Rampion 2 Wind Farm

Category 6: Environmental Statement

Volume 4, Appendix 18.3: Landscape assessment

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Contents

1. Landscape assessment

1.1.1 This Appendix reports the landscape assessment for the onshore elements of the Proposed Development. The assessment is set out in two parts as follows:

- assessment of landscape character – reporting the effects on landscape character, characteristics, and landscape elements (trees / woodland / hedges and scrub); and
- assessment of landscape designations – reporting on the effects on the special qualities (comprising the reason for the designation) setting and integrity of landscape designations.

1.1.2 This landscape assessment is also summarised in **Chapter 18: Landscape and visual impact, Volume 2** of the ES (Document Reference: 6.2.18).

1.1.3 The assessment of landscape effects resulting from the onshore substation at Oakendene and the existing National Grid Bolney substation extension is provided in **Chapter 18: Landscape and visual impact, Volume 2** of the ES (Document Reference: 6.2.18) and therefore not repeated in this Appendix.

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2. Landscape Character Assessment

2.1 Introduction

2.1.1 Landscape Effects are defined by the Landscape Institute and Institute of Environmental Management and Assessment (IEMA) (2013) in the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA 3), paragraphs 5.1 and 5.2 as follows:

> "*An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern ... is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. ... The area of landscape that should be covered in assessing landscape effects should include the site itself and the full extent of the wider landscape around it which the proposed Development may influence in a significant manner.*"

2.1.2 These effects are assessed by considering the landscape sensitivity (value and susceptibility) against the magnitude of change. The type of effect may also be described as short, medium or long-term, direct or indirect, cumulative and beneficial, neutral, or adverse.

2.1.3 The residual landscape effects, assessed here, are those effects remaining after all of the embedded environmental measures (**Section 18.7**, **Chapter 18 landscape and visual assessment, Volume 2** of the ES (Document Reference: 6.2.18)) have been taken into account. An assessment of the cumulative landscape effects, taking account of other developments, as set out in **Chapter 5: Approach to the EIA, Volume 2** of the ES (Document Reference: 6.2.5) has been undertaken according to the methodology detailed in **Appendix 18.1: Landscape and visual impact assessment methodology, Volume 4** of the ES (Document Reference: 6.4.18.1).

2.1.4 The onshore elements of the Proposed Development have the potential to significantly affect the landscape character, characteristics and landscape elements as a result of the construction phase and during Years 1-10 of the operation and maintenance phase. Effects during the decommissioning phase are scoped out as the onshore cable corridor will be left *in-situ* at the end of the operation and maintenance phase.

2.1.5 The landscape character within the landscape and visual impact assessment (LVIA) Study Area is illustrated in **Figures 18.5b, Volume 3** of the ES (Document Reference: 6.3.18). The assessment also refers to the Zones of Theoretical Visibility (ZTV) (**Figures 18.4a-e, Volume 3** of the ES (Document Reference: 6.3.18)) and the illustrated viewpoints and viewpoint assessment in **Appendix 18.2: Visual assessment, Volume 4** of the ES (Document Reference: 6.4.18.2).

2.1.6 Reference is made to the description of the onshore elements of the Proposed Development in **Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4) and the assessment has also drawn from other aspects in particular:

- **Chapter 22: Terrestrial ecology and nature conservation, Volume 2** of the ES (Document Reference: 6.2.22);
- **Appendix 22.16: Arboricultural Impact Assessment, Volume 4** of the ES (Document Reference: 6.4.22.16);
- **Chapter 23: Transport, Volume 2** of the ES (Document Reference: 6.2.23);
- **Chapter 25: Historic environment, Volume 2** of the ES (Document Reference: 6.2.25); and
- **Chapter 26: Water environment, Volume 2** of the ES (Document Reference: 6.2.26).

2.1.7 Cross reference has also been made to **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15), where the sea / coastline has a characterising influence on the landscape character.

2.1.8 In summary, all the LCAs crossed by the onshore cable corridor (14 out of the 19 included in the assessment) will in part, be significantly affected, four of which are located within the SDNP:

- Part 1: Climping to SDNP:
  - 31: Climping Lower Coastal Plain;
  - 34: Middle Arun Valley Floor;
  - 35: Lower Arun Valley Floor;
  - 40: Lyminster-Angmering Coastal Plain; and
  - 41: Black Ditch Rife.
- Part 2: SDNP:
  - R1: South Downs Upper Coastal Plain;
  - B4: Angmering and Clapham Wooded Estate Downland;
  - A3: Arun to Adur Open Downs;
  - J3: Arun to Adur Scarp Footslopes.
- Part 3: SDNP to Oakendene / Bolney:
  - D1: Amberley to Steyning Farmlands;
  - F1: Pulborough, Chiltington & Thakeham Farmlands;
  - G1: Ashurst & Wiston Wooded Farmlands;
  - O3: Steyning & Henfield Brooks;
  - J3: Cowfold & Shermanbury Farmlands; and
  - LW1: Hickstead Low Weald.

2.1.9 Four of the LCAs are not significantly affected. They include the chalk escarpment at I3: Arun to Adur Down Scarp which will be crossed completely by trenchless

crossing techniques; LCAs 38: Littlehampton Arun Valley Sides and E1: Parham & Storrington Wooded Farmlands and Heaths which are not crossed by the cable corridor; and SC1: South Coast Shoreline which precedes the landfall and commencement of the trenched installation of the cable corridor further inland.

2.1.10 None of the LCAs included in the assessment will be significantly affected overall.

2.1.11 The geographical extent of significant landscape effects is largely contained within approximately 250m of the onshore cable corridor due to the screening effects of successive layers of vegetation (existing trees, woodland, and hedgerows). This increases to within approximately 350m of the onshore cable corridor within the more open Arun Valley Floor and Coastal Plain landscapes (LCAs 34, 35, and 40) within the southern (Part 1) section of the onshore cable corridor. A similar effect occurs within the northern (Part 3) section of the onshore cable corridor where it crosses the River Adur valley (LCA O3: Steyning & Henfield Brooks).

2.1.12 Within the SDNP, the geographical extent of these significant effects will also be largely restricted to approximately <250m of the onshore cable corridor due to the wooded and/or agrarian character of three of the LCAs (R1, B4 and J3) within the SDNP. An exception to this is the A3: Arun to Adur Open Downs LCA where significant effects will extend to within approximately 650m of the onshore cable corridor, particularly in relation to multiple elevated areas viewing along the linear onshore cable corridor.

2.1.13 The duration of these effects will be short-term, occurring within the 3.5 year onshore cable corridor construction phase (3 years for the onshore cable corridor and 3.5 years including temporary construction compounds). However, construction work along the onshore cable corridor will be carried out in discrete sections (typically 600m – 1,000m of onshore cable corridor) with progressive backfill and reinstatement commenced in as shortest timeframe as practical (embedded environmental measures C-19 and C-20, **Table 18-25 of Chapter 18: Landscape and visual impact, Volume 2** of the ES (Document Reference: 6.2.18)). Once topsoil has been reinstated and the temporary construction haul road removed the effects on landscape character would begin to resemble agricultural effects, particularly in areas of arable farming and the effects on landscape character would no longer be significant. In areas of livestock farming, the re-establishment of pasture would occur within the first growing seasons (within the overall construction phase) and again, the effects on landscape character would no longer be significant.

2.1.14 Significant effects on individual landscape elements, removed as a result of the onshore cable corridor construction works are also reported and, in each case, new, replacement planting will be undertaken and maintained for 10 Years.

2.1.15 The nature of these residual effects will be both direct and indirect, adverse and in some cases cumulative with other whole Proposed Development effects and other development included in the cumulative assessment.

2.1.16 There will be no significant effects on landscape character during the operation and maintenance phase (the onshore cable will be buried underground), although there will be some residual effects arising from the loss of landscape elements (treelines, woodland, hedges, and scrub) during the construction phase. New replacement planting will be undertaken and maintained for 10 Years in

accordance with the **Outline Landscape and Ecology Management Plan (LEMP)** (Document Reference 7.10) to mitigate these effects.

2.1.17 A summary of the effects on landscape character for the onshore cable corridor is provided in **Table 2-1**.

Table 2-1 Summary of landscape effects: onshore cable corridor

Visual Receptor	Sensitivity	Construction phase (3.5 Years)		Operation and maintenance phase		
		Magnitude	Level of effect	Level of effect Year 1	Level of effect Year 5	Level of effect Year 10
Landscape character areas: Part 1 – Climping to South Downs National Park (SDNP)						
SC1: South Coast Shoreline	Medium	Zero	No Effect	No Effect	No Effect	No Effect
Landscape elements	N/A – No trees / woodland / hedges directly affected.					
31: Climping Lower Coastal Plain	Medium-low	Medium-high	**Moderate** (<250m)	Negligible	No Effect	No Effect
Landscape elements:	N/A – No trees / woodland / hedges directly affected.					
34: Middle Arun Valley Floor	Medium-low	Medium-high	**Moderate** (<350m)	Negligible	No Effect	No Effect
Landscape elements: (Scrub and 1No. hedge notched to 14m)	Medium-low	Medium	Moderate / Minor	Negligible	No Effect	No Effect
35: Lower Arun Valley Floor	Medium-low	Medium-high	**Moderate** (<350m)	Minor	Minor / Negligible	No Effect
Landscape elements: (3No. scrub cleared to	Medium-low	Medium-high	Moderate	Minor	Minor / Negligible	No Effect

Visual Receptor	Sensitivity	Construction phase (3.5 Years)		Operation and maintenance phase		
		Magnitude	Level of effect	Level of effect Year 1	Level of effect Year 5	Level of effect Year 10
30m and hedge notched to 14m)						
38: Littlehampton Arun Valley Sides	Low	Low	Negligible	No Effect	No Effect	No Effect
Landscape elements:	No trees / woodland / hedges directly affected.					
40: Lyminster-Angmering Coastal Plain	Medium	Medium-high	**Moderate** (<350m)	Moderate / Minor	Minor	No Effect
Landscape elements: (6No. treelines / hedges notched to 14m and 2No. woods cleared / notched to 6m)	Medium-high	Medium	**Moderate**	**Moderate**	Moderate / Minor	Minor
41: Black Ditch Rife	Medium-low	Medium-high	**Moderate** (<250m)	Negligible	No Effect	No Effect
Landscape elements:	N/A – No trees / woodland / hedges directly affected.					

Visual Receptor	Sensitivity	Construction phase (3.5 Years)		Operation and maintenance phase		
		Magnitude	Level of effect	Level of effect Year 1	Level of effect Year 5	Level of effect Year 10
Landscape character areas: Part 2 – SDNP						
R1: South Downs Upper Coastal Plain	High	Medium-high	**Major** (<250m)	Moderate	Minor	No Effect
Landscape elements: (Double treeline / notched to 6m and hedge notched to 14m)	Medium-high	Medium-high	**Major / Moderate**	**Moderate**	Moderate / Minor	Minor
B4: Angmering and Clapham Wooded Estate Downland	High	Medium-high	**Major** (<250m)	Moderate	Minor	No Effect
Landscape elements: (Double woodland cleared to 30m and 2No.hedges notched to 14m)	High	Medium-high	**Major**	**Major / Moderate**	**Moderate**	Minor
A3: Arun to Adur Open Downs	High	High	**Major** (<650m)	Minor	No Effect	No Effect
Landscape elements: (7No. treelines / hedges notched to 14m)	Medium-high	Medium-high	**Major / Moderate**	**Moderate**	Minor	No Effect

Visual Receptor	Sensitivity	Construction phase (3.5 Years)		Operation and maintenance phase		
		Magnitude	Level of effect	Level of effect Year 1	Level of effect Year 5	Level of effect Year 10
I3: Arun to Adur Downs Scarp	High	Negligible-Zero	Minor	No Effect	No Effect	No Effect
Landscape elements:	N/A – No trees / woodland / hedges directly affected.					
J3: Arun to Adur Scarp Footslopes	High	Medium-high	**Major** (<250m)	Moderate	Minor	No Effect
Landscape elements: (1No. woodland cleared to 30m and 11No. treelines / hedges notched to 14m)	High	Medium-high	**Major**	**Major**	**Moderate**	Minor
Landscape character areas: Part 3 – SDNP to Oakendene / Bolney						
D1: Amberley to Steyning Farmlands	Medium-low	High <250m	**Major** (<300m)	No Effect	No Effect	No Effect
Landscape elements:	N/A – No trees / woodland / hedges directly affected.					
E1: Parham & Storrington Wooded Farmlands & Heaths	Medium-low	Negligible-Zero	Negligible	No Effect	No Effect	No Effect
Landscape elements:	N/A – No trees / woodland / hedges directly affected.					

Visual Receptor	Sensitivity	Construction phase (3.5 Years)		Operation and maintenance phase		
		Magnitude	Level of effect	Level of effect Year 1	Level of effect Year 5	Level of effect Year 10
F1: Pulborough, Chiltington & Thakeham Farmlands	Medium-high	Medium-high	**Major / Moderate** (<250m)	Minor	Minor / Negligible	No Effect
Landscape elements: (1No. treeline and 1No. hedges notched to 14m)	Medium-high	Medium-high	**Major / Moderate**	**Moderate**	Moderate / Minor	Minor
G1: Ashurst & Wiston Wooded Farmlands	Medium-high	Medium-high	**Major / Moderate** (<150m)	Minor	Minor / Negligible	No Effect
Landscape elements: (2No. treelines cleared to 20m and 13No. treelines / hedges notched to 14m)	Medium-high	Medium-high	**Major / Moderate**	**Moderate**	Moderate	Minor
O3: Steyning & Henfield Brooks	Medium	Medium-high	**Moderate** (<350m)	Minor	Minor / Negligible	No Effect
Landscape elements: (20No. including 1No. wood cleared to 30m 1No. hedge cleared to 20m and 18No.	Medium-high	Medium-high	**Major / Moderate**	**Major / Moderate**	**Moderate**	Minor

Visual Receptor	Sensitivity	Construction phase (3.5 Years)		Operation and maintenance phase		
		Magnitude	Level of effect	Level of effect Year 1	Level of effect Year 5	Level of effect Year 10
treelines / hedges notched to 6-14m)						
J3: Cowfold & Shermanbury Farmlands	Medium	Medium-high	**Moderate** (<150m)	Minor	Minor / Negligible	No Effect
Landscape elements: (23No. including 2No. woods cleared to 30m and 20m and 21No. treelines / hedges notched to 6-14m)	Medium-high	Medium-high	**Major / Moderate**	**Major / Moderate**	**Moderate**	Minor
LW1: Hickstead Low Weald	Medium-low	Medium-high	**Moderate** (<150m)	Minor	Minor / Negligible	No Effect
Landscape elements: (1No. wood cleared to 20m and 3No. treelines / hedges notched to 14-20m)	Medium-high	Medium	**Moderate**	**Moderate**	**Moderate**	Minor

*Note: Significant effects in shown in **bold** and extent of significant effect for linear receptors shown in brackets.

2.2 NCA 126: South Coastal Plain (Climping to Arundel)

2.2.1 The South Coastal Plain National Character Area (NCA) 126 is described by Natural England (2014, p.2) as:

> *"…flat, coastal landscape with an intricately indented shoreline lying between the dip slope of the South Downs and South Hampshire Lowlands and the waters of the English Channel, Solent and part of Southampton Water. The coastline includes several major inlets which have particularly distinctive local landscapes and intertidal habitats of international environmental importance for wildfowl and waders. Chichester Harbour Area of Outstanding Natural Beauty lies within the NCA and the foothills of the South Downs, along the northern boundary, fall within the South Downs National Park. Some three per cent of the area is designated as a Site of Special Scientific Interest, and there are four Special Protection Areas, two Special Areas of Conservation and four Ramsar sites: Chichester and Langstone Harbour, Pagham Harbour, The Solent and Southampton Water and Portsmouth Harbour."*

2.2.2 Within the South Coastal Plain NCA the onshore cable corridor is routed across the *Lower Arun Valley* (County Landscape Character (CLC) SC10), The Littlehampton and Worthing Fringes (SC11) to the north of Littlehampton and the Angmering Coastal Plain (SC12) to the south of the SDNP. A small part of the onshore cable corridor and the landfall are located within the *Chichester to Yapton Coastal Plain* (CLC SC9).

2.2.3 There will be no landscape effects to the south of the landfall including the *South Coast Shoreline* (CLC SC1) at Climping Beach and the adjacent, southern part of SC9 due to the proposed horizontal directional drill (HDD) method of cable installation at landfall.

2.2.4 **Table 2-2** to **Table 2-8** detail the landscape assessment and set out the landscape effects of the onshore elements of the Proposed Development within this area.

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Table 2-2 Effects on Landscape Character within the South Coast Shoreline (SC1)

South Coast Shoreline (SC1)	
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)	**Viewpoint A (Figure 18.19, Volume 3 of the ES (Document Reference: 6.3.18)**)
Note: There will be **No Effect** on this area of the foreshore at Climping Beach due to the HDD activity being underground as illustrated in **Figure 18.19, Volume 3** of the ES (Document Reference: 6.3.18), despite this being in the onshore part of the proposed DCO Order Limits. There will be no other construction or operation and maintenance activities within the South Coast Shoreline (SC1).	

Table 2-3 Effects on landscape character within No. 31: Climping Lower Coastal Plain LCA

No. 31: Climping Lower Coastal Plain LCA		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint A** (**Figure 18.19, Volume 3**) and **Viewpoint B1** (**Figure 18.21, Volume 3**) **of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 126: South Coastal Plain
	County Character Area:	SC9: Chichester to Yapton Coastal Plain LCA within West Sussex
Designation	None	
Character description	This LCA is located within the CLC SC9: Chichester to Yapton Coastal Plain and comprises a low lying, flat open landscape that has been reclaimed from the sea over time and remains below the current high spring tide level. It is characterised by highly productive arable fields and has a fragmented hedgerow and hedgerow tree pattern	

No. 31: Climping Lower Coastal Plain LCA	
	with occasional shelterbelts. There are long views to Arundel and the Downs from within the area. Sensitivities at the regional level include fragmentation and loss of hedgerows and connection between hedgerows and woodland. The key characteristics at a local scale are described in the Arun Landscape Study (Arun District Council, 2006): Key Characteristics: • *"Abuts Arun River valley to the east and Ford to the north.* • *Almost entirely intensively farmed arable land.* • *Predominately large field sizes.* • *Blocks of arable fields separated by roads with scattered and ribbon development.* • *Fields with hedgerows and tree belts providing enclosure."* The most relevant features relating to the onshore cable corridor are the large arable fields and hedgerows. Landscape elements: comprise arable crops and grassland along field margins. Although there are no trees or hedgerows within this part of the onshore cable corridor and the Climping construction compound, trees, tree belts and hedgerows are present along roadsides and field boundaries as well as shelterbelts and woodland within the wider LCA.
Assessment of sensitivity	Landscape value: The overall value of this landscape is stated as 'Substantial' in the Arun Landscape Study (Arun District Council, 2006). This relates to a cumulative value ascribed to this non-designated landscape by virtue of its proximity to the locally valued Arun Valley, and the scenic value of the undeveloped coastline. In terms of designation alone however, the LCA is not designated at a national or local level. The landscape is not rare or particularly scenic, being intensively farmed and the flat arable fields are interspersed by tree belts and hedgerows which are not uncommon to the wider area. However, the proximity of this landscape to the coastline affords higher levels of landscape quality in terms of the areas local sense of place and representativeness. Opportunities to experience the landscape result from its heritage and recreational attributes. The area includes a number of recreational routes (NCR 2 and local footpaths), campsites, beach access and associated recreational facilities.

No. 31: Climping Lower Coastal Plain LCA

The landscape value is assessed as **Medium**.

Landscape susceptibility:

The Arun Landscape Study (Arun District Council, 2006, para. 5.2.2) ascribes an inherently 'Substantial' level of landscape susceptibility because it *"Includes the only substantial area of undeveloped coastline, largely rural, within the floodplain and provides separation between Middleton-on-sea and Littlehampton."* Considering the nature of the onshore elements of the Proposed Development, in this case their short-term and temporary duration the landscape susceptibility to this type of development is lower. This is due to the changing character of the landuse and landcover pattern, resulting from development pressures in the north at Horsemere Green and Ferry Road, the relatively flat landscape which limits views of ground-based construction activity and the arable fields which regularly encompass crop rotation, and movement of agricultural machinery. There are limited hedges / trees and woodland. Collectively these characteristics indicate a higher level of resilience and reduced susceptibility, specifically to the onshore cable corridor during construction. During the operation and maintenance phase, the onshore cable corridor will be buried with only the manhole covers at the landfall visible.

