

National Forest Inventory - Woodland -

model which does not take into account the screening effects of vegetation, buildings or other structures. Existing Buildings have been incorporated into the DTM from OS MasterMap with assigned individual heights and OS Open Map Local (where OS MasterMap data was not available) with an assumed

Woodland from National Forest Inventory has also been incorporated into the DTM with an assumed

ZTV is based upon a grid of points at 10 apart within the Converter Station footprint at a height of 30m (above a platform of 6.48m AOD) with an observer eye



30/05/2022

8.6 Baseline Environment

8.6.1 Location and Context

The proposed underground DC cable corridor has a total length of 69.4 km from the proposed landfall at Fraisthorpe in the East Riding of Yorkshire to the proposed converter station near Drax Power Station in Selby District.

The landscape varies considerably within the ZoI. It includes parts of the low-lying and undulating coastline and inland agricultural coastal plain of Holderness to the east, the undulating to rolling agricultural landscape of the Yorkshire Wolds, and the large-scale agricultural landscape of the Humberhead Levels to the west.

The landscape of the ZoI is well-settled, with a variety of market towns, smaller villages, hamlets and small clusters of dwellings, and scattered properties. The Yorkshire Wolds is more sparsely settled than the Holderness and Humberhead Levels landscapes to the east and west (respectively). Settlement is most frequent around the major road corridors that cross the landscape, and along the North Sea coast.

The land use is predominantly agriculture and in particular arable crops. The drained landscapes of the Humberhead Levels, and parts of Holderness, create swathes of large-scale fields defined by a geometric pattern of drains. The productive nature of the land has led to these areas being intensively farmed and modified by human influence.

The pattern of vegetation is variable with pockets of woodland and hedgerow field boundaries a consistent feature of the Yorkshire Wolds becoming more fragmented in the large-scale agricultural landscape of the Humberhead Levels.

The baseline environment for the landscape and visual assessments is described subsequently in the following four sections (**Figure 3-2**), commencing from the proposed landfall in the east to the proposed converter station in the west:

- Section 1 Landfall to Bainton;
- Section 2 Bainton to Market Weighton;
- Section 3 Market Weighton to River Ouse; and
- Section 4 River Ouse to Drax Substation.

8.6.2 Landscape Character Overview

Landscape character is a composite of physical and cultural elements. Landform, hydrology, vegetation, land cover, land use pattern, cultural and historic features and associations combine to create a common 'sense of place' and identity which can be used to categorise the landscape into definable units. The level of detail and size of unit can be varied to reflect the scale of definition required. It can be applied at a national, regional, and local level.

8.6.2.1 National and Regional Landscape Character

Natural England has identified and mapped landscape character at the national level. The extents of the ZoI coincide with the following National Character Area (NCA) descriptions (Ref 8-16), as shown on **Figure 8-2**:

- NCA27: Yorkshire Wolds;
- NCA28: Vale of York;
- NCA39: Humberhead Levels; and
- NCA40: Holderness.

At the regional scale, the North Yorkshire County Council (2011) 'North Yorkshire and York Landscape Characterisation Project' (Ref 8-17) identifies nine 'Primary Landscape Units' (PLU) and 39 'County Landscape Character Types' (CLCT) that provide a regional level landscape characterisation. The majority of these PLUs and CLCTs do not fall within the ZoI other than the following which occupy very peripheral areas:

- Farmed Lowland and Valley Landscapes (G) PLU;
- Levels Farmland (23) CLCT; and
- River Floodplain (24) CLCT.

Both the NCAs, and regional PLUs and CLCTs, by their nature are generalised and broad-brush but provide a context to the landscape of the ZoI and the landscape character assessment.

A complete description of these landscape units is available online.

The NCAs and regional PLUs and CLCTs provide a framework within which local planning authorities have characterised the landscape at a local scale. Local landscape character units represent the highest resolution of data currently available and as such form the basis of this assessment.

8.6.2.2 Local Landscape Character

The following published studies cover the ZoI:

- East Riding of Yorkshire Landscape Character Assessment Update (ERYLCA) (Ref 8-8); and
- Selby Landscape Character Assessment (SLCA) (Ref 8-18).

Parts of the ZoI from the River Ouse eastwards to the coast at Fraisthorpe fall within the ERYLCA. This area is covered by Landscape Character Types (LCTs). Each LCT is divided into more specific Landscape Character Areas (LCAs). The English Onshore Scheme ZoI contains 13 LCTs and 21 LCAs within ERYC.

The ZoI to the west of the River Ouse falls within the SLCA, which defines the landscape character through a single tier of LCAs. The English Onshore Scheme ZoI coincides with five LCAs within SDC.

The relationship of LCTs and LCAs to the ZoI extents are illustrated on **Figure 8-2** and listed in **Table 8-8**.

Table 8-8 Landscape Units within the Zol

English Onshore Scheme Section	East Riding of Yorkshire Landscape Character Assessment Update			
	Landscape Character Types (LCTs)	Landscape Character Areas (LCAs)		
3	LCT1: Flat Open Farmland	1A: Shiptonthorpe and Market Weighton Farmland		
3	LCT4: River Corridors	4B: River Ouse Corridor, Barmby on the Marsh to M62 Bridge		
3	LCT5: Open Farmland	5A: Howden to Bubwith Farmland		
3	LCT6: Wooded Open Farmland	6B: South Cliffe and Hotham Common		
3	LCT7: Foulness Open Farmland	7A: South of Holme on Spalding Moor Farmland		
		7B: Eastrington Farmland		
2	LCT10: Complex Sloping Farmland	10G: West Wolds Edge Elevated Farmland 10H: West Facing Scarp Slope		
2	LCT11: Jurassic Hills Farmland	11A: West Facing Open Farmland		
2	LCT12: Sloping Wooded Farmland	12A: South Western Sloping Wolds Farmland		
2	LCT13: Open High Rolling Farmland	13A: South Dalton Estate Farmland 13C: South Wolds Rolling Farmland 13D: North Wolds Plateau Farmland		
1	LCT16: Sloping Farmland	16A: Southwest Driffield Parkland and Golf course 16B: Kilnwick Percy Wooded Farmland 16D: Nafferton Sloping Farmland 16E: Lund Sloping Farmland		
1	LCT18: Low-Lying Drained Farmland	18A: River Hull Corridor		

		18E: Kelk Beck Farmland
1	LCT19: Open Farmland	19C: North Holderness Open Farmland
1	LCT20: Coastal Farmland	20C: Bridlington to Hornsea Coast
English Onshore Scheme Section	Selby Landscape Character Assessment	
	Landscape Character Areas (LCAs)	
4	LCA 5: Ouse Valley	
4	LCA6: Derwent Valley	
4	LCA7: Aire Valley	
4	LCA10: East Selby Farmland	
	207 (10: Last Golby Fairmana	

A description of the baseline landscape character of these LCTs and LCAs is provided within the relevant route section below (see Sections 8.6.4 to 8.6.7).

8.6.2.3 Landscape Designation Overview

Landscapes can be designated for their special landscape or scenic qualities. These areas may be identified in development plans at the local, regional or national scale.

The following landscape designations have been identified within the ZoI; their locations are shown in **Figure 8-2**:

- Dalton Hall (Grade II*) and Houghton Hall (Grade II) Registered Parks and Gardens (RPG).
- Yorkshire Wolds Important Landscape Area (ILA)¹.
- Lower Derwent Valley and Pocklington Canal ILA.

Registered Parks and Gardens

Historic England's 'Register of Historic Parks and Gardens of Special Historic Interest in England' (RPG) (Ref 8-19) identifies 'designed' landscapes of particular importance in terms of their special character.

There are two RPGs within the ZoI; their location is shown on Figure 8-2:

- Dalton Hall (Grade II*); and
- Houghton Hall (Grade II).

Dalton Hall RPG occupies approximately 200 ha of landscape park and pleasure grounds within a rolling agricultural landscape. The grounds were laid out in 1723-37 for Sir Charles Hotham and are one of the best preserved early 18th century Rococo gardens in the country. Dalton Hall lies south-west of the centre of the park and overlooks the surrounding parkland which comprises open pasture with scattered mature trees with shelterbelt planting along many of the parkland boundaries.

Houghton Hall RPG occupies an approximately 100 ha site in a rural and agricultural setting. It comprises a park and pleasure grounds laid out in 1768 to the design of Thomas White. Gardens and parkland extend around the Hall and consist largely of open pasture land with scattered mature trees and clumps along with two large lakes. A shelterbelt of planting extends along the eastern side of the park as well as a band of woodland containing a path called Sand Walk to the west side of the pleasure grounds.

Within the landscape assessment, consideration of specific heritage assets has been restricted to the contribution RPGs make to present-day landscape character and visual amenity, and as places of

¹ On the 24th June 2021, Natural England announced proposals for the consideration of several new protected landscapes across England. One of these areas identified for potential AONB designation is the Yorkshire Wolds. Since the announcement, no further information has been made available regarding the potential designation. Accordingly, the assessment only considers the effects on the Yorkshire Wolds ILA including the areas of highest quality.

interest. Further consideration of heritage assets is contained in **Chapter 8: Archaeology & Cultural Heritage**.

Important Landscape Areas

The Yorkshire Wolds and Lower Derwent Valley and Pocklington Canal ILAs are two geographically distinct ILAs designated at the local level within the ERLP (2016), Policy ENV2. Policy ENV2 takes a landscape character led approach to the designation of ILAs which is also outlined in the East Riding of Yorkshire Important Landscape Areas Boundary Refinement document, 2014 (Ref 8-20). Policy ENV2 states (p.127):

"Proposals should protect and enhance existing landscape character as described in the East Riding Landscape Character Assessment, in particular, within the following Important Landscape Areas as shown on the Policies Map"

Paragraphs 8.33-8.34 of the ERLP (2016) recognise the varying quality of the landscape within the Yorkshire Worlds. Areas of 'highest quality' are identified in the ERLP Proposals Map and these are illustrated on **Figure**. With regard to the Yorkshire Wolds ILA in particular, paragraph 8.34 of the policy states:

"Development should seek to retain the varied landform including but not limited

to:

- The contrasting and varying levels of enclosure and exposure, isolation, and tranquillity;
- Diversity of the landscape;
- Distinctive features and views;
- Field patterns;
- Villages and their distinctive character and setting;
- The historic importance of the Great Wolds Valley; and
- Signs of past human activity."

No one landscape, or designated area, is likely to be entirely homogenous within its boundaries. Therefore, where key differences, or variations in the character, quality, or value of the landscape are identified these are described in more detail within the subsequent description of landscape character for the English Onshore Scheme sections (see Sections 8.6.4 to 8.6.7).

The key characteristics and assessed value of the two locally designated ILAs are set out in Table 8-9.

Table 8-9 Key Characteristics and Value of the ILAs within the Zol

Yorkshire Wolds ILA	Published ILA key characteristics relevant to the Zol			
The Yorkshire Wolds ILA comprises Landscape Character Areas: 10, 11, 12, 13, 14, 15 in the ERYC LCA.	Refer to Table 8-11 and Table 8-17 for characteristics by LCA.			
Value	This landscape is designated at a local level as comprising valued elements across multiple ERYC LCAs. LCA15a comprises areas of the highest landscape quality with most of the ILA falling within LCA13 and its sub areas. The areas of the ILA fall largely outside of the ZoI and those areas within it are assessed in Section 2. Within the ZoI, this designated landscape is judged to have Medium value.			
Lower Derwent Valley and Pocklington Canal ILA	Published ILA key characteristics relevant to the Zol			
Key attributes of River Corridors in the Humberhead levels (Landscape Character Area: 4)	The key characteristics are: Low lying flat floodplain Combination of grassland pasture and meadow that are subject to seasonal flooding			

Yorkshire Wolds ILA	Published ILA key characteristics relevant to the Zol
	 Man-made embankments formed as a result of dredging in the twentieth century
	 Riparian woodland and trees in the corridor
	 Areas of species rich alluvial flood meadow habitat
	 Small areas of organic arrangement of medium sized fields combined with more regular boundaries of enclosed fields
	 Intimate isolated corridor landscape that is a marked contrast from surrounding intensively farmed land
Value	This landscape is designated at a local level as a result of its key attributes described above. The 2014 ILA assessment noted that ILA boundaries demarcate the transition between areas of different landscape characteristics and landscape quality. The ILA is of value as a result of elements of quality and contrast with adjacent intensively farmed landscapes. The River Derwent corridor is an important landscape feature that contributes to scenic quality. In the southern part of the ILA, Drax Power Station has a strong detracting influence and is the point of convergence for the large overhead lines, both of which influence the southernmost part of the ILA. These features detract from scenic quality and perceptual qualities of a rural landscape and sense of isolation. Within the Zol, this designated landscape is judged to have Medium value.

8.6.3 Visual Amenity Overview

Visual amenity is defined in the GLVIA (Ref 8-1, p.158) as:

"the overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area"

The English Onshore Scheme, in particular the proposed underground DC cable route, would pass through a variety of landscapes. The alignment of the proposed underground DC cable route has been selected to avoid settlement and therefore reduce the number of potential visual receptors affected. Notwithstanding this, the ZoI contains a well-developed network of roads, public rights of way (PRoW) including footpaths and bridleways, recreational routes and railways. An overview of key visual receptors is provided for each of the relevant route sections (see Sections 8.6.4 to 8.6.7), and their location relative to the English Onshore Scheme is illustrated on **Figure 8-3**.

A total of 14 representative viewpoint locations have been selected to form the basis of the visual assessment. These have been identified to provide a representative cross section of visual receptors within the ZoI and have been agreed through consultation with ERYC and SDC.

Table 8-10 provides details of the 14 viewpoints, the locations of which are shown on **Figure 8-3**. A description of the baseline view and its value from each are provided within each of the relevant route sections (8.6.4 to 8.6.7) and are supported by baseline photography contained in **Appendix 8B**.

Table 8-10 Representative viewpoint locations

English Onshore Scheme Section	Viewpoint Description	Easting	Northing	Reason for Selection
Representa	ative viewpoint locat	ions for the	landfall and ι	underground DC cable route
Section 1	Viewpoint 1: Fraisthorpe Beach coastal car park	516994. 83	463075.1 48	Representative of settlement, recreational receptors at the coastline (e.g., coastal strip; sailing club; holiday parks / caravan sites; PRoW), and users of the road network.
	Viewpoint 2: PRoW (ERYC Ref KELKF02),	510470. 484	459612.4	Representative of settlement, recreational receptors including PRoW and long-distance recreational trails, and users of the road network.

English	Viewpoint	Easting	Northing	Reason for Selection
Onshore Scheme Section	Description			
	east of Little Kelk			
	Viewpoint 3: Wansford Road, Wansford	506194. 554	456524.0 99	Representative of settlement, recreational receptors including PRoW and long-distance recreational trails, and users of the road network.
	Viewpoint 4: Hutton	502176. 068	453141.2	Representative of settlement, recreational receptors including PRoW and long-distance recreational trails, and users of the road network.
	Viewpoint 5: Bainton	498655.5	451907.3 09	Representative of recreational receptors including PRoW and long-distance recreational trails, and users of the road network.
Section 2	Viewpoint 6: Yorkshire Wolds Way, east of Market Weighton	492325.6	441806.4	Representative of recreational receptors including PRoW and long-distance recreational trails, and users of the road network.
Section 3	Viewpoint 7: North Howden / Brind, PRoW (ERYC Ref: HOWDF13)	474536.7	430640.3	Representative of settlement, recreational receptors including PRoW, and users of the road network.
	Viewpoint 8: Asselby, PRoW (ERYC Ref: ASSEF02) also part of the 'Howden 20'	471387.2	428292.4	Representative of settlement, recreational receptors including PRoW and long-distance recreational trails, and users of the road network.
	Viewpoint 9: Barmby Barrage – PRoW (ERYC Ref: BOTMF07), also Trans Pennine Trail	468054.4	428619.4	Representative of settlement, recreational receptors including PRoW and long-distance recreational trails, and users of the road network.
Representa	ative viewpoint locat	ions for the	Converter St	ation
Section 4	Viewpoint 10: PRoW (North Yorkshire County Council (NYCC) Ref: 35.26/5/1) near Wren Hall	467308.3	427129.3	Representative of settlement, recreational receptors including PRoW.
Section 4	Viewpoint 11: PRoW (NYCC Ref: 35.26/4/1) north of Drax village	467468	426620.6	Representative of settlement, recreational receptors including PRoW, and users of the road network.
Section 4	Viewpoint 12: PRoW (NYCC Ref: 35.47/8/1), near Pear Tree Avenue	467540.3	428084.5	Representative of settlement, recreational receptors including PRoW and long-distance recreational trails, and users of the road network.
Section 4	Viewpoint 13: PRoW (NYCC Ref: 35.81/15/1), east of Carlton	465460.2	424455.3	Representative of settlement and recreational receptors including PRoW.

English Onshore Scheme Section	Viewpoint Description	Easting	Northing	Reason for Selection
Section 4	Viewpoint 14: Newland, PRoW (NYCC Ref: 35.49/7/1)	468868.1	424963	Representative of settlement, recreational receptors including PRoW, and users of the road network.

8.6.4 Section 1 - Landfall to Bainton

The easternmost section of the English Onshore Scheme extends approximately 26 km across the Holderness landscape (NCA 40) from the North Sea coastline at Fraisthorpe in the east, to the settlement of Bainton in the west. In general, this is a large-scale intensively farmed agricultural landscape. The relatively narrow coastline and inland coastal strip within the ZoI is less developed than areas around Bridlington to the north. Moving inland from the landfall, the landscape is unified primarily by agricultural land use. Landform is flat to gently undulating, and low-lying from the coast to the east of Hutton Cranswick, with high points at c.10 metres (m) Above Ordnance Datum (AOD). To the west of Hutton Cranswick, the landform rises towards the dip slope of the Yorkshire Wolds, c.40 m AOD. Views within Section 1 tend to be shortened by surface features e.g. vegetation, built form, and localised topography, the screening effect of which is emphasised by the limited variation in topography; however, where gaps in screening objects occur there are opportunities for more long range views.

8.6.4.1 Landscape Designations

The majority of the ZoI of Section 1 - Landfall to Bainton, does not fall within, or lie in close proximity to, any designated landscape, apart from the westernmost extent of Section 1 which includes a very a small part of the Yorkshire Wolds ILA, shown on **Figure 8-2**.

Effects on the LCAs within the ILA are described under Section 2 – Bainton to Market Weighton.

8.6.4.2 Landscape Character

The local landscape character context for Section 1 – Landfall to Bainton is shown on **Figure 8-2**. This crosses the following LCTs and LCAs defined by the ERYLCA (Ref 8-8):

LCT 20: Coastal Farmland

LCA20C: Bridlington to Hornsea Coast.

LCT 19: Open Farmland

• LCA19C: North Holderness Open Farmland.

LCT 18: Low-lying Drained Farmland

- LCA18A: River Hull Corridor, and
- LCA18E: Kelk Beck Farmland.

LCT 16: Sloping Farmland

- LCA16A: 16A: Southwest Driffield Parkland and Golf course,
- LCA16B: Kilnwick Percy Wooded Farmland,
- LCA16D: Nafferton Sloping Farmland, and
- LCA16E: Lund Sloping Farmland.

