:00

North Falls - Onshore Substation

Figure 30.2.9b:
Barn Lane - Grange Road

LUC

OS reference:	608267 E 229217 N
AOD (Above Ordnance Datum):	35.7 m
Direction of view:	173°
Distance to proposed substation :	148 m

Horizontal field of view:	90° (cylindrical projection)
Vertical field of view:	27°
Paper size:	841 x 297 mm (half A1)
Correct printed image size:	820 x 250 mm

Camera:	NIKON D750
Lens:	Nikkor AF 50mm f/1.8D
Camera height:	1.5 m (above AOD)
Date and time:	27/05/2025 12:00

North Falls - Onshore Substation

Figure 30.2.9c:
Barn Lane - Grange Road

Visualisation showing North Falls development, including year 15 planting - (90 degree view)

LUC

OS reference:	608267 E 229217 N
AOD (Above Ordnance Datum):	35.7 m
Direction of view:	193°
Distance to proposed substation :	148 m

Horizontal field of view:	90° (cylindrical projection)
Vertical field of view:	27°
Paper size:	841 x 297 mm (half A1)
Correct printed image size:	820 x 250 mm

Camera:	NIKON D750
Lens:	Nikkor AF 50mm f/1.8D
Camera height:	1.5 m (above AOD)
Date and time:	27/05/2025 12:00

North Falls - Onshore Substation

Figure 30.2.9d:
Barn Lane - Grange Road

Visualisation showing cumulative development, including year 15 planting - (90 degree view)

LUC

OS reference:	608267 E 229217 N
AOD (Above Ordnance Datum):	35.7 m
Direction of view:	193°
Distance to proposed substation :	148 m

Horizontal field of view:	90° (cylindrical projection)
Vertical field of view:	27°
Paper size:	841 x 297 mm (half A1)
Correct printed image size:	820 x 250 mm

Camera:	NIKON D750
Lens:	Nikkor AF 50mm f/1.8D
Camera height:	1.5 m (above AOD)
Date and time:	27/05/2025 12:00

North Falls - Onshore Substation

Figure 30.2.9e:
Barn Lane - Grange Road

NORTH FALLS

Offshore Wind Farm

sse Renewables | RWE

HARNESSING THE POWER OF NORTH SEA WIND

North Falls Offshore Wind Farm Limited

A joint venture company owned equally by SSE Renewables and RWE.

To contact please email contact@northfallsoffshore.com

North Falls Offshore Wind Farm Limited Registered Address: Windmill Hill Business Park, Whitehill Way, Swindon, Wiltshire, SN5 6PB, United Kingdom

Registered in England and Wales Company Number: 12435947