The susceptibility of the landscape is assessed as **Low**.

Sensitivity	**Landscape character: Medium-low** **Landscape elements:** N/A	Landscape value:	Medium
		Landscape susceptibility:	Low

Magnitude of change and level of residual effect

During construction:	Within the Climping Lower Coastal Plain LCA the onshore cable corridor (approximately 200m in length) crosses up to two arable fields (subject to cropping) and passes through a 'gap' between a hedgerow and tree belt on the edge of the LCA before continuing northeast into the adjacent open fields and LCA. The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

The TC-01 construction compound (approximately 120m x 100m) will be located at approximately kilometre point (KP) 0m in the arable field to the north of Climping Beach, as indicated in Viewpoint A (**Figure 18.19, Volume 3** of the ES (Document Reference: 6.3.18)). The trenchless crossing construction compounds TC-01a and TC-02 will be located in the adjacent Lower Arun Valley Floor No. 35 LCA, and although partly screened by intervening vegetation their intervisibility will further indirectly and adversely influence the landscape character. The temporary trenchless crossing compounds will remain in place for approximately six months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Ground-based construction activity along the onshore cable corridor will be transient and of short-term duration with progressive backfill and reinstatement as the onshore cable corridor works are completed along the onshore route within the overall 3.5 year construction phase. The trenchless crossing construction compound TC-01 will remain in place for six months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

The onshore cable corridor and TC-01 construction compound will add a large to medium-scale additional feature, to this landscape, contrasting with the rural character of the open fields and coastal plain. Two further trenchless crossing construction compounds TC-01a and TC-02 will be visible in the adjacent LCA (35 Lower Arun Valley Floor and part of Ford and Horsemere Green townscapes), further reinforcing the effect on landscape character. The geographical extent of the effects of the onshore cable corridor and TC-01 is a maximum of approximately 600m to the west and northwest, before being screened by vegetation along Climping Street. The minimum geographical extent is approximately 200m to the south where the effects on landscape character are contained by the sea defences along the coastline, with further containment provided to the east by shelterbelt / development at The Mill and to the north by Kents Farm and intervening vegetation along Ferry Road to the north.

The magnitude of change affecting the landscape character will be **Medium-high** and the geographical area will be contained within the arable fields within which the onshore cable corridor and TC-01 are located (<250m) reducing to **Low** in the surrounding LCA.

The level of effect will be **Moderate** and **Significant** (<250m).

The Climping construction compound will occupy an area of approximately 6.1 hectares (ha) for the duration of the construction phase (up to 3.5 years). It will contain welfare facilities / offices, parking, construction plant and storage

No. 31: Climping Lower Coastal Plain LCA

of materials and equipment (up to 7m high) and a concrete batching plant up to 20m high. The temporary construction compound will be accessed off Church Lane and contained by security fencing, set back from the canopy and root zone of the existing perimeter trees.

The compound is located within a single large arable field that will be well screened throughout the year by existing mature vegetation (trees and hedgerows / shrubs) along Church Lane to the east and the A259 to the south and along the perimeter of the Climping Village Hall and Playing Fields. There is further perimeter vegetation (mature trees and hedgerows / shrubs) to the north of this field unit and the western boundary of the field is contained by further shrubs and the Climping Park (mobile home park). As a result, the Climping construction compound will be well contained within this LCA although the top of the concrete batching plant will be visible over a wider area.

The magnitude of change (taking account of construction access A-05 and the concrete batching plant) will be High affecting a small geographical area of the LCA (the arable field in which the compound is located) reducing to Low in the surrounding LCA, beyond the perimeter vegetation screening and mobile home park.

The magnitude of change likely to affect the landscape character as a result of the Climping construction compound will be **High** to **Medium-high** affecting a small geographical area of the LCA (contained within the affected field unit) reducing to non-significant levels in the surrounding LCA.

The level of effect will be **Moderate** and **Significant** (<250m).

Level of effect	**Landscape character: Moderate** and **Significant** (<250m) **Landscape elements: No Effect**
Type of effect	Short-term, temporary, direct and adverse.

During operation and maintenance: - Years 1-10	All construction areas will have been reinstated and there will be **No Effect** on landscape elements.

No. 31: Climping Lower Coastal Plain LCA	
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	The onshore elements of the Proposed Development will be experienced cumulatively with residential development at Ferry Road (ID 61 / 62, Arun Local Plan - reference site SD9) which indirectly affects the neighbouring 35: Lower Arun Floor LCA to the north-east. Both the additional cumulative effect on the onshore elements of the Proposed Development and the combined cumulative effects of other development will be **Significant** (**Moderate**).

Table 2-4 Effects on landscape character within No. 34 Middle Arun Valley Floor LCA

No. 34 Middle Arun Valley Floor LCA		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint C** (**Figure 18.22**), **Viewpoint C1** (**Figure 18.23**), and **Viewpoint D** (**Figure 18.24**), **Volume 3 of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 126: South Coast Plain
	County Character Area:	SC10: Lower Arun Valley LCA
Designation:	None	

No. 34 Middle Arun Valley Floor LCA	
Character description	This LCA overlaps with the mid and northeastern parts of the wider SC10: Lower Arun Valley and comprises extensive drained floodplain pastures along the River Arun. Some stretches of the tidal river are contained by high banks engineered to control flooding. The area is influenced by urban development at Littlehampton including wharves, jetties, moorings, and a golf course. Elsewhere there are large open arable fields. There are views to Arundel and Arundel Castle from within the area. Sensitivities at the regional level include unsympathetic reprofiling and changes to riverbanks and associated drainage. The key characteristics at a local scale are described in the Arun Landscape Study (Arun District Council, 2006): Key Characteristics: • *"Open valley floor, predominately pasture with occasional arable fields.* • *Exposed with wide-open views, including north to Arundel.* • *Centred on the River Arun and contains a network of railway lines.* • *Minor recreational uses adjacent to Ford."* The most relevant features relating to the onshore cable corridor are the open pasture fields which tend to be contained by ditches rather than hedgerows and the area generally is un-wooded. Landscape elements: There are trees and hedgerows along some field boundaries within this part of the onshore cable corridor, as well as field drainage / watercourses along the mainly pasture field boundaries.
Assessment of sensitivity	Landscape value: The overall value of this landscape is stated as 'Substantial' in the Arun Landscape Study (2006). This relates to a cumulative value ascribed to moderate to high scenic beauty, setting to Arundel and proximity to the SDNP. In terms of designation alone however, the LCA is not designated at a national or local level. The landscape is not rare or particularly scenic, being intensively grazed with flat open fields that are interspersed by broken tree belts and occasional hedgerows. The River Arun is contained by engineered bunds and the associated drainage ditches are not scenically valued. However, the proximity of this landscape to Arundel Castle and the South Downs to the north affords higher levels of landscape quality in terms of the area's local sense of place and representativeness. Opportunities to experience the landscape result from its heritage and recreational

attributes. The area includes a number of recreational routes (River Arundel footpath and local footpaths), campsites and sailing / marinas.

The landscape value is therefore assessed as **Medium**.

Landscape susceptibility:

The Arun Landscape Study (Arun District Council, 2006, para. 5.2.2) ascribes an inherently 'Major' level of landscape susceptibility due to its *"Intact pastoral landscape, provides setting to Arundel and separation to Littlehampton, low lying floodplain."* Considering the nature of the onshore elements of the Proposed Development, in this case their ground-based, short-term and temporary duration, the landscape susceptibility to this type of development is lower. This is due to the relatively flat topography which limits wider views and the lower sensitivity of grassland and occasional crops within the fields which will quickly recover from the construction works. Permanent pasture will be more sensitive than arable fields which are subject to regular cultivation. Woodland is not a characteristic of the valley flood plain and the treebelts and occasional hedgerows tend to be sparse and or broken. Collectively these characteristics indicate a higher level of resilience and reduced susceptibility to the construction and operation of the onshore elements of the Proposed Development.

The susceptibility of the landscape is assessed as **Low**.

Sensitivity	**Landscape character: Medium-low** **Landscape elements: Medium-low**	Landscape value:	Medium
		Landscape susceptibility:	Low

Magnitude of change and level of residual effect

During construction:

Within the Middle Arun Valley Floor LCA the onshore cable corridor (approximately 2.3km in length) crosses up to nine arable fields (subject to cropping) and passes through two linear scrub / hedges (the rest being open ditches) before reaching the A284 at Lyminster on the eastern edge of the LCA. The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

No. 34 Middle Arun Valley Floor LCA

Two trenchless crossing construction compounds TC-03 and TC-04 (approximately 50m x 75m) will be located just beyond the north-western edge of Littlehampton. Compound TC-03 is in an open arable field (approximate KP 2.3km) and to the north of the trenchless crossing between the River Arun and the Littlehampton / Arundel / Ford railway line; and compound TC-04 in an open pasture field (approximate KP 3.1km) to the south of the trenchless crossing beneath the northernmost branch of the Littlehampton / Arundel / Ford railway line. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Compound TC-05 will be located in the adjacent Black Ditch Rife No.41 LCA, and although partly screened by intervening vegetation its intervisibility will further indirectly influence the landscape character.

Ground-based construction activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the route. The scale and geographical extent of these temporary construction activities will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately 350m) or when viewing along the onshore cable corridor, reducing to **Medium-low** or less on the wider LCA where the onshore cable corridor will appear partly or wholly screened by successive layers of vegetation and accommodated within the wider scale of the flat, open fields, close to the eastern edge of the LCA which is influenced by development at Littlehampton and Lyminster.

The River Arun and railway lines will be subject to trenchless crossing as illustrated in Viewpoint C (**Figure 18.22, Volume 3** of the ES (Document Reference: 6.3.18)) and there will be **No Effect** on the landscape.

Construction access A-09 is located at an existing access point off the A259 to the north of the railway line and continuing along existing farm tracks through pasture fields to the onshore cable corridor. It is assumed that some tree pruning will be required to maintain existing visibility splays at each access point. The magnitude of change will be **Low** affecting a small geographical area of landscape character in the local vicinity of the respective access.

The magnitude of change affecting the landscape character will be **Medium-high** and the geographical area will be contained within the fields within which the onshore cable corridor and TC-03 and TC-04 are located, <350m) reducing to **Low** in the surrounding LCA. Overall, the level of effect will be **Moderate** and **Significant** (<350m).

Landscape Elements:

No. 34 Middle Arun Valley Floor LCA	
	The onshore cable corridor will cross one area of scrub (HS1002) and a hedge (H22). The removal of 14m of vegetation at these locations will appear as a break in the already fragmented linear pattern of field boundary vegetation, which is not identified as a key characteristic and will not significantly affect the LCA. Changes of direction in the onshore cable corridor will prevent this appearing as a more obvious 'cut' through the LCA. The magnitude of change will be Medium and the level of effect on the landscape elements will be **Moderate / Minor** and **Not Significant**.
	Level of effect — **Landscape character: Moderate** and **Significant** (<350m) **Landscape elements: Moderate / Minor** and **Not Significant**
	Type of effect — Short-term, temporary, direct and adverse.
During operation and maintenance: - Year 1	All construction areas will have been reinstated. However, two landscape elements are affected comprising scrub (HS1002) and a hedge (H22) notched to 14m. New replacement hedge / scrub planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss. The magnitude of change accounting for the new planting will be Negligible -Zero and the level of effect **Negligible** and **Not Significant**, reflecting that they are not key characteristics.
- Year 5	Replacement hedge / scrub planting will be established along with retained hedges between the notches and there will be **No Effect** on the on the landscape elements.
- Year 10	There will be **No Effect** on the on the landscape elements as the new planting will be well established.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15).

No. 34 Middle Arun Valley Floor LCA	
	The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no significant cumulative landscape effects, residential / mixed development along the urban fringe at Littlehampton is already accounted for in the baseline.

Table 2-5 Effects on landscape character within No. 35: Lower Arun Valley Floor LCA

No. 35: Lower Arun Valley Floor LCA		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint B** (Figure 18.20) and **Viewpoint Q** (Figure 18.60), Volume 3 **of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 126: South Coast Plain
	County Character Area:	SC10: Lower Arun Valley LCA
Designation:	None	
Character description	This LCA is located within the wider SC10: Lower Arun Valley and comprises extensive drained floodplain pastures along the River Arun. Some stretches of the tidal river are contained by high banks engineered to control flooding. The area is influenced by urban development at Littlehampton including wharves, jetties, moorings, and a golf course. Elsewhere there are large open arable fields. There are views to Arundel from within the area. Sensitivities at the regional level include changes to riverbanks and drainage by unsympathetic reprofiling.	

No. 35: Lower Arun Valley Floor LCA

The key characteristics at a local scale are described in the Arun Landscape Study (Arun District Council, 2006):

Key characteristics:

- *"Valley floor with areas of unmanaged scrub, utilities and recreation.*
- *Southern end of area comprised of coastal golf course.*
- *Views, particularly from along riverside footpath, partially enclosed by areas of vegetation.*
- *Area bisected by busy A259 road.*
- *Urban influence from adjoining Littlehampton to the east and from the A259.*
- *Occasional distant views of Arundel and the South Downs to the north."*

Assessment of sensitivity

Landscape value:

The overall value of this landscape is stated as 'Moderate' in the Arun Landscape Study (Arun District Council, 2006) due to non-designated landscape, proximity to the locally valued Arun Valley and the scenic value of the undeveloped coastline.

It is influenced by urban development including a coastal golf course, jetties / marinas and engineered embankment to its eastern edge. The landscape is not rare or particularly scenic, the flat arable fields being intensively farmed and interspersed by tree belts and hedgerows which are not uncommon to the wider area. However, the proximity of this landscape to the coastline affords higher levels of landscape quality in terms of the area's local sense of place and representativeness. Opportunities to experience the landscape result include riverside recreational routes (NCR 2 and local footpaths), campsites, golfing, beach access and associated recreational facilities.

The landscape value is assessed as **Medium**.

Landscape susceptibility:

The Arun Landscape Study (Arun District Council, 2006, para. 5.2.2) ascribes an inherently 'Substantial' level of landscape susceptibility because it *"Includes the only substantial area of undeveloped coastline, largely rural, within the floodplain and provides separation between Middleton-on-sea and Littlehampton."* Considering the nature of the onshore cable corridor and its ground-based, short-term and temporary duration the landscape susceptibility to this type of development is lower. This is due to the changing character of the landuse and

No. 35: Lower Arun Valley Floor LCA

	landcover pattern, resulting from development pressures in the north at Horsemere Green and Ferry Road, the relatively flat landscape which limits views of ground-based construction activity and the arable fields which regularly encompass crop rotation, and movement of agricultural machinery. There are limited hedges / trees and woodland. Collectively these characteristics indicate a higher level of resilience and reduced susceptibility to the construction and operation and maintenance of the onshore elements of the Proposed Development. The susceptibility of the landscape is assessed as **Low**.		
Sensitivity	**Landscape character: Medium-low** **Landscape elements: Medium-low**	Landscape value:	Medium
		Landscape susceptibility:	Low
Magnitude of change and level of residual effect			
During construction:	Within the Lower Arun Valley Floor LCA the onshore cable corridor (approximately 2km in length) crosses up to five arable fields and passing through three field boundaries (trees and hedgerow) before reaching the southern bank of the River Arun. The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4). Construction compounds TC-01a (approximately 120m x 100m) and TC-02 (approximately 75m x 50m) will be located at approximately between KP0.3 and KP0.6 in the open arable field to the south of Ferry Road, largely screened from the road by vegetation as indicated in **Viewpoint Q** (**Figure 18.60, Volume 3** of the ES (Document Reference: 6.3.18)). A further alternative trenchless crossing compound (TC-03a) may be located within this LCA to the south of the River Arun, as an alternative location to compound TC-03 in the neighbouring LCA (34 Middle Arun Valley Floor). Two further trenchless crossing construction compounds TC-01 (north of Climping Beach) and TC-03 (north of the River Arun) will be visible in the adjacent LCAs, further reinforcing the effect on landscape character.		

The temporary trenchless crossing compounds will remain in place for approximately six months (TC-01) or three to three to four months (TC-03) and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Construction and operational access A-01 and light construction accesses A-02, A-03: will be up to 6m in width and will all access off Ferry Road via existing farm gateways.

Between Ferry Road and the A259 the onshore cable corridor will be subject to trenchless crossing and there will be **No Effect** on the landscape.

The Climping construction compound will be visible in the adjacent Climping Lower Coastal Plain LCA No. 31 as assessed previously.

Either side of the trenchless crossing, activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the route. The scale and geographical extent of these construction activities will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately 350m) or when viewing along the onshore cable corridor, reducing within the wider LCA where the onshore cable corridor will appear contained and accommodated within the scale of the open fields.

Landscape elements:

North of the A259, the onshore cable corridor (open cut) crosses three vegetated drains / field boundaries, the southernmost (H16 / W388) is a drain and field margin comprising a hedgerow with occasional trees / shrubs, whilst the northernmost ones (HS49, and HS48) comprise linear scrub and trees. The removal of trees and shrubs at each of these locations (tree lines notched 14m and linear scrub cleared to 30m) will appear as a break in the already fragmented linear pattern of field boundary vegetation, which is not identified as a key characteristic and will not significantly affect the LCA. Changes of direction in the onshore cable corridor will prevent this appearing as a more obvious ‘cut’ through the LCA.

For these reasons, the magnitude of change affecting the landscape character and landscape elements will be **Medium-high** and the geographical extents will be contained within the field boundaries (<350m) of the onshore cable corridor.

The level of effect will be **Moderate** and **Significant** (<350m) in respect of the LCA and **Moderate** and **Not Significant** in respect of the landscape elements which are not a key characteristic.

No. 35: Lower Arun Valley Floor LCA	
	The inclusion of alternative compound TC-03a in replacement of TC-03 would not give rise to any different magnitude of change within either LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced.
	Level of effect — **Landscape character: Moderate** and **Significant** (<350m) **Landscape elements: Moderate** and **Not Significant**
	Type of effect — Short-term, temporary, direct and adverse.
During operation and maintenance: - Year 1	All construction areas will have been reinstated. However, three landscape elements are affected comprising scrub cleared to 30m (HS48 and HS49) and hedge (W388 / H16) notched to 14m. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss. The magnitude of change accounting for the new planting will be Medium-low and the level of effect **Minor** and **Not Significant**, reflecting that they are not key characteristics.
- Year 5	Replacement hedge planting will be established along with retained hedges between the notches. Therefore, the magnitude of change will reduce to **Negligible-Zero**. The level of effect will be **Minor / Negligible** and **Not Significant**
- Year 10	There will be **No effect** on the on the landscape elements as the new planting will be well established.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.4). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.

No. 35: Lower Arun Valley Floor LCA	
Cumulative effects assessment	The onshore elements of the Proposed Development will be experienced cumulatively with residential development at Ferry Road (ID 61 / 62, Arun Local Plan - reference site SD9). Both the additional cumulative effect on the onshore elements of the Proposed Development and the combined cumulative effects of other development will be **Significant** (**Moderate**) assuming they occur either simultaneously and / or consecutively in separate phases.