Table 8-11 provides a summary of the published LCT 'key characteristics' and LCA descriptions that are judged to be relevant to the ZoI of the English Onshore Scheme.

Table 8-11 Local landscape character within the ZoI of Section 1 – Landfall to Bainton

LCT	Component LCAs within the	Published LCT / LCA key characteristics relevant to the Zol				
	Zol					
ERYLCA LCT20: Coastal Farmland	LCA20C: Bridlington to Hornsea Coast	 Flat to gently undulating topography sloping gently eastward Boulder clay cliffs eroding into the sea Seaside resorts of Bridlington, Hornsea and Withernsea Coastal static caravan parks are prominent Limited tree cover due to exposed windswept coastal lands Smaller villages and farmsteads and minor roads threatene erosion and sometimes end abruptly at the coast Tourism development along the coast Large scale turbine development visible within the landscap both within this LCT and within adjoining LCTs A mix of recreation and tourism facilities amongst large scal arable farmland 				
Value	of coastline backed. The exposure to the perceptual qualities scattered settlemer development; it is not homes/parks, beact Within the Zol, the clay eroding cliffs' to pronounced than in features, but they are limited. Views we coastal development.	not designated. The Zol falls within Bridlington Bay, a large sweeping arc d by low cliffs that has open views to the broad horizon of the North Sea. He coast and panoramic views out to sea are positive scenic and it is of this landscape. Inland, the landscape comprises of agricultural land, and in the form of hamlets, isolated properties, and farmsteads, and coastal moted for its recreational and functional value (yacht clubs, holiday ich car parks). To the north is the developed coastal edge at Bridlington, characteristic natural heritage /geological value inherent in the 'boulder that mark the transition from the inland farmed landscape is less in areas further south. The landscape within the Zol contains representative are not noted for their quality or rarity and cultural or historical associations within this landscape are characterised by a discordant composition of ent, landscape elements such as hedges which are often weakly defined tracterising influence of Fraisthorpe Wind Farm which detract from the				
LCT	Component	Published LCT / LCA key characteristics relevant to the Zol				
	LCAs within the Zol					
LCT19: Open Farmland	LCA19C: North Holderness Open Farmland	 Gently undulating topography, hummocky in places Very open landscape with few trees overall Dispersed villages linked by winding roads Red brick buildings with pantile roofs sometimes painted white. Churches are often prominent features on the skyline. Hedgerow field boundaries with few trees. Large number of wind energy developments visible across the landscape both within LCT 19 and adjoining LCTs Mainly intensively managed arable, with generally large fields and very little woodland Settlements are well scattered, numerous and varied in size A large-scale landscape where the sky dominates views over a gently undulating landform 				
Value	the coast. Agricultu with a rectilinear path the latter are noted landscape quality/clarge-scale fields of quality of this LCT. recreational use is The landscape with are not noted for the landscape, Carnab views of wind farms	ord designated. Landform is undulating to gently sloping as it transitions to oral land use unifies this landscape. Fields are generally large in scale and attern. Field boundaries are formed by tracks and occasional hedgerows, as being lost likely as a result of field amalgamation, weakening condition. Woodland cover is limited, and a combination of landform and aften results in 'big skies' and panoramic views that are an important scenic. There are no natural elements that are characteristic for their rarity and limited but locally enhanced by views towards the Yorkshire Wolds ILA. In the Zol contains representative features of the LCT context, but they eir quality. Settlement is sparse within the Zol. Within the open y Industrial Estate, the A165, intensive agricultural practices, and varied and wind turbines exert a strongly perceived human influence on this reduces the scenic quality of the otherwise typical agricultural landscape.				

	Overall, parts of thi	s landscape within the ZoI are judged to have low value.		
LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol		
LCT18: Low-Lying Drained Farmland	LCA18A: River Hull Corridor LCA18E: Kelk Beck Farmland	 Flat, low lying flood plain generally below 10 m AOD Sparse settlement in the floodplain. Farmsteads and villages concentrated on the edge of the flood plain Pockets of fens and reed swamps indicating a former landscape. Sparse tree and woodland cover Rectilinear field systems with hedgerow and drainage ditch boundaries A history of sand and gravel extraction River Hull is a major watercourse with embankments Recreation associated with water bodies and the River Hull 		
Value	tributary the Kelk B lined by riparian ve of the River Hull. The land is functional at and fragmented he The river and water within the Zol, and intensively manage Wansford and Great B1249 and intensive watercourses can houmber of recreation have local importar Overall, the river covalue which raise the	not designated. This landscape is influenced by the River Hull and its eck. The River Hull and floodplain marsh forms a narrow sinuous corridor getation and tree cover. The Driffield Canal lies immediately to the north he Kelk Beck is more subtle within the landscape. Surrounding agricultural and intensively managed. Field boundaries are formed by drainage ditches degrows typically in declining condition/quality. Tourses elevate the landscape and scenic quality of the parts of this LCT their associated landscape features are unique to the prevailing and agricultural land. Settlement is scattered within the landscape, of which at Kelk are the largest villages. Other human influence is limited to the reagricultural practices. Parts of the landscape around the river and have an increased sense of tranquility. Within the ZoI, there are a small conal routes (PRoW) that tend to follow watercourses that are considered to note although there are no notable cultural associations. Touridor and watercourses are key natural heritage assets of perceptual ne value of this LCT within the ZoI to medium, albeit the wider agricultural ally considered to be of lower value.		
LCT	Component LCAs within the	Published LCT / LCA key characteristics relevant to the Zol		
LCT16: Sloping Farmland	Zol LCA16A: Southwest Driffield Parkland and Golf course LCA16B: Kilnwick Percy Wooded Farmland LCA16D: Nafferton Sloping Farmland LCA16E: Lund Sloping Farmland	 Gently rolling landform sloping gradually down to the east Intermittent scattered woodland blocks throughout Intensively farmed rectilinear arable fields of large to medium size interspersed with less regular early enclosure fields particularly around villages Free draining land with dispersed streams arising in the Wolds and flowing east to the River Hull Hedgerow trees in places Scattered villages and farmsteads A number of turbine developments within the landscape with others visible beyond 		
Value	Sloping			

the LCT context, but they are not noted for their quality, and in parts their condition is noted as declining. Hutton Cranswick is located on the A164, but elsewhere in the ZoI this settlement is sparse and linked by minor roads. Human influence is evident in intensive agriculture and associated large farm development. Within the open landscape there are varied long-range views of wind farms and individual wind turbines that can detract from the scenic quality of the typical agricultural landscape.

The parts of this landscape within the ZoI are judged to have low value.

8.6.4.3 Visual Amenity

Key visual receptors identified within Section 1 – Landfall to Bainton that have the potential to be affected by the English Onshore Scheme are shown on **Figure 8-3**, and include:

Settlement receptors:

- Larger settlement at Nafferton and Hutton Cranswick. Smaller settlement at Wilsthorpe, Fraisthorpe, Gransmoor, Great/Little Kelk, Lowthorpe, Wansford, Skerne, and Southburn; and
- Isolated properties and farmsteads in close proximity to the proposed landfall and underground DC cable corridor.

Recreational receptors:

- Users of the PRoW network;
- Users of recognised long-distance trail, the Minster Way;
- Recreational aspects of the coast, including beaches, parking facilities for visitors to the coastal strip, caravan parks, and holiday parks; and
- National Cycle Network (NCN) Routes 1 and 164.

Transport routes:

- Major 'A' roads, the A165 and A164;
- 'B' roads and the local (unclassified) road network; and
- Passengers on the Yorkshire Coast Line.

Representative viewpoints 1 to 5 are located within the ZoI of Section 1 – Landfall to Bainton. The locations of the viewpoints are shown on **Figure 8-3** and accompanying baseline photography is shown in **Appendix 8C**. Descriptions of the baseline view and value are provided in **Table 8-12** to **Table 8-16** Viewpoint 5: Baseline DescriptionTable 8-16.

Table 8-12 Viewpoint 1: Baseline description

Viewpoint Location	Easting Northing Receptor Type				
Viewpoint 1: Fraisthorpe Beach coastal car park	516994.83	463075.148	Residential and recreational receptors		
Baseline Description				Value	
Fraisthorpe Beach and views from the panoramic view which extends along the the raised coastal margin there are extended of coastline to Bridlington and Flambor to the south. Bridlington's developed so which continues south as far as the hour There are open views south and inland the edge of the Yorkshire Wolds provided Small pockets of woodland along water containing isolated farmsteads and provided in the limit views of the A165 to a sproximity. From locations on the beach	Baseline Description This viewpoint is representative of views experienced by recreational receptors at Fraisthorpe Beach and views from the residential properties at Wilsthorpe. This is an open, panoramic view which extends along the coast and out to the broad horizon at sea. From the raised coastal margin there are extensive views along the sweeping arc of this section of coastline to Bridlington and Flamborough Head to the north and the less developed coast to the south. Bridlington's developed seafront has a strong presence in this part of the view which continues south as far as the holiday park and cluster of properties at Wilsthorpe. There are open views south and inland across the large-scale agricultural landscape with the edge of the Yorkshire Wolds providing a distant backdrop to views to the north west. Small pockets of woodland along watercourses punctuate inland views along with planting containing isolated farmsteads and properties. The land rises gently to the west, which is enough to limit views of the A165 to a short section south of Wilsthorpe, despite its relative proximity. From locations on the beach the low coast cliff and dunes are effective in limiting views inland, with the tops of the wood pole line, seafront properties and rotors of the				

Table 8-13 Viewpoint 2: Baseline description

Viewpoint Location	Easting	Northing	Receptor Type		
Viewpoint 2: PRoW (ERYC Ref KELKF02), east of Little Kelk	510470.48	459612.4	Residential and recreational receptors		
Baseline Description				Value	
Baseline Description This viewpoint is representative of views experienced by walkers using the PRoW and residential views from properties in Little Kelk. This view is typical of views experienced by users of the local PRoW network where there is no specific focus to the view. Local landform is gently undulating, which together with hedgerows and woodland blocks combine to limit most longer-range views. The large-scale field pattern dominates the foreground which gives a sense of openness. Little Kelk is partially obscured by vegetation to the east of the settlement and elsewhere isolated properties are visible to varying degrees through layers of screening vegetation in the wider landscape. Parts of Gransmoor Quarry are visible to the east along with wind farms and wind turbines of varying scales visible to the east, north, and south. These features detract from the typical views of the agricultural landscape experienced from this					

Table 8-14 Viewpoint 3: Baseline description

Viewpoint Location	Easting	Northing	Receptor Type	
Viewpoint 3: Wansford Road, Wansford	506194.55	456524.0 9	Residential receptors	
Baseline Description				Value
This viewpoint is representative of views experienced by properties on Wansford Road. This is a low-level, wide view with the focus extending across the open agricultural landscape to the west of Wansford. Local landform is generally level, which together with hedgerows and woodland blocks combine to limit some distant views. The large-scale field pattern dominates the foreground which gives a sense of openness although the band of vegetation along the River Hull provides a degree of enclosure to the south west. In the background of the view to the north-west is the raised topography and partially wooded horizon of the Yorkshire Wolds. Occasional movement of traffic on the B1249 is visible to the south-west. The settlement edge of Driffield sits towards the back of the midground on a high point in the landscape. Wind turbines are seen in the background of the view above and between intervening vegetation both to the south-west and north-west of this location.				

Table 8-15 Viewpoint 4: Baseline description

Viewpoint Location	Easting	Northing	Receptor Type	
Viewpoint 4: Hutton Balk Road, Hutton502176.06453141.2Residential receptors				
Baseline Description		Value		
This viewpoint is representative of view This is a slightly elevated view, affordin vegetation and for many properties, so towards the undulating agricultural land mid-ground comprise large-scale rectili hedgerows, fragmented by plantation v A164 is visible set within this context. To visible in the background of the view. There are relatively few detracting feat midground, and a distant single wind to landscape. This view is typical of the seagricultural landscape.	g a relatively wi me curtilage pla dscape to the wo near agricultura woodland and sh he undulating la ures. A wood pourbine is noticea	de vista framed inting. The focu- est of Hutton. T il fields divided helterbelts. Traf andform of the ble line extends ble amid the di	d partly by roadside us of the view is The foreground and by low clipped ffic travelling along the Yorkshire Wolds is from the fore-to- stant gently undulating	Low

Table 8-16 Viewpoint 5: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type
Viewpoint 5: NCN164 – Way of the Roses, Burn Butts Lane, east of Bainton	498655.5	451907.3	Recreational receptors

Baseline Description	Value
This viewpoint is representative of recreational users of the long-distance recreational trails and local road network. This is a slightly elevated, panoramic and well composed view. Although there is no particular focus to the view, the balance of features within this gently undulating landscape creates an attractive composition.	Medium
The large-scale of field parcels in the foreground creates a sense of openness. The fore-to-mid ground rectilinear field parcels are bound by well clipped hedgerows and the road is lined to the east by specimen trees. The Yorkshire Wolds ILA lies approximately 500 m to the north west of this location at its closest point. From this viewpoint the gently undulating topography, well managed and intact hedgerows, and slightly greater woodland cover denote the transition to the Wolds and is an important aspect in the wider composition of the view.	
Overall, this is typical of views within the landscape around the fringes of the Yorkshire Wolds.	

8.6.5 Section 2 – Bainton to Market Weighton

This section of the English Onshore Scheme extends approximately 17 km across the Yorkshire Wolds (NCA27) from the eastern dip slopes around Bainton, to the western scarp slope of the Wolds around Market Weighton. Agricultural land use defines this part of the Zol. The settlement pattern is mainly one of isolated farmsteads and small clusters of properties with occasional small, nucleated villages. It is notable also for its more undulating to rolling topography, particularly within parts of the Wolds plateau, which contrasts to the Zol sections to the east and west. Principally as a result of changes in landform, views within Section 2 tend to be more varied; from elevated and long-range vistas at the Wolds edges, to more enclosed and contained views within the rolling plateau.

8.6.5.1 Landscape Designations

Part of the ZoI of Section 2 – Bainton to Market Weighton falls within the locally designated Yorkshire Wolds ILA, including a small area identified as 'highest quality' along the western scarp slope, shown on **Figure 8-2**.

8.6.5.2 Landscape Character

The local landscape character context for Section 2 – Bainton to Market Weighton is shown in **Figure 8-2.** This Section crosses the following LCTs and LCAs defined by the ERYLCA (Ref 8-8):

LCT 13: Open High Rolling Farmland

- LCA13A: South Dalton Estate Farmland
- LCA13C: South Wolds Rolling Farmland
- LCA13D: North Wolds Plateau Farmland

LCT 12: Sloping Wooded Farmland

LCA12A: South Western Sloping Wolds Farmland

LCT 11: Jurassic Hills Farmland

LCA11A: West Facing Open Farmland

LCT 10: Complex Sloping Farmland

- LCA10G: West Wolds Edge Elevated Farmland
- LCA10H: West Facing Scarp Slope

Table 8-17 provides a summary of the published LCT 'key characteristics' and LCA descriptions that are judged to be relevant to the ZoI of the English Onshore Scheme, to determine the landscape value.

Table 8-17 Local landscape character within the Zol of Section 2 – Bainton to Market Weighton

LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol
LCT 13: Open High Rolling Farmland	LCA13A: South Dalton Estate Farmland LCA13C: South Wolds Rolling Farmland LCA13D: North Wolds Plateau Farmland	 Elevated rolling landform of the Yorkshire Wolds dip slope falling east. Large scale open landscape with long distance views and dominated by the sky. Sparsely populated area with scattered villages and farmsteads. Large and very large rectilinear regular arable fields. Fragmented hedgerows that are severely clipped. Very few trees resulting in an open landscape. Shelterbelts around farmsteads on the hill tops are a prominent feature. Numerous PRoW. South Dalton Church spire is a prominent landmark in the relatively featureless landscape. South Dalton Estate Farmland is distinguished from the surrounding farmland by its well wooded nature and parkland trees, with the Dalton estate making up the majority of the LCA. South Wolds Rolling Farmland is dominated by agriculture with wind turbines to the north-west, near Sancton.
Value	within this LCT is un rectilinear pattern is transition between with a more pronou Section 2 to the dip including hedgerow and natural/cultural representativeness the ILA designation Elsewhere, woodla The landscape qua the Zol is highly reprotable elements the Human influence is bisects the Zol. Set detract from the social stransition of the social stransition in the social stran	s of this LCT lie within the Yorkshire Wolds ILA. The landscape of the Zol nified by agricultural land use. Fields are consistently large scale. Their is emphasised by largely intact hedgerow boundaries. Within the Zol the LCA13C and LCA13D is mainly perceptible through changes in landform; inced rolling topography to the south, becoming undulating to the north of eslope of the Wolds. The intactness, quality/condition of landscape features is in notable compared to LCTs outside of the Wolds ILA. Recreational use heritage elements are present in a landscape which retains //distinctiveness within a functional agricultural landscape, recognized within a Parts of LCA13A appear well-wooded around Houghton Hall RPG. In the shelterbelts often enclose properties located on higher ground. It is recognised through its local-level designation and the landscape within presentative of the LCT and constituent LCAs. However, the LCT has no that are rare or with notable cultural heritage of association contributions. In evident in intensive agriculture practices and the presence of the A1079 that attement is generally dispersed. Overall, there are relatively few features that enic quality of this deeply rural agricultural landscape.
LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol
LCT 12: Sloping Wooded Farmland	LCA12A: South Western Sloping Wolds Farmland	 Sloping landform of the west facing Yorkshire Wolds chalk scarp slope. Sparsely populated area with villages of North Newbold and Sancton at the bottom of the slope on the boundary with the Jurassic Hills Farmland. Few scattered large farmsteads. Minor roads ascending the scarp slope of the Wolds are narrow with hedgerows either side. Steep sided wooded dales incise the scarp slope of the Wolds. Contrasting land management of the steep sided grassland dales and flatter arable Wold tops. Extensive views west over the Jurassic Hills to the Humberhead Levels.
Value	EYRC as being 'Hig landscape is charac adjoining LCA13C	s of this LCT lie within the Yorkshire Wolds ILA, and within an area defined by ghest Quality'. A small part of LCA12A falls within the ZoI. Within the ZoI this cterised by agricultural land use, which is read as a continuation of the and similarly has the LCT has no notable elements that are rare or with itage or historical association contributions. Large scale fields wrap the

	combination of scal Elevated, long-rang have particular visu Wolds distinctive la farm development. have a strong influe aspects.	andform. Hedgerows and hedgerow trees enclose roads and fields, but a le and elevation create the sense of a relatively open landscape. ge panoramic views west are a characteristic of the escarpment edge and gel appeal, recreational value and perceptual aspects as part of the Yorkshire andform. Human influence is evident in agriculture practices and scattered. The Sober Hill Wind Farm and 400kV overhead line to the south of the Zol ence on this part of LCT that detracts from its scenic quality and perceptual
LOT		ndscape is judged to have medium value.
LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol
LCT 11: Jurassic Hills Farmland	LCA11A: West Facing Open Farmland	 Sloping landform leading up to the chalk scarp slope of the Wolds Undulating topography between 15m and 60m AOD Pockets of acidic grass and heathland provide diverse habitats and contrasting appearance among the arable landscape Parkland and estate farmland associated with Houghton Hall Trees scattered in hedgerows and parkland throughout Strong hedgerow boundaries reinforce the field pattern as well as contribute to wildlife corridors
Value	by EYRC as being value of the landsca Houghton Hall RPC landscape locally a this RPG are some mature trees, and a landscape. Human development. The 4 influence over this landscape.	s of this LCT lie within the Yorkshire Wolds ILA, largely within an area defined 'Highest Quality', reflecting quality/condition, recreational and perceptual ape elements. The LCT has areas of acid grassland that are locally rare. So occupies much of the area within the ZoI which elevates the value of this is a result of its cultural/historical associations. In the immediate environs of larger blocks of woodland, remnant estate features including scattered a smaller scale rectilinear pattern of fields that add to the scenic quality of this influence is evident in agriculture practices and associated farm 400kV overhead line and A614 are detracting features that exert a localised landscape to the north of Houghton Hall.
LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol
LCT 10: Complex Sloping Farmland	LCA10G: West Wolds Edge Elevated Farmland LCA10H: West Facing Scarp Slope	 Sloping landform of the west facing Yorkshire Wolds scarp slope Steep sided dales incising the scarp slope with small water courses fed by numerous springs Diverse landform from the steep sided dales to the rolling elevated farmland Narrow roads winding up the dales to the elevated Wolds tops. Straight roads across the Wold tops Extensive views from the elevated farmland between the dales Extensive woodland and tree cover Remote, attractive, diverse and rare landscape that has a tranquil nature LCA10H is noted as a steep, transitional LCA between the Vale of York rising farmland and the elevated farmland of the Wolds
Value	by EYRC as being fall within the Zol. T generally large scal Goodmanham. The declining towards the higher Wolds tops. designation which r As with other lands views west have pathe influence of set.	of LCA10H fall within the Yorkshire Wolds ILA, and within an area defined 'Highest Quality'. A relatively small part of this LCT and its constituent LCAs This landscape within the ZoI is unified by agricultural land use. Fields are le, reducing in size around the settlements of Market Weighton and equality and condition of field boundary landscape features is noted as the edges of settlement to the west, but relatively intact to the east across the The landscape quality of the Wolds is recognised through its local-level reflects scenic and recreational value as well as perceptual aspects. capes on the scarp slope of the Wolds, elevated, long-range panoramic articular visual appeal and representativeness/distinctiveness. Within the ZoI tlement is felt to the west of this LCT around Market Weighton, and the fact from the perceptual aspect of tranquility noted of other parts of this LCT.