Table 2-6 Effects on landscape character within No. 38 Littlehampton Arun Valley Sides LCA

No. 38 Littlehampton Arun Valley Sides LCA		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint C1 (Figure 18.23), Volume 3 of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 126: South Coast Plain
	County Character Area:	SC10: Lower Arun Valley LCA
Designation:	None	
Character description	This LCA is located on the eastern, urban edge of the wider SC10: Lower Arun Valley and is largely covered by recent housing development at Court Wick Park on the north-western edge of Littlehampton. The remaining landscape components consist of arable and pasture fields fringing the housing development and associated with Brook Barn Farm. Beyond this the area is bounded by railway lines associated with Arundel Junction and there is a solar farm to the north, both within the neighbouring Middle Arun Valley Floor LCA (No. 34). The key characteristics at a local scale are described in the Arun Landscape Study (Arun District Council, 2006): <u>Key Characteristics:</u> • *"Mainly large scale arable fields.*	

No. 38 Littlehampton Arun Valley Sides LCA	
	• *Urban influence from Littlehampton and Wick to the east.* • *Contained by boundary vegetation to the west.* • *Adjacent to Middle Arun Valley Floor."* The most relevant characteristic relating to the onshore cable corridor is the urban influence of recent housing development on the edge of Littlehampton. This has dramatically altered the LCA taking up the majority of this area since the Arun Landscape Study (2006) and increasing the urban influence on the eastern edge of the LCA. Landscape elements: comprise arable crops and grassland with some treebelts along field boundaries and farm tracks and some trees along the railway line.
Assessment of sensitivity	Landscape value: The overall value of this landscape is stated as 'Slight' in the Arun Landscape Study (2006). This relates to a cumulative value ascribed to the areas limited scenic beauty, in combination with proximity to the locally valued Arun Valley. In terms of designation alone however, the LCA is not designated at a national or local level. The landscape is not rare or particularly scenic, being intensively farmed and now comprises the urban fringe of Littlehampton. The recent housing development has views across this landscape which is likely to be highly valued by local residents, but there are no recreational facilities or footpaths. The landscape value is assessed as **Medium** to **low**. Landscape susceptibility: The Arun Landscape Study (Arun District Council, 2006, para. 5.2.2) ascribes an inherently 'Substantial' level of landscape susceptibility because it *"…contributes to separation between Arundel and Littlehampton."* This characteristic no longer applies as much of the LCA has been developed. The nature of the onshore elements of the Proposed Development during the construction phase will be ground-based, short-term and temporary and are most likely to be screened by existing treebelts with occasional views of the onshore cable corridor possible. **Viewpoint C1** (**Figure 18.23, Volume 3** of the ES (Document Reference: 6.3.18)) is located on the edge of the LCA, beyond perimeter vegetation, viewing towards the onshore cable corridor and out of the LCA. These factors combined with the changing character of the landuse and landcover pattern of the arable fields which regularly encompass crop rotation and the movement of agricultural machinery indicate a reduced susceptibility. In addition, the influence of urban elements in the LCA increase the sense of a built environment with increased

No. 38 Littlehampton Arun Valley Sides LCA			
	traffic movement and linear infrastructure. Permanent pasture will be more sensitive than arable fields which are subject to regular cultivation. Collectively these characteristics promote a higher level of resilience and reduced susceptibility to the nature of the onshore elements of the Proposed Development. The susceptibility of the landscape is assessed as **Low**.		
Sensitivity	**Landscape character: Low** **Landscape elements:** N/A	Landscape value:	Medium to low
		Landscape susceptibility:	Low
Magnitude of change and level of residual effect			
During construction:	The onshore cable corridor is routed just beyond the edge of the LCA in the adjacent Middle Arun Valley Floor LCA (No. 34). Ground-based construction activity, beyond the perimeter hedge / vegetation and along the onshore cable corridor will be transient and of short-term duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the route. The magnitude of change likely to indirectly affect the landscape character will be **Low**. The onshore cable corridor construction works will not affect trees or other landscape elements.		
	Level of effect	**Landscape character: Negligible** and **Not Significant** **Landscape elements: No Effect**	
	Type of effect	Short-term, temporary, direct and neutral.	
During operation and maintenance: - Years 1-10	All construction areas will have been reinstated and there will be **No Effect** on landscape elements.		

No. 38 Littlehampton Arun Valley Sides LCA	
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.4). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no significant cumulative landscape effects, residential / mixed development along the urban fringe at Littlehampton is already accounted for in the baseline.

Table 2-7 Effects on landscape character within No. 40 Lyminster Angmering Coastal Plain LCA

No. 40 Lyminster Angmering Coastal Plain LCA		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint H2a** (**Figure 18.36**), **Viewpoint H2b** (**Figure 18.37**), **Viewpoint H2c** (**Figure 18.38**), **Viewpoint H3a** (**Figure 18.39**), and **Viewpoint WS3** (**Figure 18.75**), **Volume 3 of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 126: South Coast Plain
	County Character Type:	LW5: Southern Low Weald SC11: Littlehampton and Worthing Fringes
Designation:	None	

No. 40 Lyminster Angmering Coastal Plain LCA	
Character description	This LCA overlaps with the county character area boundaries of LW5: Southern Low Weald in the north (within which the onshore cable corridor is routed) and SC11: Littlehampton and Worthing Fringes in the south. The LCA comprises a relatively low-lying, gently undulating clay landscape, drained by shallow stream valleys. It is characterised by an intricate pattern of small pastures, enclosed by hedgerows and shaws which contrasts in places with a broader, open, homogenous arable landscape with some large fields. Immediately outside the main settlements, landscape is rural and peaceful. Sensitivities at the regional level include removal of hedgerows and loss of individual specimen hedgerow and field trees. The key characteristics at a local scale are described in the Arun Landscape Study (Arun District Council, 2006): Key characteristics: • *"Consists almost entirely of open arable fields.* • *Boundary vegetation provides enclosure.* • *Surrounds Poling.* • *Bounded by busy A27 to the north.* • *Middle distance views of Downs.* • *Rural landscape."* Landscape elements: The most relevant features relating to the onshore cable corridor are the areas of pasture, hedgerow and field trees.
Assessment of sensitivity	Landscape value: The overall value of this landscape is stated as 'Substantial' in the Arun Landscape Study (2006). This relates to a cumulative value ascribed to 'moderate' scenic beauty, in combination with proximity to / setting of the SDNP as well as ancient woodland and other non-landscape designations. In terms of landscape designation alone however, the LCA is not designated at a national or local level. The landscape is not rare, comprising arable fields interspersed by tree belts and hedgerows with some large-scale agricultural buildings and the busy A27 road along the northern boundary both of which detract from the scenic / amenity value. However, the proximity of this landscape to the South Downs affords

No. 40 Lyminster Angmering Coastal Plain LCA

slightly higher levels of landscape quality in terms of the areas local sense of place and representativeness. Opportunities to experience the landscape result from its heritage and recreational attributes. The area includes a number of recreational routes (local footpaths), and the remains of a priory.

The landscape value is assessed as **Medium-high**.

Landscape susceptibility:

The Arun Landscape Study (Around District Council, 2006, para. 5.2.2) ascribes an inherently 'Substantial' level of landscape susceptibility, with susceptible attributes including: "*Rural upper coastal plain adjacent to AONB* [now the SDNP]*, detached from existing settlement, relatively high ecological and heritage value."* Some of the mature trees within this LCA are of High to Medium susceptibility due to their age, landscape role (screening the A27) and scenic or amenity value. Permanent pasture will be more sensitive than arable fields which are subject to regular cultivation. Considering the nature of the onshore elements of the Proposed Development, in this case their ground-based, short-term and temporary duration the landscape susceptibility to this type of development is lower. This is due to the limited duration of the construction works, the changing nature of arable fields and the screening effects of treebelts and hedgerows that contain the open fields preventing wider views of construction activity. Collectively these characteristics indicate greater resilience and reduced susceptibility to the onshore elements of the Proposed Development.

The susceptibility of the landscape is assessed as **Low** with some mature trees of **Medium-high** susceptibility.

Sensitivity	**Landscape character: Medium** **Landscape elements: Medium-high** (trees / treelines)	Landscape value:	High to Medium
		Landscape susceptibility:	Low

Magnitude of change and level of residual effect

No. 40 Lyminster Angmering Coastal Plain LCA

During construction:

Within the Lyminster Angmering Coastal Plain LCA the onshore cable corridor (approximately 4.2km in length) crosses approximately eight arable fields and four pasture fields (subject to cropping) from the eastern edge of Lyminster to the A27 north-west of Angmering, bypassing to the north of the village of Poling.

The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

Trenchless crossing construction compounds TC-06, TC-07, TC-08 and TC-09 (all approximately 70m x 50m) will be located within the LCA, with alternative temporary construction compound locations TC-06a, TC-07a, TC-08a, TC-09a and TC-10a also located within the LCA. Temporary construction compounds TC-06 (approximate KP 05km) and TC-07 (approximate KP 07km) will be sited within large arable fields to the east of Lyminster and to the north of Poling respectively. Temporary construction compounds TC-08 (approximate KP 08.2km) and TC-09 (approximate KP 08.5km) and alternative TC-10a, will be sited within smaller scale fields, close to the A27 and surrounded by mature field boundaries and woodland belts. There will be five trenchless crossing along this part of the onshore cable corridor (TC-06 related to the Lyminster Bypass, TC-07 crossing Poling Street, TC-08 and TC-09 crossing a public right of way (PRoW). Decoy Lane and mature woodland and TC-10 crossing the A27. In all cases roadside vegetation will be retained, including that along the A27.

The trenchless crossing construction compound TC-05 will be located in the adjacent Black Ditch Rife No. 41 LCA, and although partly screened by intervening vegetation its intervisibility will further indirectly influence the landscape character. The retention of landscape features (hedgerows, tree line features and woodland) means that there will be **No Effect** on the landscape at these locations.

Either side of the trenchless crossings, activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the route.

Construction and operational accesses:

- Light construction and operational access A-14: Located off Lyminster Road at Lyminster will provide temporary construction and operational access.

- Construction and operational accesses A-15 and A-16: Located off the route of Lyminster Bypass will provide temporary construction and operational access directly onto the cable corridor.
- Light construction and operational accesses A-17 and A-18: Located off Poling Street to the north of Poling will provide temporary construction and operational access directly onto the cable corridor.
- Light construction access A-20: Located off the A27 and via an existing lane at Orchard Rough will provide temporary construction access. The access tracks will be 6m wide with crushed aggregate.

Collectively the magnitude of change resulting from the construction accesses will be **Low**.

Overall, the magnitude of change will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately <350m) reducing to **Medium-low** or less on the wider LCA where the onshore cable corridor will appear contained and often screened by intervening vegetation.

The inclusion of alternative compounds TC-06a, TC-07a, TC-08a, TC-09a and TC-10a in replacement of TC-06, TC-07, TC-08, TC-09 and TC-10 would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

The level of effect on landscape character will be **Moderate** and **Significant** (<350m).

Landscape elements:

There will be localised significant effects on eight landscape elements, including six treelines / hedges (H601, H600, W9, H521, H527 / H529, and H531) and two areas of woodland (W37-41 cleared to 6m) and W49 notched to 6m) within this 4.2km section of the onshore cable corridor.

The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, which is identified as a key characteristic of the LCA. However, the extent of vegetation loss and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious ‘cut’ through the LCA, but the nature of this effect will be long-term or permanent in the case of woodland, although limited to 6m. The magnitude of change will be **Medium**.

The level of effect on landscape elements will also be **Moderate** and **Significant**.

Level of effect	**Landscape character: Moderate** and **Significant** (<350m)

No. 40 Lyminster Angmering Coastal Plain LCA

	Landscape elements: Moderate and **Significant**	
	Type of effect	Short-term (long-term or permanent in relation to mature trees), temporary, direct and adverse.
During operation and maintenance: - Year 1	All construction areas will have been reinstated. Eight landscape elements, including six treelines / hedges (H601, H600, W9, H521, H527 / H529, and H531) and two areas of woodland (W37-41 cleared to 6m) and W49 notched to 6m) will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss. The magnitude of change accounting for the new planting will be **Medium** and the level of effect **Moderate** and **Significant**, reflecting the loss to tree lines and some woodland.	
- Year 5	Replacement hedge planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Low**. The level of effect on landscape elements will be **Moderate / Minor** and **Not Significant**.	
- Year 10	Replacement hedge planting will be well established although it will not match mature trees / woodland and a **Negligible-Zero** magnitude of change will remain. The level of effect on landscape elements will be **Minor** and **Not Significant**.	
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.	

No. 40 Lyminster Angmering Coastal Plain LCA	
Cumulative effects assessment	There will be no significant cumulative landscape effects, residential / mixed development along the urban fringe at Littlehampton which is already accounted for in the baseline. The Lyminster Bypass construction work has already commenced, and it is due for completion in 2024, prior to the construction phase for the Proposed Development. Accounting for a future baseline, that includes the completed Lyminster Bypass, there will be a combined cumulative effect on the landscape character resulting from both developments. The level of effect will be **Major** and **Significant**, with the greater affect resulting from the bypass which will be permanent. The Lyminster Bypass is accompanied by substantial landscaping and once established the cumulative effects would reduce, noting that the majority of the effects of the onshore cable corridor are limited to the construction phase.

Table 2-8 Effects on landscape character within No. 41: Black Ditch Rife LCA

No. 41: Black Ditch Rife LCA		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint H1a (Figure 18.33) and H1c (Figure 18.34), Volume 3 of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 126: South Coast Plain
	County Character Area:	SC11: Littlehampton & Worthing Fringes
Designation:	None	
Character description	This LCA is located within the wider SC11: Littlehampton and Worthing Fringes and comprises a relatively low-lying, flat open landscape of open fields and small paddocks, with frequent urban fringe influences from the	

No. 41: Black Ditch Rife LCA

	adjacent northern edge of Littlehampton to the south. Elements include arable and market gardening, meandering rifes and straight drainage ditches, and clusters of windblown trees. There are long views to the South Downs. Sensitivities include urban development pressures, new field divisions and changes to field boundary types, loss of tree and hedgerow cover and planting of hedge and tree boundaries with unsympathetic exotic species such as Leyland Cypress. The key characteristics at a local scale are described in the Arun Landscape Study (Arun District Council, 2006): Key characteristics: • *"Shallow, minor valley associated with Black Ditch.* • *Tall, dense vegetation along ditches limits views towards Littlehampton"* Landscape elements: There are roadside hedgerows within this part of the onshore cable corridor, with some small areas of scrub along the mainly pasture field boundaries.		
Assessment of sensitivity	Landscape value: The overall value of this landscape is assessed as **Medium-low** as it is not designated at a national or local level. The landscape is not rare or particularly scenic, being intensively farmed and influenced by the urban fringe of Littlehampton. Landscape susceptibility: The nature of the onshore elements of the Proposed Development during the construction phase will be ground-based, short-term and temporary and are most likely to be screened by existing vegetation. These factors combined with the influence of urban elements indicate a higher level of resilience and reduced susceptibility to the nature of the onshore elements of the Proposed Development. The susceptibility of the landscape is assessed as **Low**.		
Sensitivity	**Landscape character: Medium-low** **Landscape elements:** N/A	Landscape value:	Medium-low
		Landscape susceptibility:	Low

No. 41: Black Ditch Rife LCA

Magnitude of change and level of residual effect

During construction:

The onshore cable corridor is routed through the westernmost corner of the LCA, to the south of Lyminster and continues eastwards, approximately 100m before transitioning into the adjacent Lyminster Angmering Coastal Plain LCA (No.41). Further change from the Lyminster Bypass will affect and subdivide this LCA and the adjacent LCA. Within the Black Ditch Rife LCA the onshore cable corridor (approximately 300m in length) crosses a series of paddocks or small pasture fields on the southern edge of Lyminster.

The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4). A trenchless crossing compound TC-05 (approximately 70m x 50m) will be located within the paddock / pasture field to the east of the A284, as indicated in **Viewpoint H1a** (**Figure 18.33, Volume 3** of the ES (Document Reference: 6.3.18)). A further trenchless crossing construction compound TC-06 will be visible in the adjacent LCA, further reinforcing the effect on landscape character. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Temporary construction and operational access to the trenchless crossing construction compounds will be close by, off the A284, which will be crossed via trenchless crossing, retaining the roadside vegetation.

Beyond the trenchless crossing, activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the onshore cable route.

The magnitude of change affecting the landscape character will be **Medium-high** and the geographical area will be contained within the fields within which the onshore cable corridor and TC-06 are located, <250m) reducing to **Low** in the surrounding LCA.

The level of effect will be **Moderate** and **Significant** (<250m).

The onshore cable corridor construction works will not affect trees or other landscape elements.

No. 41: Black Ditch Rife LCA

	Level of effect	**Landscape character: Moderate** and **Significant** (<250m) **Landscape elements: No effect**
	Type of effect	Short-term, temporary, direct and neutral.
During operation and maintenance: - Years 1-10	All construction areas will have been reinstated and there will be **No Effect** on landscape elements.	
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.	
Cumulative effects assessment	There will be no significant cumulative landscape effects, residential / mixed development along the urban fringe at Littlehampton is already accounted for in the baseline. The Lyminster Bypass construction work has already commenced, and it is due for completion in 2024, prior to the construction phase for the Proposed Development. Accounting for a future baseline, that includes the completed Lyminster Bypass, there will be a combined cumulative effect on the adjacent landscape character resulting from both developments, noting that the bypass will effects a permanent change. The level of effect influencing this neighbouring LCA is likely to indirectly increase pressure for development, sub-dividing this landscape close to an urban fringe area. The effects of the onshore cable corridor will be limited to the construction phase only.	

2.3 NCA 125: South Downs and South Downs National Park

2.3.1 The South Downs NCA is described by the Natural England (2013a, p. 3) as comprising:

> *"...whale-backed' spine of chalk stretching from the Hampshire Downs in the west to the coastal cliffs of Beachy Head in East Sussex; two per cent of the coastline between Eastbourne and Seaford is recognised as Heritage Coast. The majority of the area falls within the South Downs National Park, a recognition of its natural beauty and importance for access and recreation, and allowing for local decision making processes to manage this nationally important area. Some eight per cent of the NCA is classified as urban, comprising the coastal conurbation of Brighton and Hove in the east. The South Downs NCA is an extremely diverse and complex landscape with considerable local variation representing physical, historical and economic influences; much of it has been formed and maintained by human activity, in particular in agriculture and forestry."*

2.3.2 Within the South Downs NCA the onshore elements of the Proposed Development are primarily routed across the edge of the R1: South Downs Upper Coastal Plain, the B4: Angmering and Clapham Wooded Estate Downland and the A3: Arun to Adur Open Downs before descending the main chalk escarpment, with a trenchless crossing of the I3: Arun to Adur Downs Scarp and crossing the J3: Arun to Adur Scarp Footslopes on the northern edge of the SDNP.

2.3.3 **Table 2-9 to Table 2-13** details the landscape assessment and sets out the landscape effects of the onshore elements of the Proposed Development within this area.

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Table 2-9 Effects on landscape character within R1: South Downs Upper Coastal Plain

R1: South Downs Upper Coastal Plain		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint: H5a (Figure 18.40), Volume 3 of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 125: South Downs
	County Character Type:	LCT: R Upper Coastal Plain
Designation:	South Downs National Park	
Character description	This LCA is located just within the southern boundary of the SDNP forming part of the Upper Coastal Plain, it is a transitional landscape between the chalk downs and the flat lower coastal plain and the River Arun Valley. The LCA is underlain predominantly by upper chalk forming a smooth, gently undulating topography. The area is drained by a series of streams flowing southwards. Most of the LCA within the LVIA Study Area is mixed woodland, but there is also a strong network of hedgerows and hedgerow trees, mostly oaks alongside a mixture of small field sizes and shapes supporting a mixture of predominantly pasture (chalk grassland) and some arable. The unwooded landscape is well settled (Crossbush and a series of farms) and is rich in historic features. The key characteristics are described in the South Downs Landscape Character Assessment (LCA) 2020: <u>Key Characteristics:</u> • *"The northern edge of the low lying, undulating, fertile strip of land between the dipslope of the South Downs and the sea.* • *The underlying geology (upper chalk) is masked by drift deposits of 'Head' (weathered and broken up material) at the foot of the dipslope which gives rise to stony fertile soils.* • *The outlying chalk ridge at Highdown Hill is a distinctive feature and is separated from the chalk dipslope to the north by a narrow clay vale.* • *Drains, ponds and streams around Ashling, including the source of the Bosham Stream, and designed ponds at Ashling Park, provide important ecological features in the local context.*	

R1: South Downs Upper Coastal Plain	
	• *Mixture of field sizes and shapes supporting a mixture of pasture and arable – vast fields between East Lavant and Halnaker are reminiscent of the medieval open field landscape that formerly existed here.* • *A strong network of hedgerows, hedgerow oaks and small woodlands create structure – woodlands form important visual and ecological links with the wooded downs to the north. Extensive woodland cover in the east creates a distinctive dark horizon in views from the A27.* • *The clay vale between the chalk dipslope in the north and the outlying chalk ridge at Highdown Hill was probably assarted from the late Saxon period onwards, producing the irregular patchwork of early enclosures still visible around Ecclesden Farm (east of Angmering). Blocks of recent enclosure mark areas of former common e.g. at Slindon.* • *Nucleated historic villages e.g. Funtington, West Ashling, East Ashling, Mid Lavant, and East Lavant, are located along the foot of the dipslope. Characteristic building materials include flint and brick.* • *Registered Park and Garden at Highdown and other historic parklands at Ashling, Goodwood, Slindon and Binsted, contribute landscape features such as avenues, parkland trees, and woodland.* • *A wealth of archaeological features indicating the long history of the landscape, including the Bronze Age and Iron Age earthworks at Highdown Hill and the series of Iron Age linear boundaries defining an area of high status settlement on the outskirts of Chichester at 'Devil's Ditch'.* • *Crossed by narrow rural roads, many of which continue up the dipslope of the chalk onto the chalk downs.* • *Sand and gravel pits indicate the economic value of the underlying drift deposits.* • *Views over the coastal plain and towards the sea from Highdown Hill."* <u>Landscape Elements:</u> Sensitivities at the regional level include the strong network of hedgerows, hedgerow oaks and small woodlands; early field enclosure patterns which could be vulnerable to field amalgamation; parkland trees and woodland associated with historic parklands; and the rural character of unmarked roads which could be vulnerable to 'improvement'.
Assessment of sensitivity	<u>Landscape Value:</u> The LCA is located within the SDNP which is noted for its high scenic value. Opportunities to experience the landscape result from its heritage and recreational attributes which consist of a number of recreational routes including an extensive network of local footpaths, historic buildings, settlements and rural roads.

R1: South Downs Upper Coastal Plain

The landscape value is assessed as **High**.

Landscape Susceptibility:

The landuse and landcover pattern of established hedgerows and mature woodland are indicators of increased susceptibility to change and areas of permanent pasture will also be vulnerable to disturbance, although less so than hedgerows, trees and woodland. Although the onshore elements of the Proposed Development are short term and linear the predominant landscape characteristics indicate high levels of susceptibility (trees and woodland cover) reducing to medium to high in the areas of small pasture fields.

The susceptibility of the landscape is assessed as **Medium - High**.

Sensitivity:	**Landscape character: High** **Landscape elements: Medium-high**	Landscape value:	High
		Landscape susceptibility:	Medium - High

Magnitude of change and level of residual effect

During construction:

Within the South Downs Upper Coastal Plain LCA the onshore cable corridor (approximately 1.2km in length) crosses approximately four arable fields (subject to cropping) between the A27 at Hammerpot, northwards to the west of Norfolk House (approximate KP 10.1km). The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4). Trenchless crossing construction compounds TC-10, TC-11 and alternative trenchless crossing compound location TC-11a (all approximately 70m x 50m), are located in single fields to the north of the A27. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

The onshore cable corridor will be subject to trenchless crossings at the A27 (approximate KP 08.9km) and a bridleway (PRoW 2188) to the north of Hammerpot (approximate KP 09.4km). Treelines on either side of the bridleway will however, be notched to 6m to allow for the temporary construction haul road.

Beyond the trenchless crossings, temporary construction activity along the onshore cable corridor will be transient and of short-term duration with progressive backfill and reinstatement as the onshore cable corridor works are completed along the route within the overall 3.5 year construction phase. The trenchless crossing construction compounds TC-10 and TC-11 will add a medium-scale additional feature to this landscape, contrasting with the rural character of the open fields although partly screened by woodland belts and within the influence of the nearby A27 road corridor.

Construction and operational accesses:

There will be three temporary construction accesses (approximately 6m wide) two of which will also provide operational access along the onshore cable corridor:

- Access A-21: Construction and operational access off the A27 at Hammerpot directly into the route of the onshore cable corridor
- Access A-22: Construction access off the A27 at Hammerpot, with access across an arable field.
- Access A-24: Light construction and operational access from Swillage Lane and via a field boundary bordering Norfolk House.

None will require vegetation removal and collectively the magnitude of change will be **Low**.

Overall, the scale and geographical extent of the construction activities will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately 250m) or when viewing along the onshore cable corridor, reducing to **Low to Negligible-Zero** in the wider LCA where the onshore cable corridor will be largely screened by successive layers of field boundary vegetation and woodland.

The inclusion of alternative trenchless crossing compounds TC-10a (within the neighbouring LCA) and TC-11a in replacement of TC-10 and TC-11 would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

Landscape elements:

There will be localised significant effects on two landscape elements (one double treeline (W15 and W16) either side of the PRoW 2188 north of Hammerpot notched to 6m, and one treeline (W8) at PRoW 2190, notched to 14m) within this 1.2km section of onshore cable corridor.

The removal of trees and hedges at each of these locations will appear as a break in the linear pattern of field boundary vegetation, which is identified as a key characteristic of the LCA. However, the extent of vegetation loss

R1: South Downs Upper Coastal Plain	
	and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious 'cut' through the LCA and will not affect the *dark horizon* in views from the A27. The nature of this effects will be long-term in the case of mature trees, although the notch is limited to 6m. The magnitude of change will be **Medium-high**. The level of effect on landscape elements will be **Major / Moderate** and **Significant**.
	Level of effect — **Landscape character: Major** and **Significant** (<250m) **Landscape elements: Major / Moderate** and **Significant**
	Type of effect — Short-term (long-term in relation to mature trees), temporary, direct and adverse.
During operation and maintenance: - Year 1	All construction areas will have been reinstated. Two landscape elements (one double treeline (W15 and W16) either side of the PRoW 2188 north of Hammerpot notched to 6m, and one treeline (W8) at PRoW 2190, notched to 14m) will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained trees / hedgerow between the notches will give the appearance of a 'gappy' hedge or treeline rather than a complete loss. The magnitude of change accounting for the new planting will be **Medium** and the level of effect **Moderate** and **Significant**, reflecting the loss to tree lines.
- Year 5	Replacement hedge planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Low**. The level of effect on landscape elements will be **Moderate / Minor** and **Not Significant**.
- Year 10	Replacement hedge planting will be well established although it will not match mature trees and a **Negligible -Zero** magnitude of change will remain.

R1: South Downs Upper Coastal Plain	
	The level of effect on landscape elements will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-10 Effects on landscape character within B4: Angmering and Clapham Wooded Estate Downland

B4: Angmering and Clapham Wooded Estate Downland		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint: H6a** (Figure 18.41), **Viewpoint: H7c** (Figure 18.44), and **Viewpoint: NP3** (Figure 18.71), Volume 3 **of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 125: South Downs
	County Character Type:	LCT: B Wooded Estate Downland
Designation:	South Downs National Park	

B4: Angmering and Clapham Wooded Estate Downland

Character description

Angmering and Clapham Wooded Estate Downland is a distinctive ridge of chalk dominated by large woodland blocks and estates in the central part of the South Downs. The area supports extensive woodland including semi-natural ancient woodland, beech, mixed and commercial coniferous plantation. The woodland is interlocked with irregular shaped arable fields linked by hedgerows. Views are contained within woodland but there are some longer-range views from elevated open areas. Scattered villages and farmsteads are a feature of the landscape. Sensitivities at the regional level include large areas of ancient woodland, rare yew forests, chalk grassland, chalk heath and mixed scrub. The key characteristics at a local scale are described in the South Downs Landscape Character Assessment (LCA) (South Downs National Park, 2020):

Key characteristics:

- *"Comprises a chalk dipslope, exhibiting a strong and distinctive topography of rolling hills. supporting a mosaic of parkland, woodland and mixed farmland.*
- *Slightly acidic heavy soils support large expanses of ancient woodland, including assart woodland, much of which may have originated before the medieval period, but also including ornamental plantations associated with landscape parks at Michelgrove and Angmering together with game coverts.*
- *Interwoven with the woodland is an agricultural landscape of straight-sided arable fields linked by hedgerows – fields that were largely amalgamated in the 20th century.*
- *A low density of dispersed settlement, characterised by scattered farmsteads – most of 18th-19th century origin, with some of medieval origin representing shrunken hamlets. Chalk flint is the dominant building material, often edged with red brick.*
- *Medieval villages located in the dry valleys at Patching and Clapham are surrounded by early planned enclosures.*
- *A deeply rural secluded landscape with large tracts devoid of roads and settlement.*
- *Constantly changing views with some views across to Arundel Castle to the west and other views across the open downland to the north and the coastal plain to the south."*

Landscape elements:

The main landscape elements that will be affected by the onshore cable corridor are arable fields, hedgerows (TRX-04) and field boundary woodland.

B4: Angmering and Clapham Wooded Estate Downland			
Assessment of sensitivity	Landscape value: The Angmering and Clapham Wooded Estate Downland LCT is located within the SDNP which is noted for its high scenic value. Opportunities to experience the landscape result from its heritage and recreational attributes which consist of a number of recreational routes including an extensive network of local footpaths, national/long distance walking route (Monarch's Way) and rural roads. The landscape value is assessed as **High**. Landscape susceptibility: Susceptibility to change from the onshore elements of the Proposed Development, is influenced by their ground-based, short-term and temporary duration. The landcover pattern of established hedgerows, mature woodland and elevated and open arable fields are indicators of increased susceptibility to change. However, the arable fields will also be less susceptible to change since they are regularly subject to seasonal cultivation and agricultural change. Collectively these characteristics indicate a **Medium-high** susceptibility and reduced resilience to the nature of the onshore elements of the Proposed Development.		
Sensitivity:	**Landscape character: High** **Landscape elements: High** (trees / woodland)	Landscape value:	High
		Landscape susceptibility:	Medium-high
Magnitude of change and level of residual effect			
During construction:	Within the Angmering and Clapham Wooded Estate Downland LCA the onshore cable corridor (approximately 2km in length) crosses approximately five fields at Angmering Park. The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4). At the wooded escarpment at Michelgrove the proposed DCO Order Limits have been widened to enable flexibility with respect to trenchless crossing compound locations. Alternative trenchless crossing compounds TC-12a, TC-12b or TC-12c (all approximately 70m x 50m) will be located within the LCA, compounds TC-12a (approximate KP		

11.7km) and TC-12c will be sited within large arable fields on either side of woodland at Michelgrove Park, while compound TC-12b will be sited within an existing clearing withing this woodland. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

The onshore cable corridor will be subject to a trenchless crossing beneath woodland bordering the steep scarp slope crossing Michelgrove Park towards the northern edge of the LCA. Bridleways 2180 / 2175 and in the alternative options 2011 / 2175 will also benefit from the trenchless crossing. The retention of woodland landscape features means that there will be **No Effect** on the landscape at this location.

Elsewhere temporary construction activity along the onshore cable corridor will be ground-based, transient and of short-term duration with progressive backfill and reinstatement as the onshore cable corridor works are completed along the route within the overall 3.5 year construction phase. The onshore cable corridor and trenchless construction compound TC-12a (if selected) will add a medium-scale additional feature to this landscape, contrasting with the rural character of the open fields although partly screened by woodland belts. The scale and geographical extent of these construction activities will be **Medium-high** when experienced locally to the construction works within Angmering Park (within the same field unit or approximately 250m) or when viewing along the onshore cable corridor, reducing to **Low** on the wider LCA where the onshore cable corridor will be wholly or partially screened by woodland.

At the upper edge of the scarp, alternative trenchless crossing compound TC-12b would be fully screened in contrast with alternative trenchless crossing compounds TC-12a, while trenchless crossing compound TC-12c would have similar context to that of TC-12a. The overall magnitude of change on the wider LCA for either of the compounds would not change with either location (other than a change of field unit location for where the magnitude of change is locally experienced).

Construction and operational accesses:

- Light construction and operational access A-25: Located off Blakenhurst Lane will provide temporary construction and operational access along an existing forest track. The magnitude of change will be **Negligible-Zero** affecting a small geographical area of landscape character in the local vicinity of the access route.

B4: Angmering and Clapham Wooded Estate Downland

Overall, the magnitude of change will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately <250m) reducing to **Medium-low** or less on the wider LCA where the onshore cable corridor will appear contained and often screened by intervening vegetation.

The inclusion of alternative trenchless crossing compounds TC-06a, TC-07a, TC-08a, TC-09a and TC-10a in replacement of TC-06, TC-07, TC-08, TC-09 and TC-10 would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

Landscape elements:

There will be localised significant effects on three landscape elements, including one area of woodland (W4 and W4) cleared to 30m on either side of PRoW 2208, and two hedges (H540 and H541) at Angmering Park notched to 14m, within this 2km section of onshore cable corridor.

The removal of trees and shrubs at each of these locations will appear as a break in the pattern of field boundary vegetation and linked woodland cover, which is identified as a key characteristic of the LCA. However, the limited extent of vegetation loss within well-wooded estate parkland, along with the varying direction of the onshore cable corridor across the landscape will prevent this appearing as an obvious 'cut' through the LCA, although the nature of this effect will be permanent. For these reasons, the magnitude of change likely to affect the landscape elements will be **Medium-high** and the level of effect on landscape elements will also be **Major** and **Significant** due to the effects on woodland and mature trees.

Level of effect	**Landscape character: Major** and **Significant** (<250m) **Landscape elements: Major** and **Significant**
Type of effect	Short-term, temporary, direct and adverse.

B4: Angmering and Clapham Wooded Estate Downland	
During operation and maintenance: - Year 1	All construction areas will have been reinstated. Three landscape elements, including one area of woodland (W4 and W4) cleared to 30m on either side of PRoW 2208, and two hedges (H540 and H541) will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge / break in the treeline rather than a complete loss. The magnitude of change accounting for the new planting will be **Medium** and the level of effect **Major / Moderate** and **Significant**, reflecting the loss to tree lines and some woodland and replacement planting.
- Year 5	Replacement hedge planting will be established, along with retained hedges between notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to Medium-low to **Low**. The level of effect on landscape elements will be **Moderate** and **Not Significant**.
- Year 10	Replacement hedge planting will be well established although it will not match mature trees / woodland and a **Negligible -Zero** magnitude of change will remain. The level of effect on landscape elements will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substations at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-11 Effects on landscape character within A3: Arun to Adur Open Downs

A3: Arun to Adur Open Downs		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoints: G (Figure 18.30), H7a (Figure 18.42), H7b (Figure 18.43), H7d (Figure 18.45), H7f (Figure 18.46), H7g (Figure 18.47), H7h (Figure 18.48), NP1 (Figure 18.70), NP5 (Figure 18.73), LD1 (Figure 18.66), LD2 (Figure 18.67), LD4 (Figure 18.68), LD5 (Figure 18.69). Volume 3 of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 125: South Downs
	County Character Type:	LCT A: Open Downland
Designation:	South Downs National Park	
Character description	This LCA is located at a county level within the wider Open Downland. It comprises the distinctive upland landscape on the south facing dip slope of the South Downs. It is a large scale, elevated landscape of rolling chalk downland. It features mainly large-scale arable fields of cereals with some pasture, divided by post and wire fencing. There are some small woodland blocks and limited hedgerow. The area is sparsely settled and its elevated features afford long range views. Sensitivities at the regional level include areas of unimproved chalk grassland, chalk heath and pasture, which are vulnerable to changes in management and require consistent grazing regimes; subtle historic landscape features such as hedgerows and tracks, ancient field systems and tumuli, which are not protected and are vulnerable to change and loss. The key characteristics at a local scale are described in the South Downs Landscape Character Assessment (LCA) (South Downs National Park, 2020): Key characteristics: • "*Vast open rolling upland chalk landscape of blunt, whale-backed downs reaching 238m at Chanctonbury Hill.*	

A3: Arun to Adur Open Downs

- *Furrowed by extensive branching dry valley systems which produce deep, narrow, rounded coombes - the main dry valley (the Findon Valley) contains the A24.*
- *Dominated by large scale irregular fields of arable and pasture (of 19th and 20th century date) bounded by visually permeable post and wire fencing or sparse thorn hedgerows creating a very open landscape supporting a range of farmland birds. Hedgerows and tracks survive from the earlier manorial downland landscape.*
- *Significant areas of unimproved chalk grassland, for example at Cissbury Ring and Lancing Ring, which support nationally scarce plant species.*
- *Occasional scrub and woodland on steeper slopes and beech clumps on hill tops contribute to biodiversity and provides visual texture in the landscape.*
- *A landscape managed for country sports (game shooting) which preserves the shape and form of the landscape and creates a distinctive landcover including small woodlands and game cover plots.*
- *Large open skies ensure that weather conditions are a dominant influence creating a dynamic landscape, with considerable seasonal variation.*
- *A strong sense of remoteness and tranquillity with pockets of deep remoteness associated with hidden dry valleys and higher reaches of the dip slope.*
- *Large number of prehistoric and later earthworks, including causewayed enclosures, long barrows and round barrows, providing a strong sense of historical continuity. Iron Age hillforts at Cissbury Ring and Chanctonbury Ring form prominent features on the skyline.*
- *Four flint mines of Neolithic date (Cissbury, Harrow Hill, Blackpatch and Church Hill, Findon) are associated with minor scarps.*
- *Good public access with a network of public rights of way and open access land.*
- *The typical settlement form is relatively late in origin and comprises isolated farmsteads of 18th-19th century origin. The individual farmsteads are often prominent features in the landscape. The village of Findon is the exception.*
- *Building materials are typically flint, red brick and clay tiles, with more modern materials used in farm buildings.*

A3: Arun to Adur Open Downs

	• *Extensive views from the north out across the scarp footslopes and Low Weald beyond the National Park, and over the coastal plain to the south.*" Landscape elements: Arable and pastural fields, occasional hedgerows, shelterbelts and scrub and recreational/farm access tracks.		
Assessment of sensitivity	Landscape value: The Arun to Adur Open Downs LCT is located within the SDNP and is noted for its high scenic value. Opportunities to experience the landscape result from its open, elevated character and long views which combine with its heritage features and a number of recreational routes including an extensive network of local footpaths and national / long distance walking routes (South Downs Way and Monarch's Way). The landscape value is assessed as **High**. Landscape susceptibility: The susceptibility of this landscape is influenced by its open, elevated character and long views, which in contrast to lower lying areas, allows the visual influence of development to potentially affect a wider area of the landscape character. This is reinforced by the lack of settlement and movement that has resulted in high levels of tranquillity (a key characteristic) and remoteness. These attributes indicate a high level of susceptibility and although the onshore elements of the Proposed Development will be ground-based, short term and temporary, the linear nature of the onshore cable corridor will be visibly extended over a wider area of the landscape. The landuse and landcover pattern of open arable fields are indicators of reduced susceptibility to change since they are subject to seasonal cultivation and harvesting that will introduce movement of machinery and change in colours and texture. Areas of hedgerow and chalk grassland, however, are more susceptible to change as they are permanent elements and although areas of grassland can be reinstated quickly, hedgerows will take longer to re-establish. Collectively these characteristics indicate a **Medium-high** susceptibility.		
Sensitivity	**Landscape character: High** **Landscape elements: Medium-high**	Landscape value:	High
		Landscape susceptibility:	Medium-high

A3: Arun to Adur Open Downs

Magnitude of change and level of residual effect

During construction:

Within the Arun to Adur Open Downs LCA the onshore cable corridor (approximately 5km in length) is routed east from the chalk escarpment at Michelgrove Park, then north between Harrow Hill and Blackpatch Hill, as indicated by **Viewpoint LD4** (**Figure 18.68, Volume 3** of the ES (Document Reference: 6.3.18)) and **Viewpoint H7d** (**Figure 18.45, Volume 3** of the ES (Document Reference: 6.3.18)). The cable corridor continues north across the South Downs dip-slope, climbing from 70m AOD to 190m AOD at Sullington Hill.

The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

There are two potential trenchless crossing routes for the onshore cable corridor beneath the chalk escarpment north of Sullington Hill. Trenchless crossing construction compound TC-12 and alternative compounds TC-12d, TC-15b and TC-15c (all approximately 70m x 50m) will be located within the LCAs. Compounds TC-12 (approximate KP 12.2km) and TC-12d will be sited within large arable fields at the foot of the chalk scarp at Michelgrove Park as indicated in **Viewpoint H7d** (**Figure 18.45, Volume 3** of the ES (Document Reference: 6.3.18)); compounds TC-15b and TC-15c will be situated within large arable fields on the upper edge of the chalk scarp at Sullington Hill, as indicated in **Viewpoint LD2** (**Figure 18.67, Volume 3** of the ES (Document Reference: 6.3.18)). The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Temporary construction activity along the onshore cable corridor will be transient and of short-term duration with progressive backfill and reinstatement as the onshore cable corridor works are completed along the route within the overall 3.5 year construction phase. The onshore cable corridor and temporary construction compounds (if either are elected) will add a medium-scale additional feature to this landscape, contrasting with the rural character and relative tranquillity of the elevated open fields across the South Downs dip-slope. The landscape characteristics mean that the linear nature of the onshore cable corridor will be more clearly visible across a wider area and the colour, movement and sound of the construction activity will affect the landscape character and its key characteristics (open arable / pasture fields which are remote and tranquil) will be affected over a wider area in

comparison to the landscapes of the NCA 126: South Coastal Plain or the NCA 121: Low Weald to the south and north of the SDNP. Drawing from the viewpoint assessment and from site survey, the magnitude of change will range from **High** <250m of the onshore cable corridor, reducing to **Medium to Low** <500m and reducing further to **Negligible-Zero** <1km.