8.6.5.3 Visual Amenity

Key visual receptors identified within Section 2 – Bainton to Market Weighton that have the potential to be affected by the English Onshore Scheme are shown on **Figure 8-3**, and include:

Settlement receptors:

- Larger settlement at Middleton-on-the-Wolds and Market Weighton. Smaller settlement at Bainton, Lund, Holme on the Wolds, Goodmanham, and Sancton; and
- Isolated properties and farmsteads in close proximity to the proposed underground DC cable corridor.

Recreational receptors:

- Users of the PRoW network;
- Users of recognised long-distance trails, the Minster Way, Yorkshire Wolds Way, and Wilberforce Way; and
- NCN Routes 66 and 164.

Transport routes:

- Major 'A' roads, the A1079 and A1034; and
- 'B' roads and the local (unclassified) road network.

Representative viewpoint 6 is located within the ZoI of Section 2 – Bainton to Market Weighton. Viewpoint locations are shown on **Figure 8-3** and accompanying baseline photography is shown on **Appendix 8C**.

Descriptions of the baseline view and value are provided in **Table 8-18**.

Table 8-18 Viewpoint 6: Baseline description

Viewpoint Location	Easting	Northing	Receptor Type	
Viewpoint 6: Yorkshire Wolds Way, east of Market Weighton 492325.6 441806.4 Recreational receptors				
Baseline Description Value		Value		
This viewpoint is representative of view Panoramic, mid-range views are afford north-west of the 'Arras' farm. At this lobetween Goodmanham Wold and San elevated but largely enclosed by wood There is no particular focus to the view the valley. Rectilinear arable fields slop towards Goodmanham Wold. Field bot are gappy in parts. The strong lines of landscape and rolling topography. The composition of the view is relative in good condition and representative o	led from this location the track cton Wold. The land and outbuil by but one natura be down towards undaries are forr hedgerow emph	ation on the Yo follows the upper farm lies to the dings that wou lly looks towards the bottom of med by well-cliphasise the georning few featur	orkshire Wolds Way, oper contours of a valley south-east, more ld limit outward views. ds the opposite side of the valley before rising oped hedgerows, that metric pattern of the res which are generally	Medium

8.6.6 Section 3 – Market Weighton to River Ouse

This section of the English Onshore Scheme extends approximately 25 km across parts of the Vale of York (NCA 28), the Humberhead Levels (NCA 39) and the Yorkshire Wolds (NCA27), from the foot of the western scarp slope of the Yorkshire Wolds around Market Weighton to the River Ouse. Intensive agricultural land use defines this part of the landscape. The settlement pattern is sparse, mainly comprising isolated farmsteads and properties. Small groups of dwellings and linear settlement tend to be located along a few key transport routes through the landscape. The landform within Section 3 is level and low-lying. It is possible to experience long views within the landscape, contained in places by occasional woodland blocks and shelterbelts.

8.6.6.1 Landscape Designations

The majority of the Section 3 – Market Weighton to River Ouse Zol does not fall within, or lie in close proximity to, any designated landscape.

The westernmost extent of Section 3 includes a small part of the River Derwent Corridor and Lower Derwent Valley ILA, as shown on **Figure 8-2**.

8.6.6.2 Landscape Character

The local landscape character context for Section 2 – Bainton to Market Weighton is shown in **Figure 8-2**. Section 2 crosses the following LCTs and LCAs defined by the ERYLCA (Ref 8-8):

LCT 1: Flat Open Farmland

• LCA1A: Shiptonthorpe and Market Weighton Farmland.

LCT 6: Wooded Open Farmland

• LCA6B: South Cliffe and Hotham Common.

LCT 7: Foulness Open Farmland

- LCA7A: South of Holme on Spalding Moor Farmland, and
- LCA7B: Eastrington Farmland.

LCT 5: Open Farmland

• LCA5A: Howden to Bubwith Farmland.

LCT 4: River Corridors

- LCA4A: Derwent Valley, Barmby on the Marsh to Pocklington Canal Reach
- LCA4B: River Ouse Corridor, Barmby on the Marsh to M62 Bridge.

Table 8-19 provides a summary of the published LCT 'key characteristics' and LCA descriptions that are judged to be relevant to the ZoI of the English Onshore Scheme, to determine the landscape value.

Table 8-19 Local landscape character within the ZoI of Section 3 – Market Weighton to River Ouse

LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol
LCT 1: Flat Open Farmland	LCA1A: Shiptonthorpe and Market Weighton Farmland	 Generally flat, open landscape between 10 m and 30 m AOD gradually falling southwards. Drained intensively farmed arable land with occasional grass fields. Overall tree and woodland cover is sparse. One large woodland block at Allerthorpe. Field boundaries consist of a combination of fragmented and intact hedgerows with few hedgerow trees. Field pattern is dominated by medium sized regular shaped fields that are occasionally incised by small natural watercourses. Drainage pattern overall is regular and man made with few small improved natural watercourses of less regular shape. Land generally drains southwards. Combination of dispersed linear and nucleated villages. Large farmsteads are scattered throughout the area.
Value	agricultural land us scale of fields and f Human influence of practices and asso	ot designated. Parts of LCA 1A within the ZoI are unified by intensive e. The landscape of the ZoI reflects the character description of varied tragmented condition of landscape features of poor quality/condition. In this landscape is perceived principally through intensive agriculture ciated large farm development with no notable elements that are rare or of itage or historical association. The influence of Market Weighton is felt to

	overhead lines and reduce scenic quali	Γ, within the Zol. Detracting features include glimpsed views of spans of wind turbine development on the Wolds landscape to the east which ity and recreational use is limited. Eape is judged to have a low value.
LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol
LCT 6: Wooded Open Farmland	LCA6B: South Cliffe and Hotham Common	 Low lying flat arable farmland in good condition with occasional grass fields and small woodland blocks. The land rises gradually west. Church Hill at Holme on Spalding Moor is a prominent landmark. Random irregular field size and pattern. Hedgerow field boundaries in varying condition many with hedgerow trees. Scattered villages and farmsteads. Relatively remote and tranquil place away from villages. Agricultural development is a common feature across the landscape. Single development turbines and pylons are a visual detractor within the flat landscape.
Value	agricultural use. The boundaries compared contributing to a secont detract from the land Human influence is development. Therewolds escarpment reduce its recreation cultural heritage or	not designated. This landscape within the ZoI is characterised by mixed here is a higher proportion of woodland (plantation) and hedgerow field red to landscapes further west (LCA7A and 7B). This is noted as the second second place; however, their condition is variable which can in places
LCT	Component LCAs within the Zol	Published LCT / LCA key characteristics relevant to the Zol
LCT 7: Foulness Open Farmland	LCA7A: South of Holme on Spalding Moor Farmland LCA7B: Eastrington Farmland	 Low lying flat landscape with open views stretching as far as the Wolds in the east. Very few trees and woodland. Sparse settlement consisting mainly of scattered farmsteads. Large and very large rectilinear fields surrounded by fragmented hedgerows. Regular rectilinear drainage ditches feeding into the more sinuous River Foulness. Pylons and occasional wind development can be seen on the skyline within LCA7B. There are some long distance views of turbines within LCA7A, mainly to the south, due to the expansive views across the landscape.
Value	unified by intensive resulting in a large-lacking distinctivent heritage or historica Within the open lan views to Drax Powe from the scenic qua	n extensive part of the Zol to the west of Tollingham. The landscape is agricultural land use. Woodland and field boundaries are sparse, scale and relatively featureless agricultural landscape that is noted as ess. There are no notable elements that are rare or of notable cultural
LCT	Component LCAs within the	Published LCT / LCA key characteristics relevant to the Zol

LCA5A: Howden Low lying flat landscape below 10 m AOD. LCT 5: to Bubwith Open Relatively featureless intensively farmed arable landscape. **Farmland** Farmland Large areas are in the riparian flood plain of the River Derwent. Medium scale fields with fragmented hedgerow boundaries. Boundaries lost in places though mature oak trees remain in Open character with extensive views across the flat landscape. Occasional woodland blocks and fragmented tree cover contributing to extensive views that include Drax Power Station to the south-west and distant wind development mainly to the south. Small villages and Farmsteads are scattered throughout, but overall settlement density is low. Value This landscape is not designated. Within the ZoI the landscape is characterised by intensive agricultural land use, reflected in large scale open fields. Woodland and field boundaries are relatively sparse, albeit the landscape scale and enclosure by vegetation tends to reduce around settlement. The landscape is noted as lacking distinctiveness and with some declining landscape condition, which is reflective of the landscape within the Zol. Human influence is evident in intensive agriculture practices and associated large farm development. Features that detract from scenic quality are noticeable throughout much of this landscape within the ZoI, including views of single wind turbines and wind farms, occasional long views to Drax Power Station and spans of overhead lines. There are no notable elements that are rare or of notable cultural heritage or historical association. Overall, this landscape is judged to have low value. **LCT** Component Published LCT / LCA key characteristics relevant to the Zol LCAs within the Zol Low lying flat floodplain of the river valleys on the western edge LCA4A: Derwent LCT 4: Valley, Barmby of the East Riding. River on the Marsh to **Corridors** Combination of grassland pasture and meadow that are subject **Pocklington** to seasonal flooding. Canal Reach Man-made embankments formed as a result of dredging in the LCA4B: River 20th century. **Ouse Corridor,** Riparian woodland and trees in the corridor. Barmby on the Areas of species rich alluvial flood meadow habitat. Marsh to M62 Bridge Organic arrangement of medium and large sized fields combined with more regular boundaries of enclosed fields. Wind farms are a particular feature on the Ouse south and east of Goole, north-west of little Airmyn and some examples of single turbine development scattered across the LCT. Intimate isolated corridor landscape that is a marked contrast from surrounding intensively farmed land. Villages, hamlets and farmsteads line the river corridor just above the floodplain. The landscape of LCA4A falls largely within the River Derwent Corridor and Lower Derwent Value Valley ILA. The designation covers the narrow river channel within man-made embankment and its adjoining floodplain to the east (within ERYC). Within the ZoI the designated area is perceived as areas of smaller field parcels and occasional riparian vegetation that differentiate it from the wider intensively farmed landscape, in which recreational use is limited. Albeit that the condition of some field boundary landscape features is noted as declining, it is judged that the overall landscape quality, rarity, and scenic quality raises its value above other parts of this LCT. LCA4B is not designated. The landscape is characterised by intensive agricultural land use, reflected in a pattern of medium-large scale fields. Woodland and field boundaries are relatively sparse and the landscape scale and enclosure by vegetation tends to reduce further around settlement. Human influence is generally evident throughout in intensive agriculture practices and associated large farm development. Views of wind turbines and wind farms are frequent throughout this LCT, as are occasional long views to Drax Power Station and spans of overhead lines. Overall, this landscape is judged to have **low** value, aside from limited parts of the ZoI within the ILA which are considered to have medium value.

8.6.6.3 Visual Amenity

Key visual receptors identified within Section 3 – Market Weighton to River Ouse that have the potential to be affected by the English Onshore Scheme are shown on **Figure 8-3**, and include:

Settlement receptors:

- Larger settlement at Howden, Asselby, and Barmby on the Marsh. Smaller settlement at Bursea,
 Welham Bridge, Portington, Eastrington, Spaldington, North Howden / Brind, Newsholme,
 Asselby, and Knedlington; and
- Isolated properties and farmsteads in close proximity to the proposed underground DC cable corridor.

Recreational receptors:

- Users of the PRoW network;
- Users of recognised long-distance trails, the Trans Pennine Trail and Howden 20;
- Users of Open Access land; and
- NCN Route 65.

Transport routes:

- Major 'A' roads, the A63 and A614; and
- 'B' roads and the local (unclassified) road network.

Representative viewpoints 7 and 8 are located within the ZoI of Section 3 – Market Weighton to River Ouse. Viewpoint 9 is on the boundary of this Section, looking south. Viewpoint locations are shown on **Figure 8-3** and accompanying baseline photography is shown on **Appendix 8B**.

Descriptions of the baseline view and value are provided in Table 8-20 to Table 8-22.

Table 8-20 Viewpoint 7: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
North Howden / Brind, PRoW (ERYC Ref: HOWDF13)	474536.7	430640.3	Recreational receptors	
Baseline Description				Value
This viewpoint captures the views from is a low-lying, wide view contained by he pastoral fields are subdivided into smal the boundaries of properties in North Hembankment to the south offer the app to restrict more distant views. To the noticeable, detracting feature. This is a part of the Zol.	nedgerow plantined the conclusion of the conclusion in the conclusion of the conclus	ng and with no by post and wir etation along the ll-wooded land ge buildings at	particular focus. Large e fences. Trees along ne railway dscape, which serves Wynn Farm are a	Low

Table 8-21 Viewpoint 8: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
Asselby, PRoW (ERYC Ref: ASSEF02) also part of the 'Howden 20'	471387.2	428292.4	Residential and recrea receptors	tional
Baseline Description				Value
This viewpoint is representative of views from residential receptors in Asselby and recreational users of the local PRoW. This is a wide, low-lying view and captures the large-scale arable landscape to the north of Asselby. The fore-to-mid ground is dominated by large field parcels, with variation in crop growth and cultivation providing variety to the scene. The drainage ditch and track that divide the field parcels leads the eye away from this location. Towards the background of the view the appearance of woodland is created by the layering effect of tree-lined ditches within the low-lying and level landscape.		Low		

Detracting features include a prominent span of overhead lines seen above the vegetated skyline. In the distance to the north east is the Spaldington Airfield Wind Farm and to the west a single wind turbine at the Barmby Marsh Water Treatment Works.

Table 8-22 Viewpoint 9: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
Barmby Barrage – PRoW (ERYC Ref: BOTMF07), also Trans Pennine Trail	468054.4	428619.4	Recreational receptors	
Baseline Description				Value
This viewpoint is located on the Trans within the southern tip of the Lower De is on the River Ouse embankment which surrounding landscape. The River Ouse and narrow strips of rip with the small scale and varied form of midground of the view is defined by the which from this location are partly screform. Drax Power Station is a prominent feat towers, chimney stack, and turbine hal this location the vast scale of the power natural features. Further movement is a overhead lines to the north-east of the parts of the view and can be seen about	rwent Valley and ch offers a slight parian planting of Long Drax seer a intensively farmened by interverure in the backgorise above intervertation can be added by the plupower station expenses.	d Pocklington Cally elevated view occupy the forem on the opposite of the viruening riparian versing shelter fully appreciate umes from the extend its influence.	canal ILA. This location w across the ground of the view, the bank. The ple fields to the south egetation and built ew. The cooling belt woodland. From the against these stacks. The span of	Medium

8.6.7 Section 4 – River Ouse to Drax Substation

The westernmost section of the English Onshore Scheme extends approximately 1.7 km across parts of the Humberhead Levels (NCA 39), from the River Ouse to Drax Power Station and its environs. Intensive agricultural land use unifies much of this part of the landscape. The prominent built form at Drax Power Station, its associated overhead power lines, and the Rusholme Wind Farm are located within Section 4. The River Ouse bisects the landscape as it flows eastwards towards the Humber Estuary, set within low embankments. There is scattered settlement throughout Section 4, including the larger villages of Carlton, Camblesforth, and Drax. Landform within Section 4 is level and low-lying. It is possible to experience long views within the landscape, but also for layers of vegetation and built form to be effective in providing localised containment.

The ZoI in Section 4 includes the 3 km study area for the proposed converter station.

8.6.7.1 Landscape Designations

Consideration of the River Derwent Corridor and Lower Derwent Valley ILA is contained within Section 3 – Market Weighton to River Ouse (8.6.6, and **Table 8-19**).

8.6.7.2 Landscape Character

The local landscape character context for Section 4 – River Ouse to Drax Substation is shown on **Figure 8-2**. Section 4 includes the following LCAs defined by the SLCA (Ref 8-18):

- LCA 5: Ouse Valley;
- LCA 6: Derwent Valley;
- LCA 7: Aire Valley;
- LCA 10: East Selby Farmland; and
- LCA 15: Camblesforth Farmland.

Table 8-23 provides a summary of the published LCT 'key characteristics' and LCA descriptions that are judged to be relevant to the ZoI of the English Onshore Scheme, to determine the landscape value.