The inclusion of alternative trenchless crossing compound TC-12d in replacement of TC-12 would not influence the magnitude of change (other than a change of field unit location for where the magnitude of change is locally experienced). The deletion of either alternative trenchless crossing compound TC-15b or TC-15c, in favour of TC-15a (in the neighbouring LCA, J3 Arun to Adur Open Footslopes) would lead to a reduced localised effect at Sullington Hill which is more exposed across the Downs landscape to the south. The assessment has assumed a worst case – that either alternative trenchless crossing compound TC-15b or TC-15c will be selected.

Construction and operational accesses:

- Access A-26: Construction and operational access will be provided via Michelgrove Lane, from the A280 north of Clapham / Patching and diverting either side of Michelgrove along existing farm access tracks, with passing places introduced.
- Access A-28: Construction and operational access will be provided off the A280 west of Findon, alongside an existing bridleway (PROW 2092) to Sullington Hill.

Collectively the magnitude of change resulting from the construction access will be **Negligible-Zero**.

Overall, the magnitude of change will be **High** when experienced approximately <650m reducing to **Low to Negligible-Zero** on the wider LCA where the onshore cable corridor will appear distant and or screened by intervening landform / vegetation.

The level of effect on landscape character will be **Major** and **Significant** (<650m).

Landscape elements:

Although hedges and shelterbelts are limited in this landscape, There will be localised significant effects on up to seven landscape elements, including two treelines (W4, and W10), two treelines / hedges (W5 and H550-553) and

(W6 and H589-590), and three hedges (H545-546, H548 and H549) all notched to 14m and contained within the in the Michelgrove area, within this 5km section of onshore cable corridor.

The magnitude of change on these landscape elements will range from **High** (hedges with trees) to **Medium** (hedges). The removal of trees and hedges at each of these locations will appear as a break in the linear pattern of field boundary vegetation, although it is not a key characteristic of the LCA. However, the extent of vegetation loss and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious 'cut' through the LCA. The nature of this effect will be permanent in the case of trees, although limited to 14m. The magnitude of change will be **Medium-high**.

The level of effect on landscape elements will also be **Major / Moderate** and **Significant**.

Level of effect	**Landscape character: Major** and **Significant** (<650m) **Landscape elements: Major / Moderate**
Type of effect	Short-term, temporary, direct and adverse.

During operation and maintenance: - Year 1

All construction areas will have been reinstated.

Seven landscape elements, including two treelines (W4, and W10), two treelines / hedges (W5 and H550-553) and (W6 and H589-590), and three hedges (H545-546, H548 and H549) all notched to 14m, will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss.

The magnitude of change accounting for the new planting will be **Medium** and the level of effect **Moderate** and **Significant**, reflecting the loss to tree lines and some woodland.

- Year 5

Replacement hedge planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and

A3: Arun to Adur Open Downs	
	the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Low to Negligible-Zero**. The level of effect on landscape elements will be **Minor** and **Not Significant**.
- Year 10	There will be **No Effect** on the on the landscape elements as the new planting will be well established.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-12 Effects on landscape character within I3: Arun to Adur Downs Scarp

I3: Arun to Adur Downs Scarp		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint NP4** (**Figure 18.72), Volume 3** of the ES (Document Reference: 6.3.18)
LCA hierarchy	National Character Area:	NCA 125: South Downs
	County Character Type:	LCT I: Major Scarps

I3: Arun to Adur Downs Scarp	
Designation:	South Downs National Park
Character description	The scarp is a visually distinct landscape type forming the northern edge of the chalk rising steeply from the lower lying land of the Greensand and the Weald. It forms a prominent backdrop, skyline and landmark feature for a wide area to the north of the South Downs. The scarp is either open or wooded along its length and contains some of the most extensive areas of chalk grassland habitat within the South Downs. From open summits there are panoramic views across the lowlands to the north. Sensitivities at the regional level include the distinctive smooth concave-convex slope profiles of the scarps which are vulnerable to further mineral extraction or soil erosion particularly in areas with no woodland cover and large swathes of chalk grassland which are of national ecological value and are important in revealing the profile of the chalk landform. The key characteristics at a local scale are described in the South Downs Landscape Character Assessment (LCA) (South Downs National Park, 2020): Key characteristics: • "*A dramatic steep north-facing chalk scarp exhibiting a distinctive concave-convex slope profile, indented by 'coombes'.* • *Remarkably consistent in height and slope profile throughout its length as a result of the lithological uniformity of the chalk bedrock.* • *Relatively well wooded, some of which comprises ornamental planting.* • *The scarp contains some extensive areas of chalk grassland habitat, for example the nationally important Amberley Mount to Sullington Hill SSSI.* • *Deeply sunken lanes and tracks, known as bostal tracks, cut the scarp and link the lower land to the chalk uplands e.g. Wiston bostal.* • *'Gaps' cut by valleys form important communication routes, for example the gap between Chantry Hill and Sullington Hill, and the gap south of Washington where the A24 ascends the scarp in cutting.* • *At the foot of the scarp where the slopes are less steep the land is ploughed for crops – here colours contrast with the muted grey-green colours of the scarp face.* • *A number of small isolated chalk pits associated with the former agricultural lime-burning industry are visible on the scarp, although many are now vegetated.*

I3: Arun to Adur Downs Scarp			
	• *Elevated landform provides panoramic views over the scarp footslopes to the north and, in the distance, the Low Weald.*" Landscape elements: Grassland, scrub, woodland and farm access tracks.		
Assessment of sensitivity	Landscape value: The LCA is located within the SDNP which is noted for its high scenic value. Opportunities to experience the landscape result from a number of recreational routes that cross the scarp. The landscape value is assessed as **High**. Landscape susceptibility: The landuse and landcover pattern of chalk grassland, scrub and woodland (some of it ancient woodland) on the scarp has an increased susceptibility to change with areas of ancient and mature woodland being most vulnerable to disturbance. Although the onshore elements of the Proposed Development are ground-based, short term and linear the predominant landscape characteristics indicate high levels of susceptibility (mature trees and woodland cover) reducing to medium to high in the areas of small pasture fields. The susceptibility of the landscape is assessed as **High - Medium**.		
Sensitivity	**Landscape character: High** **Landscape elements: Medium-high**	Landscape value:	High
		Landscape susceptibility:	High - Medium
Magnitude of change and level of residual effect			
During construction:	The onshore cable corridor is routed through this LCA as a trenchless crossing and the woodland at the foot of the scarp is included in the extent of this crossing. A trenchless crossing construction compound (TC-15a) will be partly visible at the foot of the scarp in the neighbouring LCA (J3 Arun to Adur Scarp Footslopes) with the cable corridor, visible extending east across the neighbouring LCA.		

I3: Arun to Adur Downs Scarp	
	The magnitude of change will be **Negligible – Zero**.
	Level of effect — **Landscape character: Minor** and **Not Significant** **Landscape elements:** N/A
	Type of effect — Short-term, temporary, direct and adverse.
During operation and maintenance: - Years 1-10	All construction areas will have been reinstated and there will be **No Effect** on landscape elements.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-13 Effects on landscape character within J3: Arun to Adur Scarp Footslopes

J3: Arun to Adur Scarp Footslopes		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint: H (Figure 18.31a-b), Viewpoint: H1 (Figure 18.32), Viewpoint: J4 (Figure 18. 52a-b) and Viewpoint: I (Figure 18.49), Volume 3 of the ES (Document Reference: 6.3.18)**
LCA hierarchy	National Character Area:	NCA 125: South Downs
	County Character Type:	LCT I: Major Scarps
Designation:	South Downs National Park	
Character description	This LCA comprises the lowland shelf that lies at the foot of the steep northern scarp of the South Downs east of the Arun Valley. This landscape type is dominated by the chalk scarp which forms a dramatic backdrop, skyline and landmark feature for a wide area beyond the South Downs. The foot slopes themselves form a transition between the steep chalk scarp to the south and the Low Weald to the north. The landscape contains a mosaic of farmland and woodland comprising irregular arable and pasture fields bounded by an intact network of thick hedgerows, with hedgerow oaks, and woodland typical. There are impressive panoramic views onto the foot slopes from the adjacent scarp and downs as illustrated in Viewpoint I (Figure 18.49, Volume 3 of the ES (Document Reference: 6.3.18)). Sensitivities include the pattern of small irregular fields of pasture and meadow, with fields originating as historic woodland assarts, which will be vulnerable to field expansion or boundary loss and the intact network of hedgerows, hedgerow oaks and woodland. Another sensitive feature is the underhill lanes and bostal tracks which survive as rough tracks and public rights of way, indicating the course of ancient coaching lanes and droveways. These may be vulnerable to erosion as a result of recreational pressure, particularly from off-road vehicles. The scarp foot slopes are highly visible from the adjacent scarp and downs to the south and this intervisibility increases visual sensitivity although the rolling topography and the intact hedgerow network and presence of woodland also creates enclosure within the landscape as illustrated in **Viewpoint J4** (Figure 18.52a-b, Volume 3 of the ES (Document Reference:	

6.3.18)). The key characteristics at a local scale are described in the South Downs Landscape Character Assessment (LCA) (South Downs National Park, 2020):

Key characteristics:

- "*Complex geology comprising bands of chalk, mudstones and sandstones giving rise to a locally undulating lowland landscape at the foot of the northern scarp of the Arun to Adur Downs.*
- *Large, fertile straight-sided arable fields on the Lower Chalk geology at the foot of the scarp, enclosed in the 20th century from open fields systems and earlier piecemeal enclosures.*
- *Small irregular fields of pasture on the less productive clay soils, which originated as woodland assarts, represent a largely intact late medieval landscape.*
- *Hedgerows with mature hedgerow oaks linked closely with the woodland, forming an interlocking network that is of high biodiversity value as well as creating a sense of seclusion and enclosure.*
- *Sandstone outcrops give rise to locally sandy soils which support areas of acid grassland, bracken, gorse, woody scrub, and oak-birch woodland.*
- *Streams, arising from springs at the foot of the Chalk/Upper Greensand flow northwards in narrow, hidden stream valleys, some enshrouded in woodland.*
- *Field ponds, mill ponds and designed ponds are common features of the clay.*
- *Villages located on the springline, e.g. Washington, are linked by the A283, which coincides largely with the character area boundary. The steep chalk scarp forms a dramatic backdrop to villages at the scarp foot.*
- *Landscape parks such as Parham are located on the less fertile Gault Clay and Lower Greensand. These add diversity and 'time depth' to the landscape. Parham Park, which is a designated SSSI also provides great ecological interest, comprising a mixture of ancient woodland and parkland, as well as areas of lowland raised bog and alder carr.*
- *A network of public rights of way provides opportunities for countryside access, however, it is less well-developed than other areas of the Scarp Footslopes.*
- *The Scarp Footslopes are visually dominated by the steep chalk scarp to the south, which forms a backdrop to views. Impressive panoramic views from the adjacent scarp and downs reveal a pleasingly balanced woodland and farmland mosaic.*"

J3: Arun to Adur Scarp Footslopes

	Landscape elements: These include the arable / pasture fields, hedgerow network, oak trees and woodland, and a series of bostal tracks.		
Assessment of sensitivity	Landscape value: The LCA is located within the SDNP which is noted for its high scenic value. Opportunities to experience the landscape result from an extensive network of local footpaths with facilities such as parking and viewpoints. The South Downs Way, a national / long distance walking route passes through Washington, West Sussex at the foot of the scarp. The landscape value is assessed as **High**. Landscape susceptibility: Indicators of lower susceptibility include the sense of enclosure and limited visibility due to the undulating landform, the chalk scarp to the south and a network of trees, hedges and woodland which prevent longer range views. The changing character of the landuse and the landcover pattern of the arable fields arable is a further indicator due to regular crop rotation and the movement of agricultural machinery. However, the area is clearly visible from the chalk escarpment. Although the onshore elements of the Proposed Development are ground-based, short-term in duration and linear the predominant landscape characteristics indicate high levels of susceptibility (trees, hedgerows, and woodland cover) reducing to medium to high in the areas of small pasture fields. The susceptibility of the landscape is assessed as **High to Medium**.		
Sensitivity	**Landscape character: High** **Landscape elements: High** (trees / woodland)	Landscape value:	High
		Landscape susceptibility:	High to Medium
Magnitude of change and level of residual effect			
During construction:	Within the Arun to Adur Scarp Footslopes LCA the onshore cable corridor (approximately 5.5km in length) crosses this landscape in two sections: west of Washington at the foot of the escarpment and east of Washington close to the boundary of the SDNP. The central section at Washington will be trenchless.		

J3: Arun to Adur Scarp Footslopes

The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

South Downs Scarp to A24 (west of Washington)

The western most section is routed between the foot of the South Downs scarp, northeast across a mixture of arable and pasture fields to the A24, northwest of Washington, West Sussex. There will be limited visibility of the route due to the screening effects of successive layers of hedgerows, trees and woodland within this landscape as well as tree screening along the A24 embankments. Elevated views from the top of the South Downs scarp are also limited by topography as illustrated by **Viewpoint I** (**Figure 18.49, Volume 3** of the ES (Document Reference: 6.3.18)), although there would be clearer views from Sullington Hill open access land **Viewpoint NP5** (**Figure 18.73, Volume 3** of the ES (Document Reference: 6.3.18)). Trenchless crossing construction compound TC-15a will be located within a pasture field to the foot of the scarp.

Temporary construction activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the route. The scale and geographical extent of these temporary construction activities will be largely contained by one or two field boundaries.

Close to the temporary construction activity (within the same or adjacent field unit, <250m) the magnitude of change will be **Medium-high** reducing to **Medium-low** overall as successive layers of vegetation act to screen views from the wider landscape effects.

The inclusion of either alternative trenchless crossing compound TC-15b or TC-15c (both in the neighbouring LCA, A3 Arun to Adur Open Downs) in place of TC-15a would not lead to a different magnitude of change within either LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

A24 and A283 Trenchless crossings

Two sections of onshore cable corridor along this section will be trenchless, running between the A24 and A283 to the north of Washington and then crossing the A283 for a second time to the south of Rock Common Quarry. Roadside trees and vegetation along the A24 and the A283 road corridors will be retained in these trenchless crossings and there will be **No Effect** on the landscape character or elements within these sections, see **Viewpoint H** (**Figure 18.31a-b,**

Volume 3 (Document Reference: 6.3.18)). The Washington construction compound will be sited within the neighbouring D1: Amberley to Steyning Farmlands LCA.

A283 to Buncton (east of Washington)

Beyond the A283 trenchless crossing, the onshore cable corridor continues east and south of the A283 (as illustrated by **Viewpoint J4**, Figure 18.52a-b, Volume 3 of the ES (Document Reference: 6.3.18)), crossing mainly pasture fields and associated hedges and treelines. There will be a **Medium – High** magnitude of change affecting the A283 corridor and adjacent fields indirectly, while beyond approximately <250m or 1-2 field boundaries the successive screening will reduce the magnitude of change on the surrounding landscape character to **Low** to **Negligible-Zero**.

The trenchless crossing construction compound TC-17a, if elected, will be visible from part of the A283 and from adjacent fields The magnitude of change affecting the pasture field will be **High** affecting a wider area (<250m) than compound TC-17 (viewing above hedgerows from elevated ground).

Just west of Buncton the onshore cable corridor crosses the A283 for a third time via trenchless crossing. Trenchless crossing construction compound TC-18 will be located in a narrow field to the south of the A-283, bordered by dense woodland margins and hedgerow. Close to the onshore cable corridor and the associated TC compounds (within the same or adjacent field unit, <250m) the magnitude of change will be **High** to **Medium** and direct effects such as the trench excavation and vegetation removal will be visible. This will reduce to **Low** to **Negligible** overall) as successive layers of vegetation act to screen wider landscape effects.

Construction and operational accesses:

- Construction access A-33: Construction access will be taken off the A283, via open fields to the east of Barns Farm. The route will be constructed to 6m width with road stone and will cross two existing hedgerows (H161, H165) which will be notched to 14m to accommodate the access.
- Construction access A-35: Temporary construction access will be taken off the A283 to the south of East Clayton Farm through a large pasture field and crossing one hedgerow (H172) which will be notched 6m.
- Construction and operational accesses A-37, A-38, A-39 and A-40: Temporary light construction access via School Lane, Washington (A-37) and London Road, north of Washington (A-39), along with temporary construction and operational accesses off the A-283 south of Rock Common Quarry (A-39 and A-40) are all sited within the cable corridor and form a part of the magnitude of change previously described in relation to the cable corridor.

- Construction and operational accesses A-41, A-42: Temporary construction and operational accesses will be taken off the A283 east of Rock Common Quarry with no effects on vegetation.

Collectively the magnitude of change resulting from the construction accesses will be **Low**.

Overall, the magnitude of change will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately <250m) reducing to **Low to Negligible to Zero** or less on the wider LCA where the onshore cable corridor will appear contained and often screened by intervening vegetation.

The inclusion of alternative compounds would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

The level of effect on landscape character will be **Major** and **Significant** (<250m).

Landscape elements:

There will be localised significant effects on up to 12 landscape elements, including one area of woodland (W1364) cleared to 30m on either side of PRoW 2697 north of Rowdell, three treelines (W498, W505, and W507 / H181), one treeline / hedge (W494 and H158), and eight hedges (H129, H135, H146-146a, H157, H161 H162/163, H165, H166, H168, and H179) all notched to 14m within this 5km section of onshore cable corridor.

The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, which is identified as a key characteristic of the LCA. Viewing sequentially from the A283 it will be possible to see a successive 'cut' through the vegetation within the LCA, linked by the onshore cable corridor during the construction phase. The nature of this effect will be permanent in the case of woodland cleared to 30m at Rowdell. The magnitude of change will be **Medium-high** and the level of effect on landscape elements will also be **Major** and **Significant**.

Level of effect	**Landscape character: Major** (250m) **Landscape elements: Major** (successive hedges and trees / woodland)
Type of effect	Short-term, temporary, direct and adverse.

J3: Arun to Adur Scarp Footslopes	
During operation and maintenance: - Year 1	All construction areas will have been reinstated. In total 12 landscape elements, including one area of woodland (W1364) cleared to 30m on either side of PRoW 2697 north of Rowdell, three treelines (W498, W505, and W507 / H181), one treeline / hedge (W494 and H158), and eight hedges (H129, H135, H146-146a, H157, H161 H162/163, H165, H166, H168, and H179) all notched to 14m will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss. With the reinstatement of the cable corridor the effects on successive hedges will be less clearly connected and the magnitude of change will reduce to **Medium**, but remining **Medium-high** in relation to cleared woodland. The level of effect **Major** and **Significant**, reflecting the loss to tree lines and some woodland.
- Year 5	Replacement hedge / shrub planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Medium-low**. The level of effect on landscape elements will be **Moderate** and **Significant**, reflecting the loss of woodland.
- Year 10	Replacement hedge planting will be well established although not matching the size of mature trees / woodland and a **Negligible-Zero** magnitude of change will remain. The level of effect will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

NCA 121: Low Weald (Winston to Bolney)

2.3.4 The Low Weald NCA is described by the Natural England (2013b, p.3).

> *"The Low Weald NCA is a broad, low-lying clay vale which largely wraps around the northern, western and southern edges of the High Weald. It is predominantly agricultural, supporting mainly pastoral farming owing to heavy clay soils, with horticulture and some arable on lighter soils in the east, and has many densely wooded areas with a high proportion of ancient woodland. Around 9 per cent of it falls within the adjacent designated landscapes of the Surrey Hills, Kent Downs and High Weald Areas of Outstanding Natural Beauty and the South Downs National Park. Around 23 per cent of the area is identified as greenbelt land."*

2.3.5 The onshore elements of the Proposed Development are primarily routed across the extensive Ashurst & Wiston Wooded Farmlands (G1), Steyning & Henfield Brooks (O3) and the Cowfold & Shermanbury Farmlands (J3) which are documented in the *Horsham District Landscape Character Assessment, Final Report* (Chris Blandford Associates on behalf of Horsham District Council, 2003). The north easternmost part of the study area is covered by the Mid Sussex Landscape Character Assessment (Mid Sussex District Council, 2005) which includes part of Hickstead Low Weald LW1 at the end of the onshore cable corridor near Bolney.

2.3.6 There are two other NCAs within this part of the Study Area. The Wealden Greensand NCA 120 is located to the northwest of Washington, West Sussex and surrounding Storrington. This NCA is described by the Natural England (2013c, p.3):

> *"The long, curved belt of the Wealden Greensand runs across Kent, parallel to the North Downs, and on through Surrey. It moves south, alongside the Hampshire Downs, before curving back eastwards to run parallel with the South Downs in West Sussex. Around a quarter of the NCA is made up of extensive belts of woodland – both ancient mixed woods and more recent conifer plantations. In contrast, the area also features more open areas of heath on acidic soils, river valleys and mixed farming, including areas of fruit growing.*
>
> *The area has outstanding landscape, geological, historical and biodiversity interest. Some 51 per cent of the NCA is covered by the South Downs National Park, Kent Downs Area of Outstanding Natural Beauty (AONB) and Surrey Hills AONB – a testament to the area's natural beauty. The underlying geology has shaped the scarp-and-dip slope topography, with its far-reaching views, but it has also had a significant bearing on the area's sense of place: there are clear links between vernacular architecture, industry and local geology. The heritage assets provide vital connections to the NCA's industrial, military and cultural history, and include distinctive deer parks and more recent 18th-century parklands. Biodiversity interests are represented by internationally and nationally designated sites alongside numerous local sites and other non-designated semi-natural habitats. The internationally designated sites include three Special Protection Areas (SPAs), two Ramsar*

sites and eight Special Areas of Conservation (SAC), representing the outstanding value and quality of the heathland, woodland, wetland and coastal habitats found within the NCA. In addition, fragments of acid grassland and parkland landscapes add to the overall diversity of habitats."

2.3.7 The High Weald is located to the north of Cowfold and the A272. This NCA is described by the Natural England (2013d, p.3).

"The High Weald National Character Area (NCA) encompasses the ridged and faulted sandstone core of the Kent and Sussex Weald. It is an area of ancient countryside and one of the best surviving medieval landscapes in northern Europe. The High Weald Area of Outstanding Natural Beauty (AONB) covers 78 per cent of the NCA. The High Weald consists of a mixture of fields, small woodlands and farmsteads connected by historic routeways, tracks and paths. Wild flower meadows are now rare but prominent medieval patterns of small pasture fields enclosed by thick hedgerows and shaws (narrow woodlands) remain fundamental to the character of the landscape."

2.3.8 Two LCAs, within the NCA 121: Low Weald are scoped out of the assessment as follows:

- Henfield & Small Dole Farmlands D2:

  The onshore elements of the Proposed Development will not be located within this LCA which has only limited areas within the 1km buffer and fragmented ZTV coverage. Site survey and ZTV analysis confirms that there will be **Negligible to Zero** visibility of the onshore elements of the Proposed Development from limited locations and consequently there will be no effect on the landscape character.

- Upper Adur Valley LW2:

  The onshore elements of the Proposed Development will not be located within this LCA which is located approximately 700m from onshore cable corridor. Site Survey and ZTV analysis confirms that there will be **Negligible to Zero** visibility of the onshore elements of the Proposed Development from limited locations and consequently there will be no effect on the landscape character.

2.3.9 Three LCAs, within the NCA 122: High Weald are scoped out of the assessment as follows:

- Crabtree & Nuthurst Ridges & Ghylls M1:

  The onshore elements of the Proposed Development will not be located within this LCA. Site survey, ZTV and viewpoint analysis from Viewpoint SA2: A272 (**Figure 18.11, Volume 3** of the ES (Document Reference: 6.3.18)) and omitted Viewpoint SA6: PRoW 1750 north of Aglands Farm confirm that there will be **Negligible to Zero** visibility of the onshore cable corridor from limited locations and consequently there will be no effect on the landscape character.

- High Weald Fringes HW10:

  The onshore elements of the Proposed Development will not be located within this LCA which is located approximately 700m from onshore cable corridor.

Site Survey and ZTV analysis confirms that there will be **Negligible to Zero** visibility of the onshore elements of the Proposed Development from limited locations and consequently there will be no effect on the landscape character.

- Upper Adur Valley LW2:

  The onshore elements of the Proposed Development will not be located within this LCA which is located approximately 700m from onshore cable corridor. Site Survey and ZTV analysis confirms that there will be **Negligible to Zero** visibility of the onshore elements of the Proposed Development from limited locations and consequently there will be no effect on the landscape character.

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Table 2-14 Effects on landscape character within the D1: Amberley to Steyning Farmlands

D1: Amberley to Steyning Farmlands		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint: H1** (**Figure 18.32), Volume 3** of the ES (Document Reference: 6.3.18)
LCA hierarchy	National Character Area:	NCA 121: Low Weald and NCA 120: Wealden Greensand
	County Character Type:	LCT: WG8: Central Scarp Footslopes
Designation:	None	
Character description	This LCA is located within the wider WG8: Central Scarp Footslopes LCA which extends between Amberley and Steyning at the foot of the adjacent chalk escarpment. Its landscape often appears diminished and intricate in scale when set against the bold chalk ridge above. The field and vegetation patterns, lying over sandstone and clay, are complex. Large, straight-edged arable fields contrast with a pattern of smaller, irregular pastures and arable fields, and narrow linear woodlands near the streams, creating sudden transitions. There are dramatic views of the chalk escarpment to the south and glimpsed views of settlements through woodland and trees. Sensitivities in the wider Central Scarp Footslopes LCA include: Loss of rural quality of the PRoW network of tracks and byways, through inappropriate development. Only the areas outwith the South Downs J3 LCT are assessed to avoid repetition. The key characteristics at a local scale are described in the Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.55): Key characteristics: • "*Rolling landscape of the low ridges of the upper greensand, and the narrow vale of gault clay.* • *Overlooked by the chalk escarpment to the south.* • *Varied patchwork of arable and pasture farmland, with fields of irregular shapes and sizes.* • *Small north flowing streams in steep narrow valleys.* • *Sunken lanes with high hedgebanks.*	

D1: Amberley to Steyning Farmlands

- *Small springline settlements and farmsteads dispersed along the edge of the greensand ridge.*
- *Extensive historic parkland at Wiston.*
- *Mix of local building materials, including, brick and flint, sandstone and thatch.*"

The most relevant features relating to the onshore cable corridor are the fact that it is overlooked by the chalk escarpment to the south, and the varied patchwork of arable and pasture farmland, with fields of irregular shapes and sizes.

Landscape elements:

The most relevant landscape elements are the hedgerows, mature trees and woodland.

Assessment of sensitivity

Landscape value:

Although undesignated the landscape is located on the edge of the SDNP and has some common characteristics indicating High value in line with the SDNP. Part of the area is urban / suburban and borders a large sand quarry indicating lower value. Opportunities to experience the landscape result from its network of recreational routes/PRoW and from a caravan and campsite. The landscape value is assessed as **Medium**.

Landscape susceptibility:

The Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates on behalf of Horsham District Council, 2003, p.57) states that the "*overall sensitivity to change is high due to the openness and prominence of the greensand ridge at the foot of the scarp, and due to the vulnerability of small-scale historic field patterns in the gault clay vale*." This statement relates to the wider LCA and is not particularly relevant to the remining area of landscape character once the South Downs Landscape Character Assessment (LCA) (South Downs National Park, 2020) has been taken into account. The remaining area includes a large sand quarry and associated woodland, some urban/suburban areas and pasture fields, all of which are well enclosed by vegetation and indicative of **Medium to Low** susceptibility.

Sensitivity	**Landscape character: Medium-low** **Landscape elements:** N/A	Landscape value:	Medium
		Landscape susceptibility:	Medium to Low

D1: Amberley to Steyning Farmlands

Magnitude of change and level of residual effect

During construction:

The Washington construction compound is located within part of an isolated, small group of pasture fields, forming a fragment of the D1: Amberley to Steyning Farmlands LCA. This piece of LCA is surrounded by development, with the A283 to the south, Rock Common Quarry to the north and the Washington Caravan Site to the west.

The Washington construction compound will be sited within this area which is fringed by a hedge and trees. It will occupy approximately 4.0 hectares for the duration of the construction phase (up to 3.5 years) and will contain welfare facilities / offices, parking, construction plant and storage of materials and equipment (up to 7m high) and a concrete batching plant up to 20m high. Two trenchless construction compounds (TC-16, TC-17) will also be located within the limits of the compound site. The construction compound will be accessed off the A283 and contained by security fencing, set back from the canopy and root zone of the existing perimeter trees. The magnitude of change will be **High**, but tightly contained by the perimeter vegetation and surrounding landuse, such that the magnitude on the surrounding landscape character will be **Negligible-Zero**.

The inclusion of alternative trenchless crossing compound TC-17a (within the neighbouring LCA) in replacement of TC-17 would not influence the magnitude of change this LCA overall.

The level of effect will also be **Major** and **Significant**.

Level of effect	**Landscape character: Major** **Landscape elements:** N/A
Type of effect	Short-term, temporary, direct and adverse.

During operation and maintenance: - Years 1-10

All construction areas will have been reinstated and there will be **No Effect** on landscape elements.

D1: Amberley to Steyning Farmlands	
Whole Proposed Development effects	The offshore elements of the Proposed Development will not be visible. The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-15 Effects on landscape character within the E1: Parham & Storrington Wooded Farmlands & Heaths

E1: Parham & Storrington Wooded Farmlands & Heaths		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoints: I** (**Figure 18.49**) and **J5** (**Figure 18.53), Volume 3** of the ES (Document Reference: 6.3.18)
LCA hierarchy	National Character Area:	NCA 121: Low Weald and NCA 120: Wealden Greensand
	County Character Type:	LCT: WG7: Storrington Woods and Heaths
Designation	None	
Character description	This LCA is located within the wider WG7: Storrington Woods and Heaths LCA. The landform is a series of low ridges alternating with shallow valleys, reflecting a complex geology of sandstone and clay. Heavily wooded ridges to the south are interspersed with small patches of heathland. Sensitivities include loss of open heathland and woodland cover or decreases in overall diversity of woodland due to poor management or plantation planting. The	

E1: Parham & Storrington Wooded Farmlands & Heaths

key characteristics at a local scale are described in the Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.63).

Key characteristics:

- "Rolling *landform of sandy ridges cut by small narrow stream valleys.*
- *Extensive pine and oak-birch woodland. Linear streamside woods. Small areas of heathland, such as at Sullington Warren Golf course.*
- *Small mostly well hedged pasture fields with mature hedgerow oaks.*
- *Historic parkland of Parham Park with distinctive tree clumps, groves and extensive tree belts.*
- *Major areas of sand and gravel extraction at Sandgate Park and Rock Common.*
- *Scattered farmsteads and cottages along roads. Traditional local materials of sandstone, half timber and plaster and brick.*"

The closest part of the LCA to the onshore cable corridor is the hill at Rock Common which is an area of pasture, bounded by post and wire fencing and enclosed by perimeter woodland with no public access.

Assessment of sensitivity

Landscape value:

Although undesignated the landscape is located on the edge of the SDNP indicating higher value in line with the SDNP. Part of the area is suburban and includes a large sand quarry at Rock Common indicating lower value. Opportunities to experience the landscape are limited and the landscape value is assessed as **Medium** to **Low**.

Landscape susceptibility:

The Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, states that the "*overall sensitivity to change is high due to the area's many intrinsic landscape qualities and its general visibility from the chalk escarpment to the south*." **Viewpoint I: Chanctonbury Ring** (**Figure 18.41, Volume 3** of the ES (Document Reference: 6.3.18)) provides a view of this area from the escarpment which appears well wooded and this part of the onshore cable corridor will be screened by landform, otherwise the area includes a large sand quarry and associated woodland, some urban / suburban areas and pasture fields, all of which are well enclosed by vegetation and indicative of **Medium** to **Low** susceptibility.

E1: Parham & Storrington Wooded Farmlands & Heaths			
Sensitivity	**Landscape character: Medium-low** **Landscape elements:** N/A	Landscape value:	Medium to Low
		Landscape susceptibility:	Medium to Low
Magnitude of change and level of residual effect			
During construction:	The magnitude of change on the LCA will be limited to construction activity along the cable corridor within the neighbouring LCA (J3 Aran to Adur Scarp Footslopes) and construction access A-41. The magnitude of change on the LCA will be **Negligible-Zero**.		
	Level of effect	**Landscape character: Negligible** **Landscape elements:** N/A	
	Type of effect	Short-term, temporary, direct and adverse.	
During operation and maintenance: - Years 1-10	All construction areas will have been reinstated and there will be **No effect** on landscape elements.		
Whole Proposed Development effects	The offshore elements of the Proposed Development will not be visible. The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.		
Cumulative effects assessment	There will be no cumulative landscape effects.		

Table 2-16 Effects on landscape character within the F1: Pulborough, Chiltington & Thakeham Farmlands

F1: Pulborough, Chiltington & Thakeham Farmlands		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		Viewpoints: I (**Figure 18.49**), J2 (**Figure 18.51**) and J5 (**Figure 18.53), Volume 3** of the ES (Document Reference: 6.3.18)
LCA hierarchy	National Character Area:	NCA 121: Low Weald and NCA 120: Wealden Greensand
	County Character Type:	LCT: WG7: Storrington Woods and Heaths
Designation	None	
Character description	This LCA is located within the wider WG7: Storrington Woods and Heaths LCA. The landform is a series of low ridges alternating with shallow valleys, reflecting a complex geology of sandstone and clay. Heavily wooded ridges to the south are interspersed with small patches of heathland. Sensitivities include loss of open heathland and woodland cover or decreases in overall diversity of woodland due to poor management or plantation planting. The key characteristics at a local scale are described in the Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.71). Key characteristics: • "*Undulating sandstone ridge.* • *Partly wooded low scarp.* • *Extensive arable and some horticultural land use with glasshouses and mushroom farms.* • *Small orchards and vineyards* • *Leafy sunken lanes with sandstone exposures.* • *Small historic villages built of sandstone and half timber such as West Chiltington and Thakeham.* • *Scattered small cottages and farmsteads mainly along lanes.*"	

F1: Pulborough, Chiltington & Thakeham Farmlands			
	Landscape elements: The most relevant landscape elements are the hedgerows and mature trees within the onshore cable corridor.		
Assessment of sensitivity	Landscape value: Although undesignated the landscape is located on the edge of the SDNP indicating higher value in line with the SDNP. Most of the area east of the A24 is made up of arable fields bounded by hedgerows with occasional woodland clumps and it is not particularly representative of the LCA description. Part of the area is suburban and includes a large sand quarry at Rock Common indicating lower value. There are limited PRoW within this area of the LCA, the main one passing Upper Chancton Farm. The landscape value is assessed as **Medium-high**. Landscape susceptibility: The Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.73) states that the *"overall sensitivity to change is high due to the area's many intrinsic landscape qualities and its general visibility from the chalk escarpment to the south*." **Viewpoint I: Chanctonbury Ring** (**Figure 18.49, Volume 3** of the ES (Document Reference: 6.3.18)) provides a view of this area from the escarpment which indicates that the onshore cable corridor will be screened from this view by foreground landform and the construction compound will be mostly screened by the hill at Rock Common and intervening woodland. Nonetheless there is likely to be some visibility from paths on the side of the escarpment (partly wooded) and/or further along albeit at greater distance. Indicators of lower susceptibility include the sense of enclosure and limited visibility due to the undulating landform, and the network of trees, hedges and woodland which prevent longer range views from within the LCA, close to the onshore cable corridor. The changing character of the landuse and the landcover pattern of the arable fields arable is a further indicator of lower susceptibility due to regular crop rotation and the movement of agricultural machinery. The susceptibility of the landscape overall is assessed as **Medium**. Landscape elements (mature trees, hedgerows, and woodland) are indicative of higher levels of susceptibility as they are not easily replaced if removed from within the onshore cable corridor.		
Sensitivity	**Landscape character: Medium-high** **Landscape elements: Medium-high**	Landscape value:	Medium-high
		Landscape susceptibility:	Medium

F1: Pulborough, Chiltington & Thakeham Farmlands

Magnitude of change and level of residual effect

During construction:

Within the F1: Pulborough, Chiltington & Thakeham Farmlands LCA the onshore cable corridor (approximately 500m in length) crosses two pasture fields and two field boundaries between the A283 and Water Lane on the south eastern tip of the LCA, close to the SDNP boundary.

The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

An alternative trenchless crossing construction compound (TC-19a) if elected will be sited within a pasture field to the west of Water Lane, bounded by mature hedgerow vegetation. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Temporary construction activity along the onshore cable corridor will be ground based, transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the route. The scale and geographical extent of these temporary construction activities will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately 250m), reducing to **Negligible-Zero** for the wider LCA where the onshore cable corridor will appear partly or wholly screened by successive layers of vegetation.

The inclusion of alternative trenchless crossing compound TC-19a in favour of TC-19 (within the neighbouring LCA, G1 Ashton and Wiston Wooded Farmlands) would not give rise to any different magnitude of change within either LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

The level of effect on landscape elements will also be **Major / Moderate** and **Significant** (250m).

Landscape elements:

F1: Pulborough, Chiltington & Thakeham Farmlands	
	There will be localised significant effects on two landscape elements (one treeline (W514) and one hedge (H202) both notched to 14m, within this 500m section of onshore cable corridor. The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, although the limited vegetation loss and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious 'cut' through the LCA. Nonetheless the magnitude of change will be long-term in respect of the mature treelines and will be **Medium-high.** The level of effect on landscape elements will also be **Major / Moderate** and **Significant**.
	Level of effect — **Landscape character: Major / Moderate** and **Significant** (250m) **Landscape elements: Major / Moderate** and **Significant**
	Type of effect — Short-term, temporary, direct and adverse.
During operation and maintenance: - Year 1	All construction areas will have been reinstated. In total two landscape elements (one treeline (W514) and one hedge (H202) both notched to 14m will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss and the magnitude of change will reduce to **Medium**. The level of effect will be **Moderate** and **Significant**, reflecting the loss to tree lines.
- Year 5	Replacement hedge / shrub planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity. The magnitude of change will reduce to **Low**. The level of effect on landscape elements will be **Moderate / Minor** and **Not Significant**.

F1: Pulborough, Chiltington & Thakeham Farmlands	
- Year 10	Replacement hedge planting will be well established although not matching the size of mature trees and a **Negligible-Zero** magnitude of change will remain. The level of effect will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development will not be visible. The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-17 Effects on landscape character within the G1: Ashurst & Wiston Wooded Farmlands

G1: Ashurst & Wiston Wooded Farmlands		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		Viewpoints: J1 (**Figure 18.50**) and K1 (**Figure 18.55a-b), Volume 3** of the ES (Document Reference: 6.3.18)
LCA hierarchy	National Character Area:	NCA 121: Low Weald
	County Character Type:	LCT: LW7: Wiston Low Weald
Designation	None	
Character description	This LCA is located within the wider LW7: Wiston Low Weald. The area is characterised by gently undulating landform with mainly pastoral field with woodland and has a well-wooded character. There are strong patterns of	

small to medium size fields enclosed by woodlands, shaws and hedgerows with trees with some larger arable fields. Some areas include isolated trees in pasture and ancient woodland and conifer plantations. Sensitivities in the wider Wiston Low Weald LCT include loss of woodland cover or biodiversity of woodland due to plantation planting or lack of management, changes in field sizes and loss of tranquillity as a result of land management and loss of hedgerows and isolated pasture trees. The key characteristics at a local scale are described in the Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.75):

Key characteristics:

- "*Gently undulating wooded farmland, drained by small streams.*
- *Small to medium size pasture fields usually enclosed by hedgerows and shaws.*
- *Occasional glimpsed views of the Downs.*
- *Isolated farms and cottages on lanes and small tracks.*
- *Varied local building materials of half timber, tile hanging, weatherboarding and some flint.*
- *Winding lanes.*
- *Rural, mostly remote and tranquil character*"

Landscape elements:

The most relevant landscape elements are the woodland, hedgerows and mature trees within the onshore cable corridor.