Table 8-23 Local landscape within the ZoI of Section 4 – River Ouse to Drax Substation

LCA	Published LCT / LCA key characteristics relevant to the Zol
LCA 5: Ouse Valley	 Very flat, low-lying floodplains of the River Ouse, used predominantly as arable farmland.
cuco rame,	 Medium to large scale patchwork of heavily drained fields, commonly defined by ditches or grassed 'beetle banks'.
	High grassy and vegetated flood embankments help disguise the river as it flows through the landscape.
	Localised areas of wetland and marsh provide valuable biodiversity habitats.
	 Significant number of settlements including villages, hamlets, located along the course of the River Ouse.
	 Confluences of the Ouse and Aire at Airmyn to the south-east.
	 Strong influence of human elements including the prominent Drax Power Station, Rusholme Wind Farm, pylons running through the landscape, and river levees.
	Distinct lack of woodland and tree cover creates a sense of vast openness.
Value	This landscape is not designated.
	Within the Zol this landscape is unified by agricultural land use, reflected in medium to large scale fields with an irregular pattern. There is very limited woodland cover and field boundary features within intensively farmed agricultural areas which, in combination with the level landform, creates a perceptual quality of openness and 'big skies'.
	The River Ouse is contained within raised embankments. Its presence within the landscape is most noticeable through narrow strips of riparian vegetation along its banks. The river corridor is an important landscape feature that contributes to scenic quality. The course of the river is also followed by the Trans Pennine Trail, a regionally important recreational asset.
	Drax Power Station (within LCA15) has a strong detracting influence on parts of this LCA. The power station is also the point of convergence for the large overhead lines that span LCA5. These features detract from scenic quality and perceptual qualities of a rural landscape and sense of isolation.
	Within this part of LCA5 settlement is relatively sparse, comprising scattered dwellings and farmsteads, and the small hamlet of Long Drax.
	This landscape is judged to have low value overall, albeit with localised areas of higher value within the river corridor and its immediate setting.
LCA	Published LCT / LCA key characteristics relevant to the Zol
LCA 6:	 Very flat, low-lying western floodplain of the meandering River Derwent.
Derwent Valley	 Narrow floodplain with local variations in width, with wetlands and meadows of high nature conservation value.
	 Low grassy flood embankments with areas of traditionally managed meadows for pasture or to produce hay.
	 Limited road access, with main routes crossing the river rather than following it.
	 Rectilinear field patterns defined by occasional hedgerow trees and the River Derwent.
	Recreational boating and wildlife watching attract people to this tranquil area.
Value	This landscape is not designated; however, it lies on the western banks of the River Derwent which is locally designated by EYRC as an Important Landscape Area. A small extent of this LCA lies within the Zol.
	The landscape character is defined by two features; the River Derwent to the east, and medium-large scale rectilinear agricultural fields to the west. There are some hedgerow boundaries separating fields, but this is generally an open landscape.
	Human influence is evident in the intensive agricultural practices that unify this landscape. Drax Power Station is ever-present in views to the south that detracts from the scenic quality of views enjoyed from this LCA. The Barmby Marsh Water Treatment Works wind turbine is prominent to the east of the River Derwent.
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	Overall, this landscape is judged to have low value.
LCA	Published LCT / LCA key characteristics relevant to the Zol
LCA LCA 7: Aire Valley	Published LCT / LCA key characteristics relevant to the ZoI • Flat, low-lying floodplains to the north and south of the meandering River Aire, which widens further downstream.
LCA 7: Aire	 Published LCT / LCA key characteristics relevant to the ZoI Flat, low-lying floodplains to the north and south of the meandering River Aire, which

- Areas of wetlands, marshy grasslands and fen located within the floodplain, which offer high nature conservation value.
- Power stations and pylons form distinctive human elements visible from within this landscape.
- Numerous bridges cross the River Aire, including the A1 in the west.

Value

This landscape is not designated. A small extent of LCA7 lies within the Zol. Within the Zol the landscape is characterised by a patchwork of agricultural fields of varying scale, enclosed by hedgerows and linear belts of trees, with some small blocks of woodland. The River Aire defines the southern edge of this landscape set within high embankments that in places are well-vegetated. This part of LCA7 has a more natural feel that results in greater scenic and landscape quality compared to areas further west. This part of LCA7 has relatively high levels of enclosure that, in turn, generates a sense of tranquility. There is sparse settlement within the part of LCA7 that lies within the Zol.

Within the ZoI this LCA is strongly influenced by the River Aire and has few detracting features and is judged to have **medium** value.

LCA

Published LCT / LCA key characteristics relevant to the Zol

LCA 10: East Selby Farmland

- Very flat, arable farmland, with a strong presence of tree lines along field boundaries obscuring the skyline.
- Relatively regular field pattern comprising medium scale fields defined primarily by mature hedgerows with frequent mature hedgerow trees which provide a strong sense of enclosure.
- Numerous farmsteads and small villages dispersed evenly across the landscape.
- Strong rural character, with limited built development visible due to intervening vegetation across the landscape.

Value

This landscape is not designated. A small extent of LCA10 lies within the Zol. Within the Zol this landscape provides a continuation of the simple agricultural field pattern adjacent to the Rivers Derwent and Ouse (LCA 6 and LCA5). The landscape is influenced locally by the settlement of Hemingbrough. The settlement edge to the south has mixed character that together with some shelter belt planting appears somewhat discordant within the otherwise very simple, open agricultural landscape to the south. The presence of the settlement detracts from perceptions of tranquility within the landscape.

Overall, this landscape is judged to have low value.

LCA

Published LCT / LCA key characteristics relevant to the Zol

LCA 15: Camblesfort h Farmland

- Flat arable farmland with a high concentration of small areas of broadleaved woodland and shelterbelts, creating a sense of enclosure.
- Medium-large scale rectilinear field pattern frequently lined by hedgerow trees.
- Sparse settlement with very few isolated properties and farmsteads.
- Strong human influence from the industrial Drax Power Station, highly visible from throughout the landscape.
- Time depth from the juxtaposition of the power station with the historic village of Drax.

Value

This landscape is not designated. This LCA occupies much of the central and western parts of the Zol. Drax Power Station lies at the centre of the Zol within this LCA. Its scale and built form exert a strong influence across both this and surrounding landscapes; it divides opinion and could be considered either a landmark, or a detracting feature. The span of overhead lines that converge at the power station from the north-east and south-east extend the influence of large-scale power infrastructure across a wide area. The Barlow Mound ash disposal also stands apart as a prominent raised landform within this generally level landscape.

Beyond the power station, land use is predominantly intensive agriculture comprising medium-large scale field parcels. Around Drax Power Station layers of shelterbelt and plantation woodland provide localised enclosure that heightens perceptual qualities of and tranquility. Beyond this area, the landscape becomes more open. Undeveloped views to the west, south, away from the power station, are noted as having higher scenic quality. Settlement tends to be well integrated within the landscape. The LCA is bisected by the A645, A1041 that add to the evidence of human influence on the landscape. The landscape has a relatively concentrated network of PRoW around settlements, and is considered to have local recreational value.

Overall, this landscape is judged to have low value.

8.6.7.3 Visual Amenity

Key visual receptors identified within Section 4 – River Ouse to Drax Substation that have the potential to be affected by the English Onshore Scheme are shown on **Figure 8-3**, and include:

Settlement receptors:

- Barmby on the Marsh, Newland, Carlton, Barlow, Hemingbrough, Long Drax, Drax village, and Camblesforth; and
- Scattered isolated properties and farmsteads.

Recreational receptors:

- Users of the PRoW network;
- Users of recognised long-distance trail, the Trans Pennine Trail; and
- NCN Route 65.

Transport routes:

- Major 'A' roads, the A1041, and A645; and
- 'B' roads and the local (unclassified) road network.

Representative viewpoints 10 to 14 are located within the ZoI of Section 4 - River Ouse to Drax Substation. The locations of the viewpoints are shown on **Figure 8-3** and accompanying baseline photography is shown on **Appendix 8B.**

Descriptions of the baseline view and value are provided in Table 8-24 to Table 8-28.

Table 8-24 Viewpoint 10: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
PRoW (North Yorkshire County Council (NYCC) Ref: 35.26/5/1) near Wren Hall	467308.3	427129.3	Residential and recrea receptors	tional
Baseline Description			Value	
This viewpoint is representative of views experienced by users of the PRoW and from Wren Hall. This view is dominated by Drax Power Station which creates a prominent industrial backdrop across the view with the level arable fields in the foreground creating an open aspect. The power station complex and in particular the cooling towers exert a substantial scale on the view although intervening planting along Wren Hall Lane plays an important role in screening the lower parts of the colling towers, substation and turbine hall. In addition, vegetation around Wren Hall as well as some of the adjacent farm buildings partially screen some views from the property.				

Table 8-25 Viewpoint 11: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
PRoW (NYCC Ref: 35.26/4/1) north of Drax village	467468	426620.6	Residential and recrea receptors	tional
Baseline Description				Value
This viewpoint is representative of views experienced by users of the PRoW network and views from properties on the settlement edge of Drax Village. This is a typical framed view across the level, arable landscape. High hedgerows and hedgerow trees provide enclosure to the field parcel, limiting more distant views. The built form of Drax Power Station is prominent above the mid-ground field boundary and shelterbelt planting. The northern cooling towers and chimney stack are the most visible elements of the existing power station that protrude above intervening vegetation in the landscape. The main turbine hall, by comparison, is less prominent. Overhead powerlines extend north-east from the power station and span the extent of the view, seen above intervening vegetation within the landscape.				Low

Table 8-26 Viewpoint 12: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
PRoW (NYCC Ref: 35.47/8/1), near Pear Tree Avenue	467540.3	428084.5	Residential and recreational receptors	
Baseline Description				Value
This location captures the view from a local PRoW, in close proximity to a cluster of residential properties on Pear Tree Avenue. The vast scale and extent of Drax Power Station makes it the focus of the view. The fore-to-midground of the view is defined by open, large scale arable fields, punctuated by occasional field trees. Shelterbelt planting compartments the view and restricts distant views within the level landscape. Drax Power Station is a dominant, detracting feature of the view. The scale of cooling towers, chimney stack and main turbine hall are easily appreciated against natural features in the view. Plumes are an ephemeral feature that adds to movement in the scene. A large-scale overhead line further detracts from the scenic quality as it spans the view.				

Table 8-27 Viewpoint 13: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
PRoW (NYCC Ref: 35.81/15/1), east of Carlton	465460.2	424455.3	Residential and recrea receptors	tional
Baseline Description				Value
This is a wide panoramic view from a larepresenting both recreational and restopography falls away to the north, affor fragmented by occasional blocks of shiplanting that lines the A645 to the north Club to the north-west. Drax Power Station is a prominent detrived above the wooded horizon to the highly visible. Upper parts of the turbin From this direction of view, the composition of the compared to its symmetrical layout who converge at the power station from the span a large extent of the view and design and the symmetric of the view and design and the view and the view and design and view and v	Low			

Table 8-28 Viewpoint 14: Baseline Description

Viewpoint Location	Easting	Northing	Receptor Type	
Newland, PRoW (NYCC Ref: 35.49/7/1)	468868.1	424963	Residential and recreational receptors	
Baseline Description				Value
This viewpoint is representative of view western edge of Newland. Views to the fields. Field boundaries are fragmented effect of scattered field trees and remain Drax Power Station is a relatively distated to therwise agricultural view, seen above towers, chimney stack, and turbine hall symmetrical layout of the power station other locations within the Zol the convescreening vegetation within the landscape.	Low			

8.7 Potential Impacts

8.7.1 Introduction

This section provides an overview of mitigation measures included as part of the design of the English Onshore Scheme before setting out the elements and activities which could result in potential impacts and landscape character and visual amenity, followed by an assessment of the likely effects on identified receptors in both the construction and operational phases of the English Onshore Scheme.

As agreed during the scoping exercise, the effects on landscape character have been assessed and reported at the scale of published landscape character assessments using the defined LCAs and LCTs.

The range of potential visual effects is illustrated by the use of a series of representative viewpoints which form the basis of a wider understanding of how visual amenity will change as a result of the English Onshore Scheme.

Beyond the extent of the ZoI, it is considered unlikely that the English Onshore Scheme will give rise to any significant effects on landscape and visual receptors due to distance and presence of screening features.

8.7.2 Mitigation by Design

Where feasible, mitigation measures have been incorporated into the design of the English Onshore Scheme such that they inform its detailed design and/or the approach to its construction.

Embedded measures have been defined through an iterative process of assessment and design-development, the aim being to mitigate impacts and effects as much as possible through good design and the application of best practice construction working methods. This approach has accordingly provided opportunities to prevent or reduce adverse effects on landscape character and visual amenity by designing-in measures from the outset and defining the actions and control that would be applied during construction.

The effectiveness of these embedded mitigation measures have been taken into account when identifying the potential impacts of the English Onshore Scheme and the significance of its effects on the landscape and visual environment.

Elements of embedded mitigation of specific relevance to landscape character and visual amenity comprise the following.

8.7.2.1 Siting and Routeing

Sensitive siting and routeing has sought to:

- avoid more sensitive landscape features such as woodland, including protected trees (e.g. Ancient Woodland) and mature tree specimens;
- limit the proximity of the cable corridor to settlement and residential properties; and
- avoid the areas of highest quality landscape in the Yorkshire Wolds ILA.

8.7.2.2 Construction Control and Management Measures

- Adoption of a maximum working width for the cable construction corridor of 40 m, sufficient to
 excavate the trench, store topsoil and subsoil separately and facilitate machinery and vehicle
 access (but avoiding additional land take).
- Adoption of cut and cover along the cable route and subsequent reinstatement to original ground profiles. As per Chapter 3: Description of the English Onshore Scheme, typically 1 km of cable will be installed with the original land profiles reinstated within 9 months, subject to installation methods and complexity.
- Placement of topsoil to one side of the trench and subsoil to the other, with the additional height of the subsoil storage used on whichever side requires greater screening benefit.
- Positioning temporary construction compounds in less visually conspicuous locations along the route, as far as practicable, without compromising efficient working.

- Employing standard good practice construction techniques, such as minimising vegetation clearance, installing tree protection measures around retained trees and hedgerows, separation and storage of subsoil and topsoil to ensure no degradation in quality, and reinstatement undertaken as soon as possible after completion of construction of each section/area of works.
- Reinstatement of hedgerows/field boundaries crossed by the route, with native (and species-rich where appropriate) species planted to reduce or mitigate effects on landscape character and the visual awareness of the cable route within and across the landscape in the short to medium term.
- Reinstatement of agricultural land such that there is no long-term change in land use along the cable route.

8.7.2.3 Design Principles

The DAS provides details of the design intent and design principles that have been adopted and embedded into the converter station site design. These include:

- Locating the converter station within an existing industrial context immediately adjacent to Drax Power Station, to improve landscape fit and minimise visual impact.
- Consideration of the orientation and massing of the converter station in order that other existing large structures and elements can provide a degree of visual screening.
- Designing the converter station buildings to:
 - have simple monolithic forms, avoiding unnecessary complexity in order to ensure a clean and unbroken silhouette.
 - be clad in appropriate material and colours designed to respond to the colour palette used at Drax Power Station, to help integrate the buildings into the landscape and views.

8.7.2.4 Landscape Design Principles

An outline landscape plan has been prepared for the converter station site which provides a collaborative approach to delivering landscape and biodiversity mitigation as well as Biodiversity Net Gain (BNG). This has been developed in recognition of the Leeds City Region Green and Blue Infrastructure Strategy (Ref 8-21) and in particular priority action areas 1 and 5 as well as consistent with the targets of the Government's 25 Year Environment Plan (Ref 8-22). The principles of which are embedded in this approach, which will inform the future detailed design, seek to:

- Respond to both the immediate landscape pattern of the site as well as the wider landscape character;
- Protect existing vegetation wherever possible along the boundaries of the site with the erection of
 tree protection measures in accordance with British Standard BS 5837:2012 (Ref 8-11) prior to
 commencement of ground works. Where this isn't possible along Wren Hall Lane, limit the
 corridor of vegetation removal as far as reasonably practicable (up to 15 m in width as per the ES)
 and locate the corridor of vegetation removal to the area of least established and lowest value
 trees (refer to Appendix 8C: Arboricultural Impact Assessment Report);
- Strengthen the (low level) screening benefit provided by the existing pattern of planting along Wren Hall Lane and along the northern boundary of the site with additional native woodland planting;
- Provide an integrated drainage solution with attenuation ponds and swales, planted with marginal
 wetland species set within a wider context of species rich grassland and native scrub planting to
 improve the biodiversity value within the site;
- Monitoring and maintenance of new planting and seeding to ensure successful establishment;
 and
- Limiting permanent site access from New Road to retain the surrounding landscape structure and boundary planting immediately around the converter station site.

The outline landscape and biodiversity plan is shown in **Figure 8-5** and explained further below.

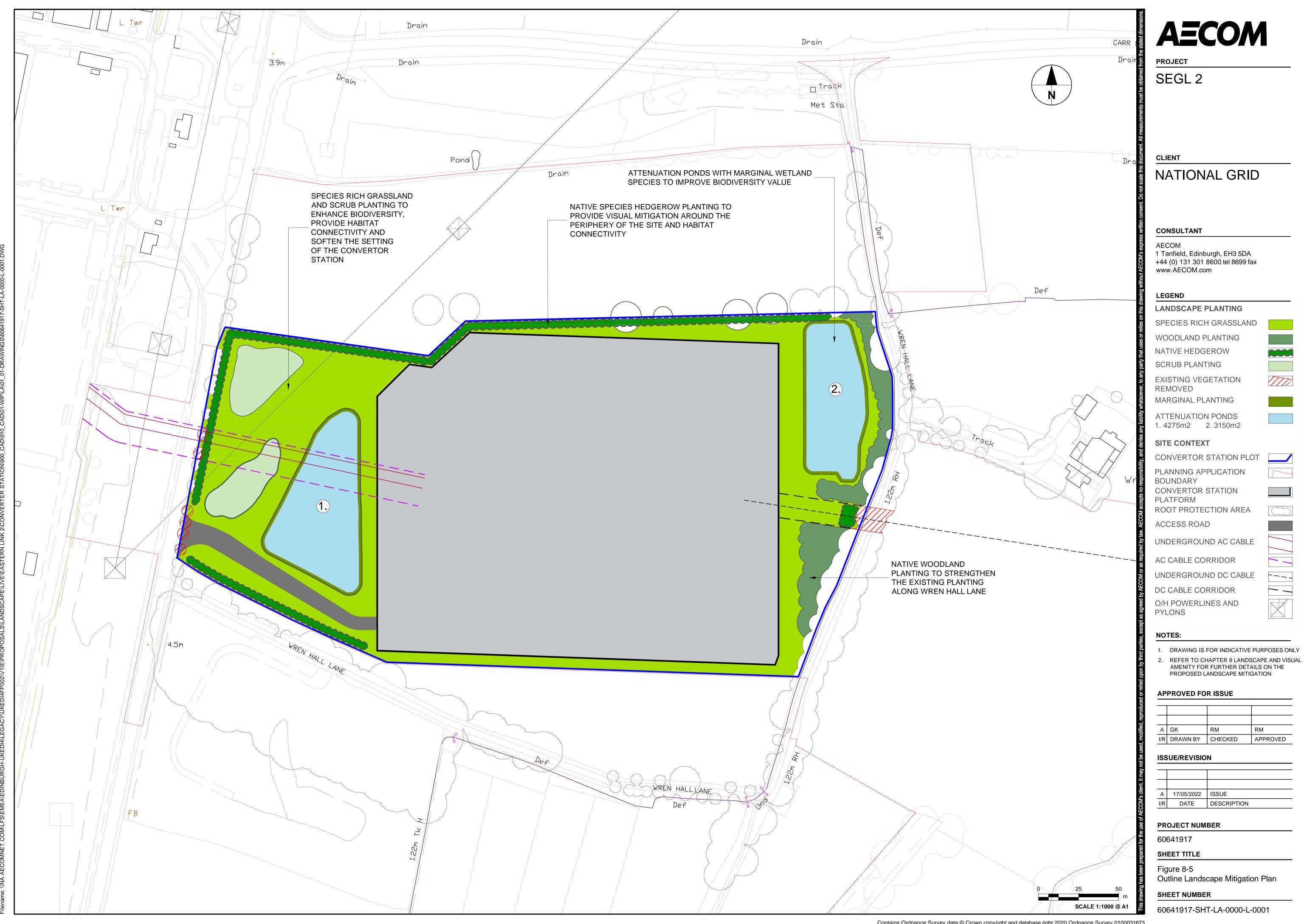
8.7.2.5 Outline Landscape and Biodiversity Plan

The development of the outline landscape and biodiversity plan has evolved as the design has developed, to ensure that landscape, visual amenity and biodiversity have been embedded within the decision making for the converter station site location and orientation.