Assessment of sensitivity

Landscape value:

The landscape is not rare, consisting of farmed pastural and arable fields interspersed by tree belts, woodland and hedgerows which are not uncommon to the wider area. However, the rolling landscape does have some scenic value and the proximity of this landscape to the SDNP to the south affords higher levels of landscape quality in terms of the areas local sense of place and representativeness. Opportunities to experience the landscape result from its network of recreational routes / PRoW. The landscape value is assessed as **Medium**.

Landscape susceptibility:

G1: Ashurst & Wiston Wooded Farmlands

The Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.76) states that the "*overall sensitivity to change is high. Although an enclosed landscape, without prominent topography and little existing development, many types of change could damage or erode its unspoilt remote rural character*."

Indicators of lower susceptibility include the sense of enclosure and limited visibility due to the undulating landform, and the network of trees, hedges and woodland which prevent longer range views from within the LCA, close to the onshore cable corridor. The changing character of the landuse and the landcover pattern of the arable fields arable is a further indicator of lower susceptibility due to regular crop rotation and the movement of agricultural machinery. There is however a dense network of trees, hedgerows, and woodland as illustrated in **Viewpoints J1** (**Figure 18.50, Volume 3** of the ES (Document Reference: 6.3.18)) and **K1** (**Figure 18.55a-b, Volume 3** of the ES (Document Reference: 6.3.18)) which will be of higher susceptibility and are a key characteristic.

The susceptibility of the landscape overall is assessed as **High to Medium**.

Landscape elements (mature trees, hedgerows, and woodland) are indicative of higher levels of susceptibility as they are not easily replaced if removed from within the onshore cable corridor.

Sensitivity	**Landscape character: Medium-high** **Landscape elements: Medium-high**	Landscape value:	Medium
		Landscape susceptibility:	High to Medium

Magnitude of change and level of residual effect

During construction:

Within the G1: Ashurst & Wiston Wooded Farmlands LCA the onshore cable corridor (approximately 4km in length) crosses the landscape to the northeast of Wiston to Spithandle Lane near Beggar's Bush Kennels and Calcot Wood.

The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

G1: Ashurst & Wiston Wooded Farmlands

The route of the onshore cable corridor runs almost parallel with Spithandle Lane (approximately 750-250m further northwest). Although woodland is avoided, the onshore cable corridor will cross up to 18 fields and approximately 18 hedgerows / tree line features, including four tracks with roadside hedgerows and trees. Two trenchless crossing construction compounds (TC-19, TC-20) will be located within the LCA. Trenchless crossing compound TC-19 will be located within mixed fields to the east of Water Lane, trenchless crossing compound TC-20 will be located within an arable field west of Calcot Wood near Horsebridge Common. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

There are two trenchless crossings within the LCA, at Water Lane and Spithandle Lane. The retention of woodland and hedgerow landscape features means that there will be **No Effect** on the landscape at these locations.

Temporary construction activity elsewhere along the onshore cable corridor will be transient and of short-term in duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the route. The scale and geographical extent of these construction activities will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately >250m), reducing to **Negligible-Zero** for the wider LCA where the onshore cable corridor will appear partly or wholly screened by successive layers of vegetation.

<u>Construction and operational accesses:</u>

- Construction and operational access A-43/a/b: via the A283 / Steyning Road along an existing access track and diverting north (A-43a) across two arable fields towards the cable corridor. The magnitude of change will be **Low**.
- Construction and operational access A-47: via Spithandle Lane off the B2135 Horsham Road, diverting north across a single field towards the cable corridor. The magnitude of change will be **Low**.

Collectively the magnitude of change resulting from the construction accesses will be **Low**.

Overall, the magnitude of change will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately <150m) reducing to **Low to Negligible to Zero** or less on the wider LCA where the onshore cable corridor will appear contained and often screened by intervening vegetation.

G1: Ashurst & Wiston Wooded Farmlands

The inclusion of alternative trenchless crossing compounds would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced). The level of effect on landscape character will be **Major / Moderate** and **Significant** (<150m).

Landscape elements:

There will be localised significant effects on 15 landscape elements including 12 hedges (H211, H214, H220, H226, H228, H230, H235, H237, H246 in two parts, H245, H247), one treeline / hedge (comprising H229 and W479) all notched to 14m. In addition, two treelines (H17 and W18) will be cleared to 20m, within this 4.5km section of onshore cable corridor.

The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, which is identified as a key characteristic of the LCA.

The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, although the limited vegetation loss and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious 'cut' through the LCA. Nonetheless the magnitude of change will be long-term in respect of the mature treelines and will be **Medium-high.** The level of effect on landscape elements will also be **Major / Moderate** and **Significant**.

Level of effect	**Landscape character: Major / Moderate** and **Significant**. (150m) **Landscape elements: Major / Moderate** and **Significant**.
Type of effect	Short-term, temporary, direct and adverse.

During operation and maintenance: - Year 1	All construction areas will have been reinstated. In total 15 landscape elements including 12 hedges (H211, H214, H220, H226, H228, H230, H235, H237, H246 in two parts, H245, H247), one treeline / hedge (comprising H229 and W479) all notched to 14m. In addition, two treelines (H17 and W18) will be cleared to 20m will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance

G1: Ashurst & Wiston Wooded Farmlands	
	of a 'gappy' hedge rather than a complete loss. With the reinstatement of the cable corridor the effects on successive hedges will be less clearly connected and the magnitude of change will reduce to **Medium**. The level of effect **Moderate** and **Significant**, reflecting the loss to treelines and mature trees.
- Year 5	Replacement hedge / shrub planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Medium-low**. The level of effect on landscape elements will be **Moderate** and **Not Significant**, reflecting the loss of mature vegetation.
- Year 10	Replacement hedge planting will be well established although not matching the size of mature trees and a **Negligible-Zero** magnitude of change will remain. The level of effect will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development including the wind turbines and offshore substations will be limited to visual effects as reported in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15). The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-18 Effects on landscape character within the O3: Steyning & Henfield Brooks

O3: Steyning & Henfield Brooks		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoints: K** (Figure 18.54a-c) **L** (Figure 18.56), **T** (Figure 18.61a-b), **T1** (Figure 18.62), Volume 3 of the ES (Document Reference: 6.3.18)
LCA hierarchy	National Character Area:	NCA 121: Low Weald
	County Character Type:	LCT: LW9: Upper Adur Valley
Designation	None	
Character description	This LCA is located within the wider LW9: Upper Adur Valle and comprises the headwaters of the River Adur which are characterised by a network of narrow valleys and streams, rimmed by low ridges the expansive, open brooks pastures of the Henfield and Beeding Brooks. The LCA has a downland backdrop and is mainly a pastoral landscape with a well-wooded character. There are relatively few panoramic or long views within the valley although views to the south are dominated by the steep downland scarp. Sensitivities in the Upper Adur Valley LCA include brooks, pasture and the impact of new urban development, modern farm buildings, masts, pylons and new roads. The key characteristics at a local scale are described in the Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.143): Key characteristics: • *"Middle reaches of the River Adur and its alluvial floodplain.* • *Seasonal flooding.* • *Small fields of unimproved and semi-improved wet grassland divided mostly by drainage ditches.* • *Course of the river marked by raised embankments.* • *Occasional patches of scrub and isolated trees & tree groupings with scrub following drainage ditches.* • *Arable valleysides with fragmented hedgerow pattern and small isolated woodlands.* • *Largely tranquil undeveloped rural character".* Landscape elements:	

O3: Steyning & Henfield Brooks			
	The most relevant landscape elements are the isolated trees and hedgerows within the onshore cable corridor.		
Assessment of sensitivity	Landscape value: The landscape is not designated but does have some perceptual qualities of tranquillity and some scenic value. It is traversed by the Downs Link long distance walking route. Other opportunities to experience the landscape result from its network of recreational routes/PRoW, particularly along the River Adur, rural roads and angling opportunities near Shermanbury. The landscape value is assessed as **Medium**. Landscape susceptibility: The Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p.145) states that the "*overall sensitivity to change is high. Although an enclosed landscape, without prominent topography and little existing development, many types of change could damage or erode its unspoilt remote rural character*." Considering the nature of the onshore elements of the Proposed Development, the changing character of the landuse and the landcover pattern of the arable fields arable is an indicator of lower susceptibility due to regular crop rotation and the movement of agricultural machinery. There is also a sparse network of trees and hedgerows, indicating High - medium susceptibility. The susceptibility of the landscape overall is assessed as **Medium-high**. Landscape elements (watercourses, mature trees and hedgerows) are indicative of higher levels of susceptibility as they are not easily replaced if removed from within the onshore cable corridor.		
Sensitivity	**Landscape character: Medium** **Landscape elements: Medium-high**	Landscape value:	Medium
		Landscape susceptibility:	Medium-high
Magnitude of change and level of residual effect			

O3: Steyning & Henfield Brooks

During construction:

Within the Steyning & Henfield Brooks LCA the onshore cable corridor (approximately 5km in length) crosses this landscape to the northeast of the River Adur, from north of Beggar's Bush Kennels near Ashurst to the B2116 near Shermanbury and Partridge Green. The onshore cable corridor will cross approximately 29 fields.

The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

Trenchless crossing construction compounds TC-21, TC-22, TC-23 and alternative compound TC-22a (all approximately 75m x 50m) will be located within pasture fields largely contained by mature field boundary hedgerows and trees. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Temporary construction activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the onshore cable route. The scale and geographical extent of these construction activities will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately <350m), reducing to **Negligible-Zero** for the wider LCA where the onshore cable corridor will appear more distant and partly screened by successive layers of vegetation.

The onshore cable corridor will be subject to three trenchless crossings, at the B2135 Horsham Road south of Ashurst, across the River Adur and across mature field boundary hedgerows to the south west of the river (approximate KP 28.6). The retention of landscape features (hedgerows and woodland) means that there will be **No Effect** on the landscape at these locations.

<u>Construction and operational accesses:</u>

There will be five construction accesses (approximately 6m wide) which will also provide operational access along the onshore cable corridor:

- Access A-48 – B2135, north of Ashurst, across a single pastoral field – will require clearance to 20m of a roadside (hedge H269) to allow access and visibility splays along the roadside. This will create a **Medium** magnitude of change along the road corridor at a local level (<250m)

O3: Steyning & Henfield Brooks

- Access A-50 (A-50a construction only, A-50b operational) – B2135, near Brightman's Farm – will require the notching of a single hedge (H295) to 14m.
- Access A-52 – A281, near Shermanbury – creation of an access alongside an existing PRoW.
- Access A-53 – B2116, near Shermanbury – creation of an access across an existing pastoral field.

Collectively the magnitude of change from the construction access will range between **Medium** to **Low**.

The level of effect on landscape character will be **Moderate** and **Significant** (<350m).

The inclusion of alternative compound TC-22a in replacement of TC-22 would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

Landscape elements:

There will be localised significant effects on up to 20 landscape elements, including one area of woodland (W475) cleared to 30m, one area of woodland notched to 6m (W1002) at Downs Link, one hedge (H269) cleared to 20m along the B2135, and 17 hedges notched to 14m (H257 in two parts, H263, H271, H295 in four parts, H297, H302, H308, H349, H358 / 359, H363, H372, and H378) within this 5km section of onshore cable corridor. The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, which is identified as a key characteristic of the LCA. However, the extent of vegetation loss and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious 'cut' through the LCA, but the nature of this effect will be long-term or permanent in the case of woodland. The magnitude of change will be **Medium-high**.

The level of effect on landscape elements will also be **Major / Moderate** and **Significant**.

Level of effect	**Landscape character: Moderate** (350m) **Landscape elements: Major / Moderate** and **Significant**
Type of effect	Short-term, temporary, direct and adverse.

O3: Steyning & Henfield Brooks	
During operation and maintenance: - Year 1	All construction areas will have been reinstated. In total 20 landscape elements, including one area of woodland (W475) cleared to 30m, one area of woodland notched to 6m (W1002) at Downs Link, one hedge (H269) cleared to 20m along the B2135, and 17 hedges notched to 14m (H257 in two parts, H263, H271, H295 in four parts, H297, H302, H308, H349, H358 / 359, H363, H372, and H378) will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss. With the reinstatement of the cable corridor the effects on successive hedges will be less clearly connected and the magnitude of change will reduce to **Medium**, but remining **Medium-high** in relation to cleared woodland. The level of effect **Major / Moderate** and **Significant**, reflecting the loss to tree lines and some woodland.
- Year 5	Replacement hedge / shrub planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Medium-low**. The level of effect on landscape elements will be **Moderate** and **Significant**, reflecting the loss of woodland.
- Year 10	Replacement hedge planting will be well established although not matching the size of mature trees / woodland and a **Negligible-Zero** magnitude of change will remain. The level of effect will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development will not be visible. The onshore substation at Oakendene and existing National Grid Bolney substation extension will not be visible.

O3: Steyning & Henfield Brooks	
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-19 Effects on landscape character within the J3: Cowfold & Shermanbury Farmlands

J3: Cowfold & Shermanbury Farmlands		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoints: T** (Figure 18.61a-b), **W** (Figure 18.64), **SA1** (Figure 18.10), **SA2** (Figure 18.11), **SA3** (Figure 18.12), **SA7** (Figure 18.13), **SA8** (Figure 18.14), Volume 3 of the ES (Document Reference: 6.3.18)
LCA hierarchy	National Character Area:	NCA 121: Low Weald and NCA 122: High Weald
	County Character Type:	LCT: LW10: Eastern Low Weald
Designation	None	
Character description	This LCA is located within the wider LW10: Eastern Low Weald LCT and comprises a lowland mixed pastoral and arable landscape with a strong hedgerow pattern. It lies over low ridges and clay vales drained by the upper Adur river system. Where possible there are some long views to the South Downs in the south and north to the High Weald. Sensitivities in the wider Eastern Low Weald LCT include a high level of perceived naturalness and a rural tranquillity in the landscape to the west of the A23 Trunk Road; woodland cover and the mosaic of shaws and hedgerows. The key characteristics at a local scale are described in the Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p. 111):	

J3: Cowfold & Shermanbury Farmlands	
	Key characteristics: • *"Gently undulating low ridges and valleys.* • *Scattered small woodlands.* • *Small and medium size pasture fields and some larger arable fields.* • *Mostly small scale intricate landscape. Localised areas with more open character.* • *Field ponds.* • *Small farmsteads and cottages dispersed along lanes and tracks.* • *The historic village of Cowfold and more suburban development at Partridge Green and Shermanbury.* • *Local building materials of half timber, brick, tile, Horsham stone and weatherboarding.* • *Landmark of St Hugh's Charterhouse Monastery at Shermanbury."* Landscape elements: The most relevant landscape elements are the woodland, hedgerows and mature trees within the onshore cable corridor and onshore substation search area.
Assessment of sensitivity	Landscape value: The landscape is not rare, consisting of farmed pastural and arable fields interspersed by tree belts, woodland and hedgerows which are not uncommon to the wider area. However, the undulating low ridges and valleys have some scenic value and the proximity to the High Weald AONB in the north indicates a higher degree of landscape quality. Opportunities to experience the landscape result from its network of recreational routes / PRoW, historic villages, and rural roads. The landscape value is assessed as **Medium-high** to **Medium**. Landscape susceptibility: The Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003, p. 113) states that the "*Sensitivity to change overall is moderate reflecting the moderate to high intervisibility of the area and moderate intrinsic landscape qualities*." Considering the nature of the onshore elements of the Proposed Development, indicators of lower susceptibility include the sense of enclosure and limited visibility due to the undulating landform, and the network of trees, hedges and woodland which prevent longer range views from within the LCA, close to the onshore cable corridor. The changing character of the landuse and the landcover

	pattern of the arable fields arable is a further indicator of lower susceptibility due to regular crop rotation and the movement of agricultural machinery. There is however a dense network of trees, hedgerows, and woodland which will be of higher susceptibility and are a key characteristic. The susceptibility of the landscape overall is assessed as **Medium**. Landscape elements (mature trees, hedgerows, and woodland) are indicative of higher levels of susceptibility as they are not easily replaced if removed from within the onshore cable corridor.		
Sensitivity	**Landscape character: Medium** **Landscape elements: Medium-high**	Landscape value:	Medium-high to Medium
		Landscape susceptibility:	Medium (High for landscape elements)

Magnitude of change and level of residual effect

During construction:	Within the Cowfold & Shermanbury Farmlands LCA the onshore cable corridor (approximately 4.5km in length) crosses this landscape between Shermanbury Road and the proposed location for Oakendene Substation near the A272, to the east of Cowfold. The onshore cable corridor will cross up to 24 fields and approximately 30 field boundaries comprising hedgerows, trees and/or woodland features. The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4). Trenchless crossing construction compounds TC-24, TC-25, TC-26, TC-27 and alternative compound locations TC-25a and TC-27a will be located within the LCA extents. Trenchless crossing compound TC-24 will occupy a small pastoral field adjacent to the A281 and close to roadside residential development and largely surrounded by mature vegetation; the other trenchless crossing compounds will be located within single fields. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

J3: Cowfold & Shermanbury Farmlands

The onshore cable corridor will be subject to four trenchless crossings, at the A281 north of Shermanbury, at two locations across Cowfold Stream (approximate KP34.2km and KP34.9km) and bordering the proposed Oakendene substation site (approximate KP 36.4km). The retention of mature hedgerows, trees and woodland landscape features here means that there will be **No Effect** on the landscape at these locations.

Temporary construction activity elsewhere along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the onshore cable route. The scale and geographical extent of these construction activities will be **Medium – high** when experienced locally to the construction works (within the same field unit or approximately >250m), reducing to **Negligible – Zero** for the wider LCA where the onshore cable corridor will appear partly or wholly screened by successive layers of vegetation.

The inclusion of alternative trenchless crossing compounds TC-25a and TC-27a in replacement of trenchless crossing compounds TC-25 and TC-27 would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

Onshore cable corridor between Oakendene Substation and Wineham Lane:

This section of the onshore cable corridor is approximately 1.5km in length, crossing the landscape between the Oakendene substation near the A272, to Wineham Lane north of the existing National Grid Bolney substation. The onshore cable corridor will cross up to 11 fields and approximately 11 field boundaries comprising hedgerows, trees and/or woodland features.

Trenchless crossing construction compound TC-28 will be situated within a linear field bordering Kent St south of the A272. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling.

Temporary construction activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the onshore cable route. The scale and geographical extent of these construction activities will be **Medium – high** when experienced locally to the construction works (within the same field unit or approximately >250m), reducing to **Negligible – Zero** for the wider LCA where the onshore cable corridor will appear partly or wholly screened by successive layers of vegetation.

The onshore cable corridor will be subject to trenchless crossings, at Kent Street south of the A272 and at Wineham Lane to the north of the existing National Grid Bolney substation. The retention of mature hedgerows, trees and woodland landscape features here means that there will be **No Effect** on the landscape at these locations.

The onshore cable corridor construction works will affect 8 hedgerows and/or tree line features (notched 14m) and a linear section of woodland (W736, cleared to 20m). The loss of trees will be permanent, and magnitude of change affecting these elements will be **High**.

Construction and operational accesses:

There will be five temporary construction accesses (approximately 10m wide) which will also provide permanent operational access along the onshore cable corridor:

- Accesses A-56 and A-57 – off the A281 north of Shermanbury, will require the notching to 14m of a trackside hedge (H422) and the notching to 6m of a tree line feature (W367). The magnitude of change will be **Medium-High** on these elements;
- Access A-60 – light construction access will be along King's Lane off Kent Street, following the existing carriageway;
- Access A-61 – Kent Street;
- Accesses A-62 and A-63 linked to trenchless crossing construction compounds;
- Access A-64 – via Kent St south of the A272; and
- Accesses A-66 (light construction) and A-67 – off Wineham Lane to the north of the existing National Grid Bolney substation.

Collectively the magnitude of change resulting from the construction accesses will be **Low**.

Overall, the magnitude of change will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately <250m) reducing to **Low to Negligible to Zero** or less on the wider LCA where the onshore cable corridor will appear contained and often screened by intervening vegetation. The inclusion of alternative compounds would not give rise to any different magnitude of change within the LCA overall

(other than a change of field unit location for where the magnitude of change is locally experienced). The level of effect on landscape character will be **Major / Moderate** and **Significant** (<150m).