Whilst the design principles outlined above and in the DAS, seek to achieve a simple and unified architectural form which appears recessive to but visually connected to Drax Power Station, specific landscape measures will be required in order to further integrate the converter station into the immediate landscape context and partially filter some views. These landscape measures have been developed collaboratively with biodiversity and hydrological considerations to ensure that a cohesive landscape plan is developed for the site.

The outline landscape plan is shown on Figure 8-5 and contains the following key elements.

- Retention of boundary planting: existing tree and hedgerow planting to the north of the site and along Wren Hall Lane shall be retained other than where the cable corridor and haul road require a 15 m easement. This will retain the partial screening benefit that this existing planting provides in views from the east;
- Woodland planting: native woodland planting along the eastern boundary of the site adjacent to
 Wren Hall Lane (excluding the cable easement) will strengthen the existing boundary planting
 helping to reduce the overall scale and mass of the building facades particularly in views from the
 east:
- Hedgerow planting: native hedgerow planting using species typical of the local area and existing landscape will be planted along the northern, western and parts of the southern boundary of the site to provide visual mitigation around the periphery of the site and habitat connectivity;
- Replacement planting: native shallow-rooting hedgerow species typical of the local area and
 existing landscape will be planted within the cable easement along Wren Hall Lane. To prevent
 future root damage to cables, no trees will be planted within the cable easement;
- Species rich grassland and scrub planting: all areas which are not occupied by hard standing or buildings will be planted with species rich grassland and pockets of shrub planting. This will enhance biodiversity, provide habitat connectivity and soften the setting of the converter station site from immediate views to the west; and
- Attenuation ponds and swales: an integrated drainage solution with attenuation ponds and swales will be planted with marginal wetland species to improve biodiversity value within the site.



8.7.3 Assessment of Potential Impacts: Construction Phase

During construction of the English Onshore Scheme, there are several elements and activities that have the potential to temporarily impact landscape character and visual amenity within the Zol. These impacts relate to the removal of existing landscape features such as hedgerows and arable land, and the visibility of new temporary features such as construction machinery, including effects on perceptual qualities of landscape and visual amenity.

The potential for temporary impacts on the landscape and visual resource of the ZoI may arise from the following construction activities:

Underground DC Cable Route

- Site clearance, particularly the clearance of trees, hedgerows and other vegetation along the cable route.
- Ground excavation, particularly along the cable route which will result in the exposure of subsoil and the temporary change in land use from agricultural cropping/grazing to an open excavation.
- New, linear soil storage mounds adjacent to the cable trench excavation, particularly where these occupy rolling landform or varied topography.
- Construction compounds, materials storage, temporary offices, vehicle parking and associated activity.
- Localised lighting in discrete working locations to facilitate safe working, during the months with shorter daylight hours. This will be limited in extent and in line with the defined construction working hours (Monday – Saturday between 8am to 6pm).
- The stockpiling or temporary storage of materials, in particular those required along the cable route.
- Temporary drainage measures including settlement ponds along the cable route.
- Installation of temporary signage, construction equipment, traffic control measures at road crossings and localised use of perimeter fencing, and hoardings.
- Temporary traffic diversions and/or re-routing offline to avoid the cable excavation.
- The movement of construction traffic, plant and machinery and use of temporary haul roads along the cable route.

Converter Station and Underground AC Cable Route

- Site clearance, including vegetation removal.
- Converter station construction compound, welfare facilities and site offices, plant, equipment laydown, materials storage along with security fencing and hoarding with external lighting for security.
- Installation of temporary signage, construction equipment, traffic control measures at New Road and localised use of perimeter fencing, and hoardings.
- Earthworks including land re-profiling and establishment of a level platform using imported materials followed by civil engineering and building works.
- Localised lighting in discrete working locations to facilitate safe working, during the months with shorter daylight hours. This will be limited in extent and in line with the defined construction working hours (Monday – Friday 7am to 7pm; Saturday 7am to 5pm).

There would be the potential for these impacts to occur in combination adding to the impact experienced at individual receptors.

An assessment of the likely effects on landscape designations, landscape character and visual amenity during construction is provided below, using the published LCAs and LCTs and representative viewpoints to illustrate and describe the range of typical effects.

8.7.4 Assessment of effects on Landscape Designations, Landscape Character and Visual Amenity during Construction

A detailed assessment of potential effects on landscape designations, landscape character and visual amenity during construction is provided in **Appendix 8A**. The following provides a summary of the findings, described within the four sections of the route. The locations of landscape designations and character areas within the Zol are shown in **Figure 8-2** and representative viewpoints on **Figure 8-3**.

8.7.4.1 Section 1 - Landfall to Bainton

Landscape Designations

There are no designated landscapes within the ZoI of Section 1 other than the westernmost extent which includes a very small part of the Yorkshire Wolds ILA, shown on **Figure 8-2.** Effects on the Yorkshire Wolds ILA are outlined in **Section 8.7.4.2** below.

Landscape Character

Construction activity will temporarily influence the character along the foreshore as a result of the landfall construction. Away from the foreshore, the temporary loss of agricultural land will be localised and the more open nature of the landscape as the underground DC cable route crosses the open and low lying farmlands which become more undulating to the west will result in limited loss of hedgerows, trees or other vegetation. Whilst the construction activity, including machinery and stockpiles of materials and compounds will be locally prominent elements, their localised short term presence in the landscape in which seasonal disturbance of soils is characteristic will limit the effects.

The assessment has identified that potential construction stage effects on the LCTs and component LCAs within the ZoI will be Minor adverse or Negligible adverse and therefore not significant. Construction relating to the landfall and underground DC cable route will result in localised noticeable change to parts of the landscape. However, the temporary nature and short duration are such that the level of magnitude is reduced and generally low or negligible.

Visual Amenity

Viewpoints 1 to 5 are located within the ZoI of Section 1 and are representative of the key visual receptors that have the potential to be affected by the English Onshore Scheme. They reflect views from edge of settlement, recreational receptors including users of the PRoW network, recreational aspects of the cost and transport routes.

Whilst construction activity including the Marine Scheme and landfall will be visible, the main focus of seaward views will remain largely uninterrupted other than the presence of cable laying vessels which will move incrementally along the subsea cable route towards the shore. There will be no disturbance to the headland, beach and intertidal area thereby retaining these aspects of views. Whilst the construction compound and associated plant, equipment, welfare facilities and storage of materials will be a noticeable aspect in views which both extend inland across the agricultural fields and along the coastline, the duration of works is likely to be up to two months and short term, limiting the magnitude of effect and resulting in Minor adverse and not significant effects (Viewpoint 1).

The construction of the underground DC cable route will be visible typically in mid-ground views as it crosses the agricultural landscape characteristic of views within Section 1 (Viewpoints 2-5). Construction including the removal of short sections of hedgerow field boundaries, movement of plant and storage of materials will appear within views including HDD rigs, where open cut construction is avoided. Whilst the composition and focus of some of the residential views experienced from the edges of settlement such as Hutton and Wansford and from recreational users of the network of PRoW and the long distance routes (Viewpoint 5) will result in a noticeable change, this will be for a temporary period of time and of short duration. As a result effects on visual amenity will be Minor adverse and not significant (Viewpoints 2-5).

8.7.4.2 Section 2: Bainton to Market Weighton

Landscape Designations

The Zol of Section 2 is fully within the locally designated landscape of the Yorkshire Wolds ILA, shown on **Figure 8-2**. Effects on the Yorkshire Wolds ILA as result of the construction of the underground DC cable route will both directly and indirectly impact the ILA. The indirect impacts will relate to localised areas derived from the visibility of construction affecting perceptual qualities rather than direct loss or disturbance of landscape elements. This primarily relates to the North Wolds Plateau Farmland in relation to construction of the DC cable route within western parts of Section 1 and parts of the landscape within Section 2, outside the immediate cable route corridor. The scale/size and geographical extent of direct loss or change to landscape elements will be localised within a small part of the ILA with the temporary disturbance of arable land and removal of some hedgerow field boundaries as a result of the trench excavation. The rolling landform and locally elevated sections of the route will result in locally prominent views influencing the character of some of the ILA as a result of the construction activity, machinery and stockpiles of materials which will form locally incongruous elements. Importantly, the DC cable route avoids the higher quality section of the ILA defined by ERYC, other than for a very short section (approximately 165 m) adjacent to Houghton RPG.

In summary, the effects from construction of the underground DC cable route within the ILA will be short term, reversible and mitigated by the progressive reinstatement in a context in which seasonal disturbance of soils is characteristic. Taking these factors into account and given the short duration and limited geographical extent of influence on the ILA, effects will be **Minor adverse** and not significant.

Landscape Character

Construction of the underground DC cable route will temporarily influence the character of the Yorkshire Wolds landscape from the eastern dip slopes around Bainton to the western scarp slope at Market Weighton. Agricultural land use defines this part of the ZoI which displays more undulating to rolling topography, particularly within parts of the Wolds plateau. Effects of the construction of the underground DC cable route on the Open High Rolling Farmland, Sloping Wooded Farmland and Jurassic Hills Farmland LCTs and their constituent LCAs will result in **Minor adverse** or **Negligible adverse** effects which are not significant. The scale and geographical extent of influence on landscape character will be localised with the temporary change in agricultural land use, localised removal of short sections of hedgerow vegetation and the presence of construction activity, machinery and stockpiled materials, creating locally incongruous elements. These effects will be temporary and of short duration and mitigated by the progressive reinstatement of the cable corridor.

Visual Amenity

The construction of the underground DC cable route through Section 2 avoids passing in proximity to settlement, limiting potential views of the construction activity to views from occasional isolated properties and farmsteads, users of the PRoW network, long-distance trails and the local road network. Viewpoint 6 is located on the Yorkshire Wolds Way and is typical of the type of view experienced within Section 2.

Construction activity including the stripping of soil and removal of short sections of hedgerow field boundaries along with the movement of plant and storage of materials will appear along the DC cable route. The rolling nature of the landform will conceal small sections of the cable route from view whilst revealing other sections, however the pattern of relatively large-scale arable fields will assist in limiting the disturbance and contrast created by the construction activity within views. As with views experienced by visual receptors of other route sections, some of the construction activity and in particular the movement of machinery will not be dissimilar from agricultural operations typically experienced in view of this landscape. As a result of the short term and temporary change to the composition of the view experienced by recreational users, effects on visual amenity are considered to be **Minor adverse** and not significant.

8.7.4.3 Section 3: Market Weighton to River Ouse

Landscape Designations

There are no designated landscapes within the ZoI of Section 3 other than the westernmost extent which includes a very small part of the ERYC Lower Derwent Valley and Pocklington Canal ILA, shown on **Figure 8-2**. Construction of the English Onshore Scheme will not directly affect the ILA. Construction of the converter station and potentially the section of underground DC cable route between the A63 and the minor road west of Asselby will be visible from the southernmost part of the ILA resulting in indirect effects on the setting and perceptual qualities of the ILA. However, the influence will be of localised geographical extent within a small part of the southern section of the ILA and the scale/size of indirect effects on landscape character will be reduced by perception of the converter station construction in the immediate context of Drax Power Station. Effects are considered to be **Negligible adverse** and not significant.

Landscape Character

Construction of the underground DC cable route will temporarily influence the character of this intensively farmed, low lying, arable landscape. As with previous Sections, effects on the landscape character of the LCAs will be both direct and indirect. The scale/size and geographical extent of direct loss or change to landscape elements will be within small parts of the LCAs and the primary impact will be the temporary disturbance of arable land as a result of the trench excavation. Effects from construction will be short term, reversible and mitigated by the progressive reinstatement resulting in **Minor adverse** or **Negligible adverse** effects which are not significant.

Visual Amenity

The construction of the underground DC cable route through Section 3 is characterised by a sparse settlement pattern and an intensive agricultural landscape with scattered properties and small groups of dwellings and occasional linear settlement. The representative viewpoints in Section 3 (Viewpoints 7-9) are typical of the type of views experienced from properties and the local PRoW network within Section 3.

Construction activity associated with the underground DC cable route will typically appear in mid-ground views as it crosses the large scale agricultural landscape. Construction including the localised removal of field boundary hedgerows, stripping of soil, movement of plant and materials and storage of materials will appear in views for a temporary period of time and for a short duration. Localised screening as present in Viewpoint 7 will further limit the extent of construction visible within the view. Overall construction of the underground DC cable route will result in Minor adverse and not significant effects. Viewpoint 9 located at Barmby Barrage on the Trans Pennine Trail will experience views of the construction of the converter station adjacent to Drax power station. Construction plant and activity will be partially visible in views seen in the immediate context of Drax Power Station which is a prominent feature within views. Temporary effects on visual amenity as a result of the construction activity will result in an unobtrusive change in the composition of the view and **Minor adverse** effects which are not significant.

8.7.4.4 Section 4: River Ouse to Drax Substation

Landscape Designations

There are no landscape designations contained within Section 4.

Landscape Character

Section 4 is characterised by intensive agricultural land use, the prominent built form at Drax Power Station, its associated overhead power lines and Rusholme wind farm. Within this context the construction of the underground DC cable route and converter station with associated compounds will result in both direct and indirect effects on the LCAs. Where LCAs will not be directly affected by the construction works such as LCA 6 Derwent Valley, LCA 7 Aire Valley and LCA10 East Selby Farmland effects will be Negligible adverse and not significant. For the LCAs which will be directly affected by the construction activity including LCA 5 Ouse Valley and LCA 15 Camblesforth Farmland effects will be **Minor adverse** and not significant.

The construction of the DC cable route within LCA 5 will result in the small scale loss of landscape elements within a localised geographical extent of a small part of the LCA, partially mitigated by the HDD of the River Ouse and the progressive reinstatement of the cable corridor.

The construction of the underground DC and AC cable routes and the proposed converter station will occupy a small part of the eastern fringe of LCA 15. Construction of the converter station will result in direct loss of agricultural land, the removal of a small section of planting along Wren Hall Lane and the localised influence of large-scale construction activity and compounds off Wren Hall Lane and Redhouse Lane. Given the context of proximity of the large-scale construction adjacent to Drax Power Station and the dominance of the existing infrastructure locally within LCA 15, effects will be **Minor adverse** and not significant.

Visual Amenity

There is scattered settlement throughout Section 4, including the larger villages of Carlton, Camblesforth and Drax. Landform is level and low-lying and it is possible to experience long views within the landscape, although layers of vegetation and built form can provide localised containment and screen views. Viewpoints 10-14 are representative of views experienced from settlement and recreational users of the network of PRoW where the construction of the converter station and the underground DC cable route have the potential to be visible within their views. Drax Power Station and the associated infrastructure along with Barlow Ash Mound will screen the majority of views from the west.

For the majority of visual receptors within the ZoI and represented by viewpoints 12-14, the construction of the converter station and underground DC cable route will be partially visible in views and seen in the immediate context of Drax Power Station which is a prominent feature within views. Overall, the composition of the view will remain largely unchanged with the balance of agricultural field patterns, woodland blocks and the prominent presence of Drax Power Station remaining the focus of the view. As a result, effects on visual amenity will be **Minor adverse** or **Negligible adverse** and not significant.

However, where receptors are in close proximity (within 600 m of the converter station site) the construction of the underground DC cable route and the converter station will be prominent and a noticeable addition in the view (Viewpoints 10 and 11). The degree of contrast, however, will be lessened by the presence of Drax Power Station which is a prominent focus within the composition of the view and provides a substantial industrial backcloth and context to the view. Overall, effects will be **Moderate adverse** and significant for the duration of construction for those receptors in close proximity to the converter station site.

8.7.5 Assessment of Potential Impacts: Operational Phase

Elements which could give rise to potential landscape and visual impacts during operation of the English Onshore Scheme are limited to those associated with the converter station and include:

- The presence of the converter station, which would extend the impact of infrastructure within the landscape and views at Drax Power Station; and
- Potential change to the impression of the landscape character or visual amenity within the ZoI, as a result of visibility of the converter station structures.

Following construction of the landfall and the underground DC and AC cable routes, the working width along with construction compounds will be fully reinstated and as such no long-term operational landscape and visual impacts resulting from these elements are anticipated. The assessment of operational effects therefore focuses on change resulting from the introduction of the converter station at Drax within Section 4. This approach was agreed with relevant consultees at the scoping stage.

The following sections present a summary of the assessment of likely effects on landscape designations, landscape character and visual amenity during the operational phase of the English Onshore Scheme. A detailed assessment of these effects is provided in **Appendix 8A**. The locations of landscape designations and landscape character areas within the ZoI are shown in **Figure 8-2**, representative viewpoints on **Figure 8-3**, ZTV on **Figure 8-4** and visualisations in **Appendix 8B**.

8.7.5.1 Section 1 – Landfall to Bainton

As described in Section 8.7.5, no assessment of operational landscape and visual effects has been undertaken for Section 1.

8.7.5.2 Section 2 – Bainton to Market Weighton

As described in Section 8.7.5, no assessment of operational landscape or visual effects has been undertaken for Section 2.

8.7.5.3 Section 3 – Market Weighton to River Ouse

As described in Section 8.7.5, no assessment of operational landscape or visual effects has been undertaken for Section 3 other than for the Lower Derwent Valley and Pocklington Canal ILA and Viewpoint 9, as there is potential intervisibility between these receptors and the proposed converter station.

Landscape Designations

Impacts on the Lower Derwent Valley and Pocklington Canal ILA will be indirect derived from the intervisibility with the converter station. There will be no loss of landscape elements within the ILA which will represent an intensification of power infrastructure as an influence on it. However, the influence will be of localised geographical extent within a small part of the southern section of the ILA.

Effects from the operational converter station will be long term but the scale/size of indirect effects on the character of the ILA will be reduced by perception of the converter station in the immediate context of the existing, larger, and more influential Drax Power Station infrastructure. Residual effects will be **Negligible adverse** and not significant.

Visual Amenity

Residual effects on visual amenity will be limited within Section 3 to those receptors that will experience views of the converter station. Theoretical visibility within the wider landscape as shown in **Figure 8-4** is limited by intervening vegetation and built form as well as distance influencing the extent to which the converter station is discernible in views.

Recreational users represented by Viewpoint 9 at Barmby Barrage will experience longer distance views of the converter station which will be seen in the immediate context of Drax Power Station. The proposed converter station will appear as an extension to the Drax Power Station complex, extending the influence of industrial buildings within the view although intervening vegetation and in particular blocks of woodland will partially screen the converter station. Overall, the composition of the view will remain largely unchanged with the balance of agricultural field patterns, woodland blocks and the prominent presence of Drax Power Station remaining the focus to the view. This is typical of views experienced within this part of Section 3 where residual effects will be **Minor adverse** and not significant.

8.7.5.4 Section 4 – River Ouse to Drax Substation

Landscape Designations

There are no landscape designations contained with Section 4.

Landscape Character

Once operational, the introduction of the converter station within the immediate context of Drax Power Station complex will slightly increase the presence of industrial development, an already characteristic element of the landscape, within LCA 15 as well as indirectly influencing adjacent LCAs where the proximity and industrial presence of Drax is a characteristic feature, in particular LCA 5.

The converter station will result in the permanent loss of a small parcel of agricultural land along with a short section of vegetation along Wren Hall Lane. Reinstatement hedgerow and woodland planting within the converter station site and along the eastern side of Wren Hall Lane will strengthen these landscape features and provide an integrated approach to BNG. Whilst effects from the converter station will be permanent, given the context of proximity of the large-scale and the dominance of the

existing Drax Power Station infrastructure, residual effects on LCA 15 and LCA 5 are considered to be **Minor adverse** and not significant. All other adjacent LCAs will result in **Negligible adverse** residual effects which are not significant.

Visual Amenity

Once operational **Moderate adverse** and significant effects will remain for the receptors in close proximity to the converter station site (represented by Viewpoints 10 and 11) where, despite the substantial industrial backcloth and context to the view, the proposed converter station will become the new focus and a prominent new structure within the view. Proposed mitigation planting including reinstatement hedgerow planting along Wren Hall Lane, woodland planting within the converter station site and to the east of Wren Hall Lane as part of the BNG commitments will provide partial screening of the lower parts of the converter station, however, in close range views, the scale and mass of the converter station will remain prominent irrespective of the mitigation proposed.

However, from all other viewpoints including those within 1 km of the converter station site, **Minor adverse** or **Negligible adverse**, not significant, residual effects will result. Therefore, for the majority of visual receptors within the ZoI of Section 4, the composition of their views will remain largely unchanged with the balance of agricultural field patterns, woodland blocks and the prominent presence of Drax Power Station remaining the focus to the views and wider visual amenity.

8.7.6 Assessment of Potential Impacts: Decommissioning Phase

The scale and nature of activities undertaken during decommissioning would be similar to those described previously for construction, and they would be temporary during the period of decommissioning activities on site. Following the removal of the structures and the reinstatement of the land there would be no further potential effects on landscape and visual amenity. The potential effects from decommissioning should therefore be regarded as the same as construction as described in greater detail above.

8.8 Project Specific Mitigation

All design-based measures, including those indicated on the outline landscape plan (**Figure 8-5**), and construction best practice mitigation have been embedded in the scheme. Project specific mitigation measures, such as minimising the height of structures, careful selection of material and colours and sensitive lighting design will be considered as part of the detailed design stage.

Significant residual effects remain during operation for visual receptors in close proximity to the converter station. These include those represented by viewpoints 10 and 11, where the height and mass of the converter station will appear as a prominent feature within their views. The scale of the converter station is such that planting would not screen views and additional mitigation would not be effective in further reducing effects.

8.9 Residual Effects

The residual effects on landscape character and visual amenity resulting from the English Onshore Scheme will remain unchanged from those reported in Section 8-53 above. **Table 8-29**: Summary of residual landscape and visual effects during construction and **Table 8-30**: Summary of residual landscape and visual effects during operation provide summaries of construction and operational stage residual effects.

Table 8-29: Summary of residual landscape and visual effects during construction

Receptor Description	Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
					Onshore Scheme	Magnitude	Significance
Route Section	1	<u>'</u>					
LCA20C: Coastal Farmland	Medium	Construction activity and change in land use, particularly on the foreshore will temporarily influence the character.	Low	Minor	Measures set out in section 8.6.2 Mitigation by Design including directional drilling and minimal cable corridor width. Route selection to avoid key landscape elements such as woodland.	Low	Minor
LCA19C: Open Farmland	Low	Construction will occur in a 40 m wide corridor in a narrow, northern section of the LCA.	Low	Minor	Cut and cover progression along the cable route, soil storage adjacent to the trench.	Low	Minor
LCA18A: River Hull Corridor	Low	Construction activity and change in land use, will temporarily indirectly influence the character of the LCA.	Low	Minor	Minimal cable corridor width and HDD for watercourses.	Low	Minor
LCA18E: Kelk Beck Farmland	Low	Construction activity and change in land use, will temporarily indirectly influence the character of the LCA.	Low	Minor	Minimal cable corridor width and HDD for watercourses.	Low	Minor
LCA16A: Southwest Driffield Parkland and Golf Course	Low	Construction activity and change in land use, will temporarily indirectly influence the character of the LCA.	Very Low	Negligible	Cut and cover progression along the cable route, soil storage adjacent to the trench.	Very Low	Negligible
LCA16B: Kilnwick Percy Wooded Farmland: outside of	Low	Construction activity and change in land use, will temporarily indirectly influence the character of the LCA.	Very Low	Negligible	Cut and cover progression along the cable route, soil storage adjacent to the trench.	Very Low	Negligible
LCA16D:	Low	Construction activity and change in land use, will temporarily directly influence the character of the LCA.	Low	Minor	Cut and cover progression along the cable route, soil storage adjacent to the trench.	Low	Minor

Receptor Description	Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
Description					Onshore Scheme	Magnitude	Significance
Nafferton Sloping Farmland							
LCA16E: LundSloping Farmland	Low	Construction activity and change in land use, will temporarily directly influence the character of the LCA.	Low	Minor	Cut and cover progression along the cable route, soil storage adjacent to the trench.	Low	Minor
Viewpoint 1	High	Short term visual effects experienced by recreational and residential receptors with views of the landfall construction and Marine Scheme activity.	Low	Minor	Measures set out in section 8.6.2 Mitigation by Design including directional drilling and minimal cable corridor width. Route selection to avoid key landscape elements such as woodland.	Low	Minor
Viewpoint 2	Medium	Short term visual effects experienced by recreational and residential receptors in Little Kelk as a result of the underground DC cable route construction.	Low	Minor	Measures set out in section 8.6.2 Mitigation by Design including directional drilling and minimal cable corridor width. Route selection to avoid key landscape elements such as woodland.	Low	Minor
Viewpoint 3	Medium	Short term visual effects experienced by recreational and residential receptors in Wansford as a result of the underground DC cable route construction including presence of construction compound.	Low			Low	Minor
Viewpoint 4	Medium	Short term visual effects experienced by recreational and residential receptors in Hutton as a result of the underground DC cable route construction including presence of construction compounds.	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route limited extent of open trench.	Low	Minor
Viewpoint 5	High	Short term visual effects experienced by recreational	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Route selection,	Low	Minor

Receptor Description	Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
Description					Onshore Scheme	Magnitude	Significance
		receptors using National Trails and long-distance cycle route as a result of the underground DC cable route construction.			cut and cover progression along the cable route limited extent of open trench.		
Route Section 2	2						
Yorkshire Wolds ILA	Medium	Direct impacts on the ILA but loss of landscape elements will be limited due to the extensive arable landscape. Effects from construction will be short term and fully reversible.	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route and almost entire avoidance of areas of highest landscape quality.	Low	Minor
LCA13A: South Dalton Estate Farmlands	Medium	Construction activity and change in land use, will temporarily indirectly influence the character of the LCA.	Very Low	Negligible	Compound location selection. Measures as set out in section 8.6.2 Mitigation by Design.	Very Low	Negligible
LCA13C: South Wolds Rolling Farmland	Medium	Construction activity and change in land use, will temporarily directly influence the character of the LCA. Compound on A1034 Market Weighton.	Low	Minor	Compound location selection. Measures as set out in section 8.6.2 Mitigation by Design.	Low	Minor
LCA13D: North Wolds Plateau Farmland	Medium	Construction activity and change in land use, will temporarily directly influence the character of the LCA. Compound on A1034 Market Weighton.	Low	Minor	Compound location selection. Measures as set out in section 8.6.2 Mitigation by Design.	Low	Minor
LCA12A: South Western Sloping Wolds Farmland	Medium	Construction avoids direct impact on LCA12A, reducing impact to indirect effects from visibility of construction rather than direct loss or disturbance of landscape elements. Indirect impacts will arise from visibility of construction on the adjacent scarp within LCA13C.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route limited extent of open trench.	Very Low	Negligible

Receptor Description	Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
Description					Onshore Scheme	Magnitude	Significance
LCA11A: West Facing Open Farmland	Medium	Direct impacts on LCA11A will be located in the northernmost portion of the LCA. Tertiary compound on Cliffe Lane (North Cliffe) which will add to the footprint of disturbance although loss of landscape elements will be limited.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design.	Very Low	Negligible
LCA10G: West Wolds Edge Elevated Farmland	Medium	Construction will not directly impact LCA10G. Indirect impacts on the adjacent scarp within LCA13C and to a lesser extent LCA13D.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route limited extent of open trench.	Very Low	Negligible
LCA10H: West Facing Scarp Slope	Medium	Construction will not directly impact LCA10H. Indirect impacts on the adjacent scarp within LCA13C and to a lesser extent LCA13D.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route limited extent of open trench.	Very Low	Negligible
Viewpoint 6	High	Short term visual effects experienced by recreational receptors walking the Yorkshire Wolds Way as a result of the underground DC cable route construction.	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route limited extent of open trench. Careful siting of construction compounds within the ILA.	Low	Minor
Route Section 3							
Lower Derwent Valley and Pocklington Canal ILA	Medium	Temporary nature of construction and limited scale and influence on landscape character. Indirect adverse effects on the character of the ILA	Very Low	Negligible	Route selection, cut and cover progression along the cable route limited extent of open trench visible from the ILA. Location of converter adjacent to existing infrastructure, retention of existing screening vegetation.	Very Low	Negligible
LCA1: Shiptonthorpe	Low	The cable will be located in the south of the LCA. Impacts on landscape	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable	Low	Minor

Receptor Description	Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
Decomplian					Onshore Scheme	Magnitude	Significance
and Market Weighton Farmland		elements will be direct but direct loss or change to landscape elements will be within a small part of the LCA			corridor width. Cut and cover progression along the cable route limited extent of open trench.		
LCA6B: South Cliffe and Hotham Common	Low	The cable will be located centrally within the LCA. The primary impact will be temporary disturbance of arable land as a result of the trench excavation	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable corridor width. Cut and cover progression along the cable route limited extent of open trench.	Low	Minor
LCA7A: South of Holme on Spalding Moor Farmland Farmland	Low	As described for LCA6B.	Low	Minor	As described for LCA6B.	Low	Minor
LCA5A: Howden to Bubwith Farmland	Low	As described for LCA6B.	Low	Minor	As described for LCA6B.	Low	Minor
LCA4A: Derwent Valley, Barmby on the Marsh to Pocklington Canal Reach	Low	Locally prominent views of construction activity forming incongruous elements influencing a limited extent the character of this LCA.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable corridor width. Cut and cover progression along the cable route limited extent of open trench and HDD for watercourses.	Very Low	Negligible
LCA4B: River Ouse Corridor: Barmby on the Marsh to M62 Bridge	Low	Locally prominent views of construction activity forming incongruous elements influencing the character of LCA4B	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable corridor width. Cut and cover progression along the cable route limited extent of open trench and HDD for watercourses.	Low	Minor
Viewpoint 7	Medium	Short term visual effects experienced by recreational users of	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable	Low	Minor

Receptor Description	Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
Description					Onshore Scheme	Magnitude	Significance
		the local PRoW network as a result of the underground DC cable route construction.			corridor width. Cut and cover progression along the cable route limited extent of open trench.		
Viewpoint 8	Medium	Short term visual effects experienced by recreational and residential receptors in Asselby as a result of the underground DC cable route construction.	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable corridor width. Cut and cover progression along the cable route limited extent of open trench.	Low	Minor
Viewpoint 9	High	Medium term visual effects experienced by recreational users of the Trans Pennine Trail and the local PRoW network as a result of the converter station construction.	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route. Location of converter adjacent to existing infrastructure, retention of existing screening vegetation.		Minor
Route Section 4	ı						
LCA5: Ouse Valley	Low	The open landscape will result in locally prominent views of construction activity forming incongruous elements influencing landscape character.	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable corridor width. Cut and cover progression along the cable route limited extent of open trench and HDD for watercourses.	Low	Minor
LCA6: Derwent Valley	Low	Construction will not directly impact LCA6. Indirect impacts will arise from visibility of construction within adjacent character areas of LCA5, LCA4B and LCA 15.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design. Minimal cable corridor width. Cut and cover progression along the cable route limited extent of open trench and HDD for watercourses.	Very Low	Negligible
LCA7: Aire Valley	Medium	As described for LCA6. Indirect construction effects on LCA7 will be very low magnitude due to distance and no direct loss of landscape elements.	Very Low	Negligible	As described for LCA6.	Very Low	Negligible

Receptor Description	Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
Description					Onshore Scheme	Magnitude	Significance
LCA10: East Selby Farmland	Low	As described for LCA6. Indirect construction effects on LCA10 will be from limited visibility of construction works and activity associated with the converter station in LCA15.	Very Low	Negligible	As described for LCA6.	Very Low	Negligible
LCA15: Camblesforth Farmland	Low	The cable corridor and converter station will occupy a small part of the eastern fringe of the LCA.	Low	Minor	Route selection, cut and cover progression along the cable route limited extent of open trench visible from the ILA. Location of converter adjacent to existing infrastructure, retention of existing screening vegetation.	Low	Minor
Viewpoint 10	Medium	Medium term visual effects experienced by Wren Hall and recreational users of the local PRoW network as a result of the converter station, compound and underground DC cable route construction.	Medium	Moderate	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route and use of HDD technique to retain vegetation along Wren Hall Lane. Location of converter station adjacent to existing infrastructure, retention of existing screening vegetation.	Medium	Moderate (Significant)
Viewpoint 11	Medium	Medium term visual effects experienced by residential properties on the settlement edge of Drax Village and recreational users of the local PRoW network as a result of the converter station, compound and underground DC cable route construction.	Medium	Moderate	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the cable route and use of HDD technique to retain vegetation along Wren Hall Lane. Location of converter station adjacent to existing infrastructure, retention of existing screening vegetation.	Medium	Moderate (Significant)
Viewpoint 12	Medium	Medium term visual effects experienced by recreational users of the local PRoW network and the	Low	Minor	Measures as set out in section 8.6.2 Mitigation by Design. Route selection, cut and cover progression along the	Low	Minor

Receptor	Receptor Sensitivity Description	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All embedded into the English	Residual Ef	fect
Description					Onshore Scheme	Magnitude	Significance
		adjacent property at Pear Tree Avenue as a result of the converter station, compound and underground DC cable route construction.			cable route and use of HDD technique to retain vegetation along Wren Hall Lane. Location of converter station adjacent to existing infrastructure, retention of existing screening vegetation.		
Viewpoint 13	Medium	Medium term visual effects experienced by recreational users of the local PRoW network and the settlement edge of Carlton as a result of the converter station construction.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design. Location of converter station adjacent to existing infrastructure, retention of existing screening vegetation.	Very Low	Negligible
Viewpoint 14	Medium	Medium term visual effects experienced by recreational users of the local PRoW network and the settlement edge of Newland as a result of the converter station construction.	Very Low	Negligible	Measures as set out in section 8.6.2 Mitigation by Design. Location of converter station adjacent to existing infrastructure, retention of existing screening vegetation.	Very Low	Negligible

Table 8-30: Summary of residual landscape and visual effects during operation

Receptor Description	Value/ Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All Embedded in to the English Onshore	Residual Effect		
	,				Scheme	Magnitude	Significance	
Route Section 1 - Operational effects associated with the DC cable corridor have been scoped out. Consequently, no assessment of operational landscape and visual effects has been undertaken for Section 1.								
Route Section	Route Section 2 - Operational effects associated with the DC cable corridor have been scoped out. Consequently, no assessment of operational landscape and visual effects has been undertaken for Section 2.							
	-	I effects associated with the DC cable than for Viewpoint 9 which would exp		•	consequently, no assessment of operationation.	al landscape ar	nd visual effects has been	
Lower	Medium	The converter station will be	Very Low	Negligible	Measures as set out in section 8.6.2	Very Low	Negligible (year 1 and	
Derwent		visible from the southernmost part	(year 1 and	(year 1 and	Mitigation by Design. Location of	(year 1 and	year 15)	
Valley and		of the ILA in the context of the	year 15)	year 15)	converter adjacent to existing	year 15)		

Receptor Description	Value/ Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All Embedded in to the English Onshore	Residual Eff	ect
					Scheme	Magnitude	Significance
Pocklington Canal ILA		existing, larger, and more influential Drax infrastructure.			infrastructure, retention of existing screening vegetation.		
Viewpoint 9	High	The converter station will be visible in medium distance views from recreational users of the Trans Pennine Trail and the local PRoW network appearing as part of the Drax Power Station complex.	Low (year 1 and year 15)	Minor (year 1 and year 15)	Measures as set out in section 8.6.2 Mitigation by Design. Location of converter adjacent to existing infrastructure, retention of existing screening vegetation.	Low (year 1 and year 15)	Minor (year 1 and year 15)
Route Section	4						
LCA5: Ouse Valley	Low	Localised effects from the converter station on the southernmost part of LCA5. Intensification of power infrastructure as an influence on LCA5	Low (year 1 and year 15)	Minor (year 1 and year 15)	As described for the ILA.	Low (year 1 and year 15)	Minor (year 1 and year 15)
LCA6: Derwent Valley	Low	Indirect adverse effects on the character of LCA6, reduced by perception the immediate context of the existing Drax infrastructure.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)	As described for the ILA.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)
LCA7: Aire Valley	Medium	As described for LCA6. Indirect effects on LCA7 will be negligible magnitude due to distance and no direct loss of landscape elements.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)	As described for the ILA.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)
LCA10: East Selby Farmland	Low	As described for LCA6. Indirect construction effects on LCA10 will be limited by visibility and any influence being present in the baseline to a greater extent as a result of the scale of the extant buildings and structures.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)	As described for the ILA.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)
LCA15: Camblesforth Farmland	Low	Direct loss of agricultural land, totalling approximately 9ha.	Low (year 1 and year 15)	Minor (year 1 and year 15)	As described for the ILA.	Low (year 1 and year 15)	Minor (year 1 and year 15)

Receptor Description	Value/ Sensitivity	Description of Potential Impact	Magnitude	Significance	Mitigation Measure(s) – All Embedded in to the English Onshore	Residual Eff	ect
	,				Scheme	Magnitude	Significance
Viewpoint 10	Medium	The converter station will appear as a prominent addition in foreground views of recreational and residential receptors, seen against the backdrop of Drax Power Station.	High (year 1) Medium (year 15)	Major (year 1) Moderate (year 15)	As described for viewpoint 9.	High (year 1) Medium (year 15)	Major (significant) at year 1 Moderate (significant) at year 15)
Viewpoint 11	Medium	The converter station will appear as a noticeable addition in midground views of recreational and residential receptors seen against the backdrop of Drax Power Station.	Medium (year 1 and year 15)	Moderate (year 1 and year 15)	As described for viewpoint 9.	Medium (year 1 and year 15)	Moderate (significant) at year 1 and year 15
Viewpoint 12	Medium	The converter station will be visible in medium distance views seen in the immediate context of Drax Power Station which is a prominent feature in the residential and recreational views.	Low (year 1 and year 15)	Minor (year 1 and year 15)	As described for viewpoint 9.	Low (year 1 and year 15)	Minor (year 1 and year 15)
Viewpoint 13	Medium	The converter station will be visible in longer distance views from recreational and residential receptors, appearing as part of the Drax Power Station complex.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)	As described for viewpoint 9.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)
Viewpoint 14	Medium	The converter station will be visible in longer distance views from recreational and residential receptors, appearing as part of the Drax Power Station complex.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)	As described for viewpoint 9.	Very Low (year 1 and year 15)	Negligible (year 1 and year 15)

8.10 Cumulative Effects

8.10.1 Assessment of Intra-project Cumulative Effects

As outlined in **Chapter 1: Introduction**, the English Onshore Scheme forms one element of the wider Project, along with the Marine Scheme and Scottish Onshore Scheme. Due to the distances of separation between the English Onshore Scheme and the Scottish Onshore Scheme, intra-Project cumulative effects to individual receptors will not occur, for example no property or ecological site would experience effects from both the English Onshore Scheme and Scottish Onshore Scheme. Similarly, although there is a slight overlap of the English Onshore Scheme and Marine Scheme in the intertidal area between Mean High Water Springs and Mean Low Water Springs (as shown in Figure 1-2), as the HVDC cable reaches the landfall site (part of the English Onshore Scheme) via HDD, the works which could give rise to environmental impacts are physically separated and hence no significant intra-Project cumulative effects to individual receptors are predicted to occur.

The separate EIA/EA reports produced for the English Onshore Scheme, Marine Scheme and Scottish Onshore Scheme provide an environmental assessment of each topic area for which potential environmental effects could arise from that element. Once the assessment of the other elements of the Project is complete, a Bridging Document will be prepared which summarises the main interactions of these three individual environmental assessments. The Bridging Document will be made available as soon as it is available, but as highlighted above, there are no significant in-combination impacts between the English Onshore Scheme, Marine Scheme or Scottish Onshore Scheme. This section, therefore, provides an assessment of the combined and cumulative effects relating to the English Onshore Scheme only. For full definitions of terminology and details of other projects considered in this assessment see **Chapter 17: Cumulative and In-Combination Assessment**.

8.10.2 Assessment of Inter-project Cumulative Effects

The following section provides an assessment of potential cumulative landscape and visual effects. The approach and methodology for the cumulative landscape and visual assessment is outlined in Section 8-14.

The initial step of the cumulative assessment is to establish the existing cumulative baseline context through identification of existing and proposed developments of a similar nature (i.e. electrical and energy development) and scale to the English Onshore Scheme. To ensure a targeted and proportionate approach to cumulative assessment, only those schemes considered to have the potential to result in significant cumulative effects in association with the English Onshore Scheme are included. The cumulative assessment considers both construction and operational cumulative change, where there is the potential for similar construction period and duration.

The list of identified cumulative schemes includes those which are operational, under construction, consented and at the application stage awaiting determination. As requested at consultation, developments at the scoping or pre-application stage have also been considered despite the indicative nature of these schemes and the lack of certainty they will progress to the application stage. Details of the identified cumulative schemes with an indication of which have been scoped in or scoped out of the assessment are provided in **Table 8-31**: Relevant Landscape and Visual Cumulative Schemes below with a summary of the schemes which are scoped in shown in **Table 8-32** Cumulative Schemes considered in the landscape and visual assessment. The locations of those schemes included within the cumulative assessment are shown on **Figure 17-2**.

 Table 8-31: Relevant Landscape and Visual Cumulative Schemes

Cumulative Scheme ID	Cumulative Scheme	Application Status	Included in assessment?	Reason for exclusion
NSIP-1	Hornsea Project Four Offshore Windfarm	Scoping	Yes	N/A
NSIP-4	Drax Bioenergy with CCS	Scoping	Yes	N/A
NSIP-9	Humber Low Carbon Pipelines	Scoping	Yes	N/A

Cumulative Scheme ID	Cumulative Scheme	Application Status	Included in assessment?	Reason for exclusion
ERYC-2	Erection of 470 dwellings with associated infrastructure, open space and landscaping	Consented but not yet under construction	No	Whilst construction periods of this cumulative scheme and the English Offshore Scheme could overlap, the projects are not of similar nature or scale with limited intervisibility such that significant cumulative effects are unlikely.
ERYC-3	Erection of 175 dwellings following outline permission	Consented but not yet under construction	No	Whilst construction periods of this cumulative scheme and the English Offshore Scheme could overlap, the projects are not of similar nature or scale with limited intervisibility such that significant cumulative effects are unlikely.
ERYC-4	Extension of excavation area at Gransmoor Quarry and remediation of lake following ceasing of operation	Application approved	Yes	N/A
ERYC-6	Siting of 28 chalets, footpath, parking and landscaping	Application approved	No	Whilst construction periods of this cumulative scheme and the English Offshore Scheme could overlap, the projects are not of similar nature or scale with limited intervisibility such that significant cumulative effects are unlikely.
ERYC-7	Change of use for siting 46 static caravans	Application approved	No	Whilst construction periods of this cumulative scheme and the English Offshore Scheme could overlap, the projects are not of similar nature or scale with limited intervisibility such that significant cumulative effects are unlikely.
ERYC-9	22 berth marina on the Driffield Canal	Pending consideration	No	This cumulative scheme and the English Offshore Scheme are not of similar nature or scale with limited if any intervisibility such that significant cumulative effects are unlikely.
ERYC-13	Erection of 400 dwellings	Outline approval	No	This cumulative scheme lies within the urban fringe of Market Weighton with limited if any intervisibility with the English Offshore Scheme such that significant cumulative effects are unlikely.
ERYC-15	Change of use of existing buildings and land to provide a holiday park, retail, workshops	Consented but not yet under construction	Yes	N/A

Cumulative Scheme ID	Cumulative Scheme	Application Status	Included in assessment?	Reason for exclusion
ERYC-16	Solar PV array	Consented but not yet under construction	Yes	N/A
ERYC-18	Outline erection of 40 dwellings	Pending consideration	No	This cumulative scheme and the English Offshore Scheme are not of similar nature or scale with limited if any intervisibility such that significant cumulative effects are unlikely.
ERYC-20	Solar farm and battery storage facility	Consented but not yet under construction	No	Whilst construction periods of this cumulative scheme and the English Offshore Scheme could overlap, it is unlikely that there would be intervisibility between the two projects such that significant cumulative effects are unlikely.
ERYC-22	Solar farm	Application approved	Yes	N/A
ERYC-35	Erection of 600 dwellings (outline approval)	Pending consideration of reserved matters	No	This cumulative scheme and the English Offshore Scheme are not of similar nature or scale with limited if any intervisibility such that significant cumulative effects are unlikely
SE-1	Energy storage facility	Consented but not yet under construction	Yes	N/A
SE-2	Demolition of Drax Power Ltd FGD plant and associated restoration	Consented but not yet under construction	Yes	N/A
SE-3	Battery storage facility	Consented but not yet under construction	Yes	N/A
SE-4	Solar farm	Pending consideration	Yes	N/A
SE-5	Battery storage facility	Pending consideration	Yes	N/A
SE-8	Erection of 45 dwellings	Pending consideration	No	This cumulative scheme and the English Offshore Scheme are not of similar nature or scale with limited intervisibility such that significant cumulative effects are unlikely
SE-14	Development of existing horticultural facility	Consented but not yet under construction	Yes	N/A
SE-16	5 wind turbines	EIA screening request	Yes	N/A

Cumulative Scheme ID	Cumulative Scheme	Application Status	Included in assessment?	Reason for exclusion
SE-17	50MW Battery storage facility	Pending consideration	Yes	N/A
SE-18	HGV park and warehouse	Pending consideration	No	There is limited if any intervisibility between the cumulative scheme and the English Offshore Scheme such that significant cumulative effects are unlikely
SE-20	EIA scoping opinion for Barlow Ash Mound	EIA scoping request submitted	Yes	N/A

Table 8-32 Cumulative Schemes considered in the landscape and visual assessment

Route Section	Cumulative Scheme ID	Cumulative Scheme
Section 1	NSIP-1	Hornsea Project Four Offshore Windfarm
	ERYC-4	Extension of excavation area at Gransmoor Quarry and remediation of lake following ceasing of operation
	ERYC-22	Solar farm
Section 2	ERYC-16	Solar PV array
Section 3	ERYC-15	Change of use of existing buildings and land to provide a holiday park, retail, workshops
Section 4	NSIP-4	Drax Bioenergy with CCS
	NSIP-9	Humber Low Carbon Pipelines
	SE-1	Energy storage facility
	SE-2	Demolition of Drax Power Ltd FGD plant and associated restoration
	SE-3	Battery storage facility
	SE-4	Solar farm
	SE-5	Battery storage facility
	SE-14	Development of existing horticultural facility
	SE-16	5 wind turbines
	SE-17	50MW Battery storage facility
	SE-20	EIA scoping opinion for Barlow Ash Mound

8.10.3 Cumulative Landscape and Visual Assessments

Cumulative schemes have only been included in the cumulative landscape assessment where the English Onshore Scheme and a cumulative scheme occupy the same landscape character area. Where they occupy different LCAs it is considered that the potential for significant cumulative landscape effects is unlikely. **Table 8-33** Assessment of Cumulative Landscape Effects provides an assessment of cumulative effects on landscape character.

Table 8-34 provides an assessment of cumulative effects based on the fourteen viewpoints resulting from the addition of the English Onshore Scheme to the cumulative baseline scenario.

Table 8-33 Assessment of Cumulative Landscape Effects

Landscape Receptor	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
Section 1 - La	ndfall to Bainto	n		
LCA 20C Bridlington to Hornsea Coast	Medium	Cumulative schemes considered: Hornsea Project Four Offshore Windfarm (NSIP-1) Hornsea Project Four offshore wind farm landfall lies between Fraisthorpe and Barmston, approximately 1.8 km to the south of the English Onshore Scheme landfall. The underground DC cable route continues in a south-easterly direction through this LCA.	If the construction periods overlap construction activity associated with the English Onshore Scheme and Hornsea Project Four would occur within a similar part of LCA 20C. Construction activity associated with the landfalls will temporarily influence the character along the foreshore. Away from the foreshore, the temporary loss of agricultural land will be localised and the open nature of the landscape will result in limited cumulative loss of hedgerows, trees or other vegetation elements. Overall the introduction of the temporary and short term construction of the English Onshore Scheme into this cumulative baseline scenario will result in a low cumulative magnitude. As the landfall and underground DC cable corridor of the English Onshore Scheme will be fully reinstated after construction there would be no operational cumulative effects.	Minor adverse (not significant) during construction. No operational cumulative effects.
LCA 19C North Holderness Open Farmland	Low	Cumulative schemes considered: Hornsea Project Four Offshore Windfarm (NSIP-1) Hornsea Project Four offshore wind farm underground DC cable route crosses this LCA.	If the construction periods overlap construction activity associated with the English Onshore Scheme and Hornsea Project Four would occur within a broadly similar part of LCA 19C. The addition of construction activity associated with the underground DC cable route will temporarily influence the character of the wider LCA in part due to the open nature of the landscape. The combined temporary loss of agricultural land will be localised and the removal of trees or other vegetation will be limited and not experienced simultaneously in the landscape limiting the cumulative change. Overall, the introduction of the temporary and short term construction of the English Onshore Scheme into this cumulative baseline scenario will result in a low cumulative magnitude. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	Minor adverse (not significant) during construction. No operational cumulative effects.
LCA 18A River Hull Corridor	Low	Cumulative schemes considered: Hornsea Project Four Offshore Windfarm (NSIP-1) and Solar Farm (ERYC-22)	If the construction periods overlap construction activity associated with the English Onshore Scheme and Hornsea Project Four will occur within different parts of LCA 18A with limited intervisibility. The combined temporary loss of	Minor adverse (not significant) during construction.

Landscape Receptor	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
		Hornsea Project Four offshore wind farm underground DC cable route crosses this LCA. The Solar Farm will occupy land between Driffield and Skerne.	agricultural land will be localised and the removal of trees or other vegetation will be limited and not experienced simultaneously in this landscape which will limit the cumulative change. However, the construction of a short section of the underground DC cable route will run adjacent to the construction of the solar farm to the north of Skerne within the same part of the landscape. The addition of construction activity associated with the underground DC cable route will temporarily influence a very localised part of LCA 18A with the temporary loss of agriculture land and limited removal of trees or other vegetation. Overall, the introduction of the temporary and short term construction of the English Onshore Scheme along with the construction of the solar farm will result in a low cumulative magnitude. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	No operational cumulative effects.
LCA 18E Kelk Beck Farmland	Low	Cumulative schemes considered: Gransmoor Quarry extension and restoration (ERYC-4) Gransmoor Quarry extension lies within this LCA adjacent to the existing quarry.	Construction of the underground DC cable route will occur within the same part of LCA 18E as the extended workings of Gransmoor quarry. However, the limited direct loss or change to landscape elements will be localised and whilst construction activity associated with the DC cable route will result in a temporary change in land use and limited removal of vegetation, the combined effect on the landscape characteristics of this LCA in combination with Gransmoor quarry cumulative scheme are considered to be limited. Overall, the introduction of the temporary and short term construction of the English Onshore Scheme along with the quarry operations will result in a low cumulative magnitude. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	Minor adverse (not significant) during construction. No operational cumulative effects.
LCA 16E Lund Sloping Farmland	Low	Cumulative schemes considered: Hornsea Project Four Offshore Windfarm (NSIP-1) Hornsea Project Four offshore wind farm underground DC cable route crosses this LCA.	If the construction periods overlap construction activity associated with the English Onshore Scheme and Hornsea Project Four will occur within different parts of LCA 16E with limited if any intervisibility between the two projects. As such it is considered that the English Onshore scheme in addition to Hornsea Project Four will result in a very low cumulative magnitude of effect on LCA 18A.	Negligible adverse (not significant) during construction. No operational cumulative effects.

Landscape Receptor	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
			As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	
Section 2 - Ba	nton to Market	Weighton		
LCA 13D North Wolds Plateau Farmland	Medium	Cumulative schemes considered: Solar PV array (ERYC-16) The solar PV array occupies a small parcel of land to the south east of Bainton and within 500 m of the underground DC cable route.	If the construction periods overlap construction activity associated with the English Onshore Scheme and the solar PV array will occur within the same very localised part of LCA 13D. The addition of construction activity associated with the DC cable route will temporarily influence the local landscape character with the temporary loss of agricultural land and limited removal of field boundary vegetation in combination with the limited change in land use associated with the construction of the solar PV array. Overall, the introduction of the temporary and short term construction of the English Onshore Scheme into this cumulative baseline scenario will result in a low cumulative magnitude. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	Minor adverse (not significant) during construction. No operational cumulative effects.
Section 3 - Ma	rket Weighton t	to River Ouse	The state of the state of the special control of the state of the stat	
LCA 7B Eastrington Farmland	Low	Cumulative schemes considered: ERYC-15 Change of use of existing buildings and land to provide a holiday park, retail, workshops. This cumulative scheme will occupy land to the immediate west of the underground DC cable route to the east of Spaldington Common.	If the construction periods overlap construction activity associated with the English Onshore Scheme and cumulative scheme ERYC-15 will occur within the same localised part of LCA 7B. The addition of construction activity associated with the DC cable route will temporarily influence the local landscape character with the temporary loss of agricultural land and limited removal of field boundary vegetation in combination with the limited change in land use associated with the construction of cumulative scheme ERYC-15. Overall, the introduction of the temporary and short term construction of the English Onshore Scheme into this cumulative baseline scenario will result in a low cumulative magnitude. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	Minor adverse (not significant) during construction. No operational cumulative effects.
Section 4 - Riv	er Ouse to Dra	x Substation		
LCA 5 Ouse Valley	Low	Cumulative schemes considered: Humber Low Carbon Pipelines (NSIP-9) and Battery Storage Facility (SE-3)	If the construction periods overlap construction activity associated with the English Onshore Scheme and the construction of the pipeline corridors of NSIP-9 and the battery storage facility will occur in a similar and small part	Minor adverse (not significant) during construction.

Landscape Receptor	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
		The underground pipeline corridors (construction) and potentially the above ground infrastructure (locations unknown) associated with NSIP-9 and the battery storage facility lie within this LCA.	of LCA 5. The addition of construction activity associated with the DC cable route will result in the temporary loss of agriculture land and limited removal of field boundary vegetation which will appear in combination with similar construction activity associated with the underground pipelines. This will concentrate the limited and temporary change in landscape characteristics within a small part of LCA 5 which along with the construction of the battery storage facility will temporarily and for a short duration influence the landscape character. Overall, the introduction of the temporary and short term construction of the English Onshore Scheme into this cumulative baseline scenario will result in a low cumulative magnitude. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	No operational cumulative effects.
LCA 15 Camblesfort h Farmland	Low	Cumulative schemes considered: Drax Bioenergy with CCS (NSIP-4), Humber Low Carbon Pipelines (NSIP-9), SE-1, SE-2, SE-4, SE-5, SE-8, SE-14, SE-17, SE-20 All of the above cumulative schemes lie within this LCA and are all, with the exception of SE-17 associated with the immediate context of Drax Power Station. SE-17 battery storage facility will occupy a small parcel of land to the west of Barlow.	There is the potential that the construction period of the English Onshore Scheme could overlap with the construction of some or all of the cumulative schemes identified in the baseline scenario. The construction activity associated with the underground DC cable route and converter station will result in localised loss of agricultural land and the limited removal of field boundary vegetation. This combined with the construction of the various cumulative schemes will concentrate the temporary change in landscape characteristics within a small part of this LCA centred around the existing infrastructure of Drax Power Station which is already a characteristic of this LCA. Overall, the introduction of the construction of the English Onshore Scheme into this cumulative baseline scenario will result in a low cumulative magnitude due to the limited geographical extent within a small part of the LCA. Once operational the converter station in combination with the cumulative scenario will concentrate infrastructure around Drax Power Station complex which exerts a strong influence on the character of the landscape, limiting the geographical extent of change in the LCA and retaining the intrinsic character and quality of the wider LCA. Overall, the introduction of the English Onshore Scheme into this	Minor adverse (not significant) during construction and operation.

Landscape Receptor	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
			cumulative baseline scenario will result in a low cumulative magnitude.	

Table 8-34 Assessment of Cumulative Visual Effects

Viewpoint	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
Section 1 - La	ındfall to Bainto	on		
Viewpoint 1	High	Cumulative Schemes considered: NSIP-1 Hornsea Project Four Hornsea Project Four offshore wind farm landfall lies between Fraisthorpe and Barmston, approximately 1.8 km to the south of the English Onshore Scheme landfall. Construction activity associated with the marine works and the landfall will be visible in views extending seaward and south along the beach. Construction compounds associated with the Hornsea Project Four landfall might also be visible in views to the south along with associated plant and storage of materials.	If the construction periods overlap construction activity associated with the English Onshore Scheme and Hornsea Project Four would be visible in seaward views where cable laying vessels would be visible within the expansive seaward views experienced from this viewpoint. In combination views of construction of the landfall and associated construction compounds would not be experienced although combined views in succession would be possible for the short term duration of construction works. Overall, the addition of the English Onshore Scheme into this cumulative baseline scenario will result in a low magnitude during construction. As the landfall and underground DC cable corridor of the English Onshore Scheme will be fully reinstated after construction there would be no operational cumulative effects.	Minor adverse (not significant) during construction. No operational cumulative effects.
Viewpoint 2	Medium	Cumulative Schemes considered: ERYC-4 Gransmoor Quarry extension and subsequent remediation. The extension to Gransmoor quarry will extend the working area visible in the east of the view. The proposed extension to the south of Gransmoor Lane which will not be visible from this viewpoint due to intervening vegetation screening operations.	There will be no in combination views of the English Onshore Scheme and the quarry extension but there will be in succession views from this viewpoint along with the potential for occasion sequential views depending on the movement of walkers using the local PRoW network. However, frequent intervening vegetation associated with field boundaries and existing screen planting around the existing quarry will partially screen the in succession and sequential cumulative effects experienced. This, combined with the short term duration of construction works associated with the English Onshore Scheme into this	Minor adverse (not significant) during construction. No operational cumulative effects. No operational cumulative effects.

Viewpoint	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
			cumulative baseline scenario will result in a low magnitude during construction. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative	
Viewpoint 3	Medium	Cumulative Schemes considered: ERYC-22 Solar Farm The solar farm will occupy land to the north of the underground DC cable route between Skerne and Driffield. It will not be visible from this viewpoint during construction or operation due to intervening vegetation along the River Hull and Driffield Canal.	effects. There will be no cumulative effect from this viewpoint as the solar farm will not be visible, either during construction or once operational. However, if the construction periods overlap between the English Onshore Scheme and the solar farm, visual receptors within the wider study area including from the northern edge of Skerne and from the local network of PRoW have the potential to experience in combination and sequential views of the construction associated with both projects. Construction activity associated with the English Onshore Scheme will be temporary and of a short duration with intervening vegetation partially screening views. Overall, the addition of the English Onshore Scheme into this cumulative baseline will result in a very low magnitude during construction. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	Negligible adverse (not significant) during construction. No operational cumulative effects.
Viewpoint 4	Medium	No cumulative schemes will be visible from this viewpoint	N/A	N/A
Viewpoint 5	High	No cumulative schemes will be visible from this viewpoint	N/A	N/A
Section 2 - Ba	inton to Marke	t Weighton		
		ped in for assessment of cumulative visual effects		
Section 3 - Ma	rket Weighton	to River Ouse		
Viewpoint 7	Medium	Cumulative Schemes considered: ERYC-15 Change of use of existing buildings and land to provide a holiday park, retail, workshops. This cumulative scheme will occupy land to the immediate west of the underground DC cable route to the east of Spaldington Common.	There will be no cumulative effect from this viewpoint as the cumulative scheme will not be visible, either during construction or once operational. However, if the construction periods overlap between the English Onshore Scheme and cumulative scheme ERYC-15, there could be visual receptors with views of the baseline cumulative scenario and the construction of the underground DC	Negligible adverse (not significant) during construction. No operational cumulative effects.

Viewpoint	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
		It will not be visible from this viewpoint or any of the other viewpoints within Section 3 of the route, however limited visual receptors including adjacent properties, PRoW and road users travelling along a short section of the A614 have the potential to experience views of this cumulative baseline scenario.	cable route. However, given the temporary and short term duration of construction works associated with the underground DC cable route and the presence of intervening vegetation particularly along the tributary of the River Foulness, the cumulative magnitude of effect is considered to be very low. As the underground DC cable corridor will be fully reinstated there would be no operational cumulative effects.	
Viewpoint 8	Medium	No cumulative schemes will be visible from this viewpoint	N/A	N/A
Viewpoint 9	High	Cumulative Schemes considered: All of the cumulative schemes identified within Section 4 of the route shown in Table 8-32 Cumulative Schemes considered in the landscape and visual assessment. The cumulative baseline scenario involves various energy related projects either within or in the immediate context of Drax Power Station. They are all at various stages of the planning process including scoping stage. Aspects of construction and some of the permanent operational infrastructure has the potential to be visible from this viewpoint and will be either seen adjacent to Drax Power Station or will be obscured by Drax Power Station. Cumulative Scheme SE-16 might be visible, depending on the turbine height in the periphery of the view, separate from the Drax complex including Barlow Ash Mound.	There is the potential that the construction period of the English Onshore Scheme could overlap with the construction of some or all of the cumulative schemes. The introduction of additional construction plant and activity from the construction of the converter station into a cumulative baseline scenario in which similar construction activity is already present, seen within the context of Drax power Station which is prominent in the view is considered to result in a low cumulative magnitude of effect. Once operational the introduction of the converter station into the cumulative baseline scenario will result in a limited and unobtrusive change in the composition of the view. In combination views will be limited to the cumulative schemes which will appear adjacent to or within the Drax Power Station complex. Many of the cumulative schemes including the various battery storage facilities and solar farm will be obscured from view by the Drax Power Station existing and proposed infrastructure. The converter station and wind farm (SE-16) will only appear in succession from this viewpoint or occasionally sequentially for users of the Trans Pennine Trail. Overall, the addition of the converter station into this cumulative baseline scenario will result in a low magnitude.	Minor adverse (not significant) during construction and operation.
	ver Ouse to Dra			
Viewpoint 10	Medium	Cumulative Schemes considered: NSIP-4, NSIP-9, SE-1.	There is the potential that the construction period of the English Onshore Scheme could overlap with the	Moderate adverse (significant) during

Viewpoint	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
		The cumulative baseline schemes visible from this viewpoint include NSIP-4 which will appear within the Drax Power Station complex, NSIP-9 which could include underground pipeline corridors seen in succession in the view (construction only) and SE-1 battery storage facility possibly visible in the periphery of the view, although intervening vegetation is likely to screen it. Consequently, the cumulative baseline is similar to the non-cumulative baseline view.	construction of some or all of the cumulative schemes. The introduction of additional construction plant and activity from the construction of the converter station into a cumulative baseline scenario in which similar temporary construction activity will be present in the periphery of the view or viewed in succession (NSIP-9) will slightly intensify the construction operations present for a temporary period of time. This, however, is not considered to be any greater than the individual effect of the English Onshore Scheme in isolation. Once operational the introduction of the converter station into the cumulative baseline scenario will result in a noticeable change in the composition of the view. However, as with construction effects the cumulative effects will be no greater than the effects in isolation.	construction and operation.
Viewpoint 11	Medium	Cumulative Schemes considered: NSIP-4, NSIP-9, SE-1, SE-2 and SE-5. The cumulative baseline schemes visible from this viewpoint include NSIP-4 and SE-2 which will appear within the Drax Power Station complex, NSIP-9 which could include underground pipeline corridors seen in succession in the view (construction only), SE-1 and SE-5 both battery storage facilities, although intervening vegetation is likely to partially screen SE-1 and almost entirely screen SE-5 which will only appear in successive views to the south west.	There is the potential that the construction period of the English Onshore Scheme could overlap with the construction of some or all of the cumulative schemes. Additional temporary construction plant and activity from the construction of the converter station will appear both in combination and potentially in succession within the cumulative baseline scenario in which similar temporary construction activity will be present. Whilst this has the potential to intensify temporary construction plant and activity in the view, intervening vegetation and development (Drax Village) will largely screen this temporary activity resulting in a low magnitude. Once operational the converter station will occupy a noticeable part of the midground view, however the cumulative schemes as a result of either the reinstatement of the pipeline corridors associated with NSIP-9 or appearing as part of the Drax Power Station complex (NSIP-4 and SE-2) and intervening screening vegetation (SE-1 and SE-5) will result in the English Onshore Scheme having a limited additional effect from this viewpoint. Operational magnitude of effect is considered to be low.	Minor adverse (not significant) during construction and operation.

Viewpoint	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
Viewpoint 12	Medium	Cumulative Schemes considered: NSIP-4, NSIP-9, SE-1, SE-2, SE-5 and SE-20. The cumulative baseline schemes visible from this viewpoint include NSIP-4 and SE-2 which will appear within the Drax Power Station complex and SE-20 adjacent to it, SE-1 and SE-5 (battery storage facilities) which are likely to be entirely screened by intervening vegetation and NSIP-9 which this viewpoint is located within. As there is no information identifying the location of the above ground infrastructure or the location of the underground pipeline corridors within the wide area of search an assumption has been made that there is the potential for AGIs to be present within the baseline view at this viewpoint.	There is the potential that the construction period of the English Onshore Scheme could overlap with the construction of some or all of the cumulative schemes. Additional temporary construction plant and activity from the construction of the converter station will appear in combination and potentially in succession in which similar temporary construction activity will be present. Whilst this has the potential to intensify temporary construction plant and activity in the view, the construction works associated with NSIP-9 have the potential to occupy foreground views thereby largely screening views beyond to the converter station construction which will also be partially screened by intervening vegetation. Cumulative magnitude of effect will be very low. Once operational the converter station will appear in medium distance views, partially screened by intervening vegetation and seen in the immediate context of Drax Power Station and associated cumulative developments. The permanent above ground infrastructure associated with NSIP-9 has the potential to occupy the foreground view thereby partially screening the converter station from view. Consequently, cumulative magnitude of effect will be either low or very low depending on the intervening cumulative development.	Negligible adverse (not significant) during construction. Minor adverse or Negligible adverse (not significant) during operation.
Viewpoint 13	Medium	Cumulative Schemes considered: NSIP-4, NSIP-9, SE-1, SE-2, SE-4, SE-5, SE-14 and SE-20. The cumulative baseline schemes visible will all appear in midground to distant views with varying degrees of screening from intervening built form and vegetation.	There is the potential that the construction period of the English Onshore Scheme could overlap with the construction of some or all of the cumulative schemes. As with the cumulative baseline scenario the additional temporary construction plant and activity from the construction of the converter station will be similarly largely screened by intervening vegetation resulting in a very low cumulative magnitude. Once operational the converter station will appear in medium distance views in the immediate context of Drax Power Station and associated cumulative developments and partially screened by intervening vegetation. Overall, the addition of the converter station into the cumulative baseline scenario will result in a barely perceptible change	Negligible adverse (not significant) during construction and operation.

Viewpoint	Sensitivity	Cumulative Baseline	Magnitude of Cumulative Effect	Significance of Cumulative Effect
			in the composition of the view and a very low cumulative magnitude of effect.	
Viewpoint 14	Medium	Cumulative Schemes considered: NSIP-4, NSIP-9, SE-1, SE-2, SE-5 and SE-14. The cumulative baseline schemes visible will all appear in midground to distant views with varying degrees of screening from intervening built form and vegetation. The pipeline corridor associated with NSIP-9 will potentially appear in closer range views (construction only).	There is the potential that the construction period of the English Onshore Scheme could overlap with the construction of some or all of the cumulative schemes. As with the cumulative baseline scenario the additional temporary construction plant and activity from the construction of the converter station will be similarly largely screened by intervening vegetation resulting in a very low cumulative magnitude. Once operational the converter station will appear in medium distance views in the immediate context of Drax Power Station and associated cumulative developments and partially screened by intervening vegetation. Overall, the addition of the converter station into the cumulative baseline scenario will result in a barely perceptible change in the composition of the view and a very low cumulative magnitude of effect.	Negligible adverse (not significant) during construction and operation.

8.11 Summary of Assessment

8.11.1 Introduction

This chapter has considered the effects of the English Onshore Scheme on landscape character and visual amenity. It has considered the regulatory and policy framework relating to landscape and visual amenity within East Riding of Yorkshire (ERYC) and Selby District Councils (SDC) and the assessment methodology applied and consultation undertaken. It describes the existing landscape and visual conditions within the defined study areas (1 km from the proposed landfall and underground DC and AC cable corridors and 3 km from the proposed converter station). It outlines the potential impacts of the English Onshore scheme and the mitigation measures incorporated into its design to prevent and reduce these impacts. It provides an assessment of likely significant effects associated with its construction and operation that are likely to remain after the establishment of mitigation measures as well as an assessment of cumulative landscape and visual effects as a result of the additional change resulting from the English Onshore Scheme to the defined cumulative baseline scenario.

8.11.2 Baseline Overview

The proposed underground DC cable corridor has a total length of 69 km from the proposed landfall at Fraisthorpe in the East Riding of Yorkshire to the proposed converter station near Drax Power Station in Selby District. The landscape varies considerably. It includes parts of the low-lying and undulating coastline and inland agricultural coastal plain of Holderness to the east, the undulating to rolling agricultural landscape of the locally designated Yorkshire Wolds and the large scale agricultural landscape of the Humberhead Levels to the west.

The landscape of the study area is well settled, with a variety of market towns, smaller villages, hamlets and small clusters of dwellings, and scattered properties. The Yorkshire Wolds is more sparsely settled than the Holderness and Humberhead Levels landscapes to the east and west (respectively). Settlement is most frequent around the major road corridors that cross the landscape, and along the North Sea coast.

The land use is predominantly agriculture and in particular arable crops. The drained landscapes of the Humberhead Levels, and parts of Holderness, create swathes of large-scale fields defined by a geometric pattern of drains. The productive nature of the land has led to these areas being intensively farmed and modified by human influence.

The pattern of vegetation is variable with pockets of woodland and hedgerow field boundaries a consistent feature of the Yorkshire Wolds becoming more fragmented in the large-scale agricultural landscape of the Humberhead Levels.

8.11.2.1 Landscape Character and Designations

The landscape has been characterised at national, regional and local scales. The local scale published studies from ERYC and SDC and their constitute Landscape Character Types (LCT) and more specific Landscape Character Areas (LCA) have been used to inform the landscape baseline and subsequent assessment.

There are no nationally designated landscapes within the study area, although two registered Parks and Gardens are located within the Yorkshire Wolds which is identified locally by ERYC as an Important Landscape Area (ILA) along with the Lower Derwent Valley to the west of the study area.

8.11.2.2 Visual Amenity

The English Onshore Scheme, in particular the underground DC cable route will pass through a variety of landscapes. The alignment of the proposed underground DC cable route has been selected to avoid settlement and therefore reduce the number of potential visual receptors affected. Notwithstanding this, the study area contains a well-developed network of roads, public rights of way (PRoW) including footpaths and bridleways, recreational routes and railways.

A total of 14 representative viewpoint locations have been selected to form the basis of the visual assessment. These have been identified to provide a representative cross section of visual receptors within the study area and have been agreed through consultation with ERYC and SDC.

8.11.3 Overview of Impacts

During construction of the English Onshore Scheme, there are several elements and activities that have the potential to temporarily impact landscape character and visual amenity within the study area. These impacts relate to the removal of existing landscape features such as hedgerows and arable land, and the visibility of new temporary features such as construction machinery, including effects on perceptual qualities of landscape and visual amenity.

Following construction of the landfall and the underground DC and AC cable routes, the working width along with construction compounds will be fully reinstated and as such no long-term operational landscape and visual impacts resulting from these elements are anticipated. The assessment of operational effects therefore focuses on change resulting from the introduction of the converter station at Drax. This approach was agreed with relevant consultees at the scoping stage.

8.11.4 Embedded Mitigation

Embedded measures have been defined through an iterative process of assessment and design-development, the aim being to mitigate impacts and effects as much as possible through good design and the application of best practice construction working methods. This approach has accordingly provided opportunities to prevent or reduce adverse effects on landscape character and visual amenity by designing-in measures from the outset and defining the actions and control that would be applied during construction.

Elements of embedded mitigation of specific relevance to landscape character and visual amenity can be grouped into the following features:

- Siting and routeing of the English Onshore Scheme to avoid more sensitive landscape features
 and proximity to settlement and residential properties and avoiding the areas of highest quality
 landscape in the Yorkshire Wolds ILA;
- Construction Control and Management Measures to limit the land take and disruption associated with the construction of the underground DC cable route including the reinstatement of agricultural land and boundary features such as hedgerows;
- Design Principles embedded in the siting and converter station design, including siting in close
 proximity to Drax Power Station and achieving a simple and unified architectural form to appear
 recessive to but visually connected to Drax Power Station; and
- Landscape design principles and an outline landscape plan developed collaboratively with biodiversity and hydrological considerations to ensure that a cohesive landscape plan is developed for the converter station site.

8.11.5 Residual Significant Effects

8.11.5.1 Landscape Character

Construction relating to the landfall and underground DC cable route will temporarily influence the character of localised sections of the landscape. The temporary loss of agricultural land and the removal of hedgerows and trees will be limited, although the construction activity including machinery, excavated trench and stockpiled materials will be locally prominent and incongruous elements within the landscape. However, the temporary nature and short term duration of construction activity will be localised within small parts of the constituent LCAs resulting in Minor adverse or Negligible residual effects on landscape character and the ILAs. No long term effects along the underground DC cable route will result due to the full reinstatement of the working areas.

Construction of the converter station will result in the permanent loss of a small parcel of agricultural land and the localised influence of large scale construction activity and compounds will appear within the context of Drax Power Station and the dominance of the existing infrastructure locally within the LCA. Construction effects will be Minor adverse for the host LCA and Negligible for surrounding LCAs.

Once operational, the introduction of the converter station within the immediate context of Drax Power Station complex will slightly increase the presence of industrial development, an already characteristic element of the landscape, within the LCA. Residual long term effects on the host LCA will remain Minor adverse and not significant.

8.11.5.2 Visual Amenity

The assessment has identified that potential construction stage visual effects associated with the construction of the landfall and underground DC cable route will result in Minor adverse effects which are not significant. Whilst the composition and focus of some of the views experienced by residential and recreational receptors will noticeably change this will be for a temporary period of time and of short duration. The immediate reinstatement of the landfall and underground DC cable route will mean that there will be no long term visual effects experienced by these receptors.

The construction of the converter station will result in Moderate and adverse effects for those receptors in close proximity to the converter station construction site (represented by Viewpoints 10 and 11). All other receptors with views of the construction of the converter station will experience Minor adverse or Negligible effects which are not significant.

Once operational Moderate adverse and significant effects will remain for the receptors in close proximity to the converter station site (represented by Viewpoints 10 and 11) where, despite the substantial industrial backcloth and context to the view, the proposed converter station will become the new focus and a prominent new structure within the view. However, from all other viewpoints including those within 1 km of the converter station site, Minor adverse or Negligible, not significant, residual effects will result. Overall, the composition of the views experienced by receptors will remain largely unchanged with the balance of agricultural field patterns, woodland blocks and the prominent presence of Drax Power Station remaining the focus to the views.

8.11.6 Conclusion

The introduction of the English Onshore Scheme will result in no significant effects on the landscape character or the locally designated landscapes during construction or operation. For the majority of visual receptors including those within 1 km of the converter station no significant effects will result during construction or operation.

Limited significant residual effects will remain during operation for visual receptors in close proximity to the converter station where its height and mass will appear as a prominent feature within their views. The scale of the converter station is such that planting will not screen views and additional mitigation will not be effective in further reducing effects. Project specific mitigation measures, such as minimising the height of structures, careful selection of material and colours and sensitive lighting design will be considered as part of the detailed design stage in order to reduce impacts as far as possible.

8.12 References

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