Landscape elements:

There will be localised significant effects on up to 23 landscape elements, including one area of woodland (W505) cleared to 30m and one area of woodland (W736) cleared to 20m, 16 hedges (H383, H384, H424 / 425, H433, H464, H475, H476, H481 and H482 on either side of Kings Lane, H497, H507, H510, H514, H515, and H516) and four treelines (W110, W472, W473, and W678) notched to 14m and one treeline (W367) notched to 6m within this 6km section of onshore cable corridor. In addition, two hedges will be lost permanently within the footprint of the substation at Oakendene.

The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, which is identified as a key characteristic of the LCA. However, the extent of vegetation loss and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious 'cut' through the LCA, but the nature of this effect will be long-term or permanent in the case of woodland. The magnitude of change will be **Medium-high**.

The level of effect on landscape elements will also be **Major / Moderate** and **Significant**.

Level of effect	**Landscape character: Moderate** (150m) **Landscape elements: Major / Moderate** and **Significant**
Type of effect	Short-term, temporary, direct and adverse.

During operation and maintenance: - Year 1	All construction areas will have been reinstated. In total 23 landscape elements, including one area of woodland (W505) cleared to 30m and one area of woodland (W736) cleared to 20m, 16 hedges (H383, H384, H424 / 425, H433, H464, H475, H476, H481 and H482 on either side of Kings Lane, H497, H507, H510, H514, H515, and H516) and four treelines (W110, W472, W473, and W678) notched to 14m, and one treeline (W367) notched to 6m, will have been affected. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the

J3: Cowfold & Shermanbury Farmlands	
	appearance of a 'gappy' hedge rather than a complete loss. With the reinstatement of the cable corridor the effects on successive hedges will be less clearly connected and the magnitude of change will reduce to **Medium**, but remining **Medium-high** in relation to cleared woodland. The level of effect **Major / Moderate** and **Significant**, reflecting the loss to tree lines and some woodland.
- Year 5	Replacement hedge / shrub planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Medium-low**. The level of effect on landscape elements will be **Moderate** and **Significant**, reflecting the loss of woodland.
- Year 10	Replacement hedge planting will be well established although not matching the size of mature trees / woodland and a **Negligible-Zero** magnitude of change will remain. The level of effect will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development will not be visible. The existing National Grid Bolney substation extension will not be visible. The onshore substation at Oakendene will be visible, although contained by surrounding vegetation and topography. The level of effect on this landscape will be **Major** (<300m) and the combined cumulative landscape effect will also be **Significant**.
Cumulative effects assessment	There will be no cumulative landscape effects.

Table 2-20 Effects on landscape character within the LW1: Hickstead Low Weald

LW1: Hickstead Low Weald		
Figures: 18.4a-e, 18.5b, and 18.8, Volume 3 of the ES (Document Reference: 6.3.18)		**Viewpoint: SB1** (Figure 18.15), **SB3** (Figure 18.16), **SB6** (Figure 18.17), **SB7** (Figure 18.18), Volume 3 of the ES (Document Reference: 6.3.18)**.**
LCA hierarchy	National Character Area:	NCA 121: Low Weald
	County Character Type:	LCT: LW10: Eastern Low Weald
Designation	None	
Character description	This LCA is located within the wider LW10: Eastern Low Weald LCT which comprises a lowland mixed pastoral and arable landscape with a strong hedgerow pattern. The landform is gently undulating within low ridges and clay vales drained by the upper River Adur system. Where possible there are some long views to the South Downs in the south and north to the High Weald. Sensitivities in the wider Eastern Low Weald LCT include a high level of perceived naturalness and a rural tranquillity in the landscape to the west of the A23 Trunk Road; woodland cover and the mosaic of shaws and hedgerows. The key characteristics at a local scale are described in the Horsham District Landscape Character Assessment (LCA) (Chris Blandford Associates, 2003): Key characteristics: • *"Alternating west-east trending low ridges with sandstone beds and clay vales carrying long, sinuous upper Adur streams.* • *Views dominated by the steep downland scarp to the south and the High Weald fringes to the north.* • *Arable and pastoral rural landscape, a mosaic of small and larger fields, scattered woodlands, shaws and hedgerows with hedgerow trees.* • *Quieter and more secluded, confined rural landscape to the west, much more development to the east, centred on Burgess Hill.* • *Biodiversity in woodland, meadowland, ponds and wetland.*	

LW1: Hickstead Low Weald	
	• *Mix of farmsteads and hamlets favouring ridgeline locations, strung out along lanes.* • *A modest spread of designed landscapes and major landmark of Hurstpierpoint College.* • *Crossed by north-south roads including the A23 Trunk Road, with a rectilinear network of narrow rural lanes.* • *London to Brighton Railway Line crosses the area through Burgess Hill.* • *Varied traditional rural buildings built with diverse materials including timberframing, weatherboarding, Horsham Stone roofing and varieties of local brick and tile-hanging.* • *Principal visitor attraction is the Hickstead All England Equestrian Showground."* Landscape elements: The most relevant landscape elements are the woodland, hedgerows and mature trees within the onshore cable corridor and onshore substation search area.
Assessment of sensitivity	Landscape value: The landscape is not rare, consisting of farmed pastural and arable fields interspersed by tree belts, woodland and hedgerows which are not uncommon to the wider area. However, the rolling landscape does have some scenic value and the proximity of this landscape to the High Weald AONB to the north indicates a degree of landscape quality. Opportunities to experience the landscape result from its network of recreational routes/PRoW, historic villages, rural roads and the equestrian showground at Hickstead. The landscape value is assessed as **Medium**. Landscape susceptibility: The Landscape Character Assessment for Mid Sussex (LCA) 2005 states that the "*Parts of the area are visually exposed to views from the downs with a consequently high sensitivity to the impact of new development and the cumulative visual impact of buildings and other structures*." Indicators of lower susceptibility include the sense of enclosure and limited visibility due to the undulating landform, and the network of trees, hedges and woodland which prevent longer range views from within the LCA, close to the onshore cable corridor. The changing character of the landuse and the landcover pattern of the arable fields arable is a further indicator of lower susceptibility due to regular crop rotation and the movement of agricultural machinery. The existing National Grid

LW1: Hickstead Low Weald			
	Bolney substation is well screened but a local influence on the landscape sensitivity of the onshore cable corridor. The susceptibility of the landscape overall is assessed as **Medium-low**. Landscape elements (mature trees, hedgerows, and woodland) are indicative of higher levels of susceptibility as they are not easily replaced if removed from within the onshore cable corridor.		
Sensitivity	**Landscape character: Medium-low** **Landscape elements: Medium-high**	Landscape value:	Medium
		Landscape susceptibility:	Medium-low
Magnitude of change and level of residual effect			
During construction:	Within the Hickstead Low Weald LCA the onshore cable corridor (approximately 1km in length) and skirts the northern and eastern boundaries of the existing National Grid Bolney substation to the north of Bob Lane. The onshore cable corridor will cross hedgerows and mature roadside trees at Wineham Lane, crossing four fields and a further three hedgerows and tree line features. The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4). Trenchless crossing construction compound TC-28 will be situated within a pasture field bordering Wineham Lane to the north of the existing National Grid Bolney substation. The temporary trenchless crossing compounds will remain in place for approximately three to four months and will contain trenchless crossing plant and activities (including use of a crane) and cable pulling. Temporary construction activity along the onshore cable corridor will be transient and of short duration (up to 3.5 years) with progressive backfill and reinstatement as works on the onshore cable corridor are completed along the onshore cable route. The scale and geographical extent of these temporary construction activities will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately		

>150m, viewing along the onshore cable corridor), reducing to **Negligible-Zero** for the wider LCA where the onshore substation and onshore cable corridor will appear partly or wholly screened by successive layers of vegetation.

The onshore cable corridor will be subject to trenchless crossing at Wineham Lane, north of the existing National Grid Bolney substation. The retention of mature hedgerows, trees and woodland landscape features here means that there will be **No Effect** on the landscape at this location.

Overall, the magnitude of change will be **Medium-high** when experienced locally to the construction works (within the same field unit or approximately <150m) reducing to **Low to Negligible to Zero** or less on the wider LCA where the onshore cable corridor will appear contained and often screened by intervening vegetation. The inclusion of alternative trenchless crossing compounds would not give rise to any different magnitude of change within the LCA overall (other than a change of field unit location for where the magnitude of change is locally experienced).

The level of effect on landscape character will be **Moderate** and **Significant** (<150m).

Landscape elements:

There will be localised effects on up to three landscape elements within this 1km section of the onshore cable corridor. These include two hedges notched to 14m (H469) and 20m (W677); and one area of woodland (W387) cleared to 20m to the north of the existing National Grid Bolney substation and overlapping with other proposed energy related development. In addition, a further area of woodland (W3712a) will be lost permanently within the footprint of the existing National Grid Bolney substation extension.

The removal of trees and shrubs at each of these locations will appear as a break in the linear pattern of field boundary vegetation, which is identified as a key characteristic of the LCA. However, the extent of vegetation loss and varying direction of the onshore cable corridor across the landscape will prevent this appearing as a more obvious ‘cut’ through the LCA, but the nature of this effect will be long-term or permanent in the case of woodland. The magnitude of change will be **Medium**.

The level of effect on landscape elements will also be **Moderate** and **Significant**.

Level of effect	**Landscape character: Moderate** (150m) **Landscape elements: Moderate** and **Significant**

LW1: Hickstead Low Weald	
	Type of effect Short-term, temporary, direct and adverse.
During operation and maintenance: - Year 1	All construction areas will have been reinstated. In total two hedges notched to 14m (H469) and 20m (W677); and one area of woodland (W387) cleared to 20m to the north of the existing National Grid Bolney substation and overlapping with other proposed energy related development. In addition, a further area of woodland (W3712a) will be lost permanently within the footprint of the existing National Grid Bolney substation extension. New replacement hedge planting will have been undertaken, but not yet established. Retained hedgerow between the notches will give the appearance of a 'gappy' hedge rather than a complete loss. With the reinstatement of the cable corridor the effects on successive hedges will be less clearly connected and the magnitude of change will remain **Medium**. The level of effect **Moderate** and **Significant**, reflecting the loss to tree lines and some woodland.
- Year 5	Replacement hedge / shrub planting will be established, along with retained hedges between the notches. Although not mature there will be a re-connectivity of the vegetation network introducing greater age and species diversity and the opportunity for some new views out across the landscape. The magnitude of change will reduce to **Medium-low**. The level of effect on landscape elements will be **Moderate** and **Significant**, reflecting the loss of woodland.
- Year 10	Replacement hedge planting will be well established although not matching the size of mature trees / woodland and a **Negligible-Zero** magnitude of change will remain. The level of effect will be **Minor** and **Not Significant**.
Whole Proposed Development effects	The offshore elements of the Proposed Development will not be visible. The existing National Grid Bolney substation extension will be visible, although contained by surrounding vegetation. The level of effect on this landscape will be **Minor** and there will be no significant combined cumulative landscape effects.

LW1: Hickstead Low Weald	
	The onshore substation at Oakendene will be visible, although contained by surrounding vegetation and topography. The level of effect on this landscape will be **Minor / Negligible** and the combined cumulative landscape effect will be **Not Significant**.
Cumulative effects assessment	There will be no cumulative landscape effects.

3. Landscape Designations

3.1 Introduction

3.1.1 The onshore elements of the Proposed Development are partly located within the South Downs National Park (SDNP) with the route of the onshore cable corridor crossing the SDNP between the A27 near Hammerpot and the A283 near Wiston. This element of the Proposed Development will have both a direct effect and an indirect effect on the SDNP and may affect its natural beauty, special qualities and in particular its Special Landscape Qualities (SLQ) including views and perceptual qualities as well as its setting and overall integrity.

3.1.2 The High Weald Area of Outstanding Natural Beaty (AONB) will not be directly affected by the onshore elements of the Proposed Development, but nonetheless it may also be indirectly affected in terms of its SLQ including views and perceptual qualities.

3.1.3 The SDNP and the High Weald AONB are assessed here and summarised in **Chapter 18: Landscape and visual impact, Volume 2** of the ES (Document Reference: 6.2.18).

3.2 Assessment Methodology

3.2.1 This section reports on the effects on the onshore elements of the Proposed Development on the SDNP and its setting, with regard to the statutory requirement to conserve the natural beauty, special qualities and overall integrity of the national park as set out in *The National Parks and Access to the Countryside Act* 1949 and *The Environment Act* 1995.

> "*Conserve and enhance the natural beauty, wildlife and cultural heritage* [and] *promote opportunities for the understanding and enjoyment of the special qualities of the National Parks by the Public.*"

3.2.2 In addition, these statutory duties also apply to development which is outwith the SDNP as set out in *Planning Practice Guidance (PPG), Natural Environment, Landscape*, and *PPG for Renewable and Low Carbon Energy (*Ministry of Housing, Communities & Local Government, 2015; Ministry of Housing, Communities & Local Government, 2019):

> "*The duty is relevant in considering development proposals that are situated outside National Park or Area of Outstanding Natural Beauty boundaries, but which might have an impact on the setting of, and implementation of, the statutory purposes of these protected areas.*"

3.2.3 Further guidance is provided though national and local planning policy as set out in **Section 18.2** of **Chapter 18: Landscape and visual impact, Volume 2** of the ES (Document Reference: 6.2.18). The assessment has also had regard to the *South Downs Landscape Character Assessment* (South Downs National Park, 2020) and key documents including *South Downs Viewshed Study Report* (2015) and the *South Downs National Park Special Qualities* report (2011).

3.2.4 This assessment draws from the LVIA undertaken to accord with the methodology set out in **Appendix 18.1: Landscape and visual impact assessment methodology, Volume 4** of the ES (Document Reference: 6.4.18.1) with additional guidance provided by the NatureScot working draft *Guidance for Assessing the Effects on Special Landscape Qualities*, (NatureScot, 2018). This is because the assessment of landscape planning designations differs from that of landscape character or visual assessment. The assessment draws from the LVIA and goes further to consider the effects of the onshore elements of the Proposed Development on the natural beauty of the national park which are encapsulated by the SLQs as well as the setting and integrity of the designation.

3.2.5 This assessment comprises the four stages as follows.

- Stage 1: Brief description of the landscape planning designation and summary of SDNP special qualities and setting.
- Stage 2: Defining the Study Area and selection of relevant SLQs for assessment. The assessment is supported by ZTV, viewpoint analysis including site survey and the details of the landscape and visual assessment.
- Stage 3: Assessment of each of the relevant SLQs, setting and integrity of the designation by addressing the following questions:
  - i) is there an effect on the landscape character within the designated area and to what extent will this affect the natural / scenic beauty, special qualities, and the integrity?
  - ii) is there an effect on the landscape character outwith the boundary of the designation and to what extent does this represent valued setting of the designation such that it contributes to the natural / scenic beauty, special qualities and integrity of the designation?
  - iii) is there an effect on the views from within the designation to the onshore elements of the Proposed Development either within or beyond the boundary of the designation and to what extent will the effects on these views affect the natural / scenic beauty, special qualities, and integrity?
  - iv) is there an effect on the views back into the designation from beyond the boundary and to what extent will the effects on these views affect the natural/scenic beauty, special qualities, and the integrity of the designation?
  - v) the assessment will also address whole Proposed Development effects and cumulative effects.
- Stage 4: Statement of Significance – providing a summary of the assessment, noting the effects on the SDNP in terms of the SLQs, its setting and the implications for the integrity of the designation as well as highlighting any opportunities for further mitigation.

3.3 South Downs National Park

Overview and Scope

3.3.1 The onshore elements of the Proposed Development are partly located within the South Downs National Park (SDNP) with the route of the onshore cable corridor crossing the SDNP between the A27 and the A283. The LVIA confirms no effects pathway between the landfall and the substation at Oakendene and the existing National Grid Bolney substation extension.

3.3.2 The assessment of the SDNP will therefore be limited to the onshore cable corridor during the construction and the operation and maintenance phases.

3.3.3 The onshore cable will be left *in-situ* during the decommissioning phase.

Stage 1: South Downs National Park

Overview

3.3.4 The SDNP covers 1,600km^2 of rural South Downs landscape in part of the counties of Hampshire, West Sussex and East Sussex. It is a rich and diverse landscape of national importance that includes rolling hills, heathland, river valleys, ancient woodland, villages and market towns, and the iconic white cliffs of the Heritage Coast. Some key facts relating to the SDNP are:

- "*The South Downs National Park is the newest of the UK's 15 National Parks*.
- *The South Downs National Park officially came into being on 31 March 2010. However, the idea of a National Park in the South Downs can be traced all the way back to 1929.*
- *In 2016 the National Park was granted South Downs International Dark Sky Reserve status, making it one of the best places in the country to view the night sky. Today, we are one of only 16 such Reserves in the world.*
- *The National Park is home to a number of globally important habitats, including lowland heath, described as rarer than rainforest.*
- *Woolmer Forest, a lowland heath site, is the only place in the country to have all 12 of the UK's native amphibian and reptile species.*
- *Around 4% of the land in the National Park is chalk grassland. Since the Second World War, the UK has lost over 80% of its chalk grassland.*
- *The South Downs is home to a number of rare species, including the Adonis blue butterfly that thrives in chalk grassland.*
- *The South Downs Way is one of 15 National Trails. However, it is the only National Trail to lie entirely within a National Park.*
- *It is thought that the chalk ridgeline of the South Downs Way has been used by people for more than 6000 years.*

- *Cissbury Ring, just north of Worthing, is the second largest hillfort in England. It is a Scheduled monument due to its Neolithic flint mines and the remnants of the Iron Age fort.*
- *The South Downs is the most populous of the UK's National Park. 117,000 live and work within the Park's boundaries with an additional 2 million people living within 5km of the Park*." (https://www.southdowns.gov.uk)

Special Qualities of the South Downs National Park

3.3.5 There are seven special qualities of the SDNP, which were agreed through public consultation by the South Downs National Park Authority in 2015 (South Downs National Park 2015a). A summary of these is provided as follows:

"*1) diverse, inspirational landscapes and breath-taking views;*

2) a rich variety of wildlife and habitats including rare and internationally important species;

3) tranquil and unspoilt places;

4) an environment shaped by centuries of farming and embracing new enterprise;

5) great opportunities for recreational activities and learning experiences;

6) well-conserved historical features and a rich cultural heritage; and

7) distinctive towns and villages, and communities with real pride in their area."

The setting of the South Downs National Park

3.3.6 The setting of the SDNP is not defined on any plan but is likely to include:

- areas close to the boundary with common or complementary landscape character and qualities;
- panoramic views from within the SDNP to areas beyond the SDNP boundary:
  - from the northern escarpment to the lower lying landscapes of the Weald in the north; and
  - from the southern dip-slope south across the coastal plain to the sea and along the River Arun valley.
- views from beyond the SDNP boundary towards the South Downs hills (escarpment and dip-slope) as well as other landmark features within the SDNP such as Arundel Castle.

Stage 2: Study area and SLQ selection

Overview

3.3.7 The SDNP and the LVIA Study Area is illustrated in **Figure 18.6a, Volume 3** of the ES (Document Reference: 6.3.18) of the ES, with **Figure 18.6b, Volume 3** of the ES (Document Reference: 6.3.18) illustrating the ZTV of the wider area. A more detailed picture of the ZTV and viewpoint locations for the onshore cable corridor

is illustrated in **Figures 18.4a-e, Volume 3** of the ES (Document Reference: 6.3.18).

3.3.8 It should be noted that the SDNP boundary does not extend to include the visual watershed or area visible from within the SDNP, rather it focuses on the hill range of the South Downs and the heritage coast. Therefore, in terms of the setting of the SDNP, this is likely to include areas of landscape and views to and from the SDNP which are beyond the boundary of the SDNP.

Summary of Landscape Effects

3.3.9 The part of the SDNP within the Study Area comprises a broad elevated east–west ridge with a steeply sloping, north facing chalk escarpment (I3 Arun to Adur Downs Scarp) fringed by a landscape of patchwork of pasture fields (J3 Arun to Adur Scarp Footslopes) that runs along the foot of the escarpment. The undulating dip-slope is south of the escarpment, a large-scale area of gently undulating and elevated open downs (mainly cereals crops and pasture) with few trees / hedges / woodland (A3 Arun to Adur Open Downs) further south and along the southern fringes of the SDNP are large areas of ancient woodland and estates (B4 Angmering and Clapham Wooded Estate Downland and R1 South Downs Upper Coastal Plain). The River Arun valley is located to the west (G4 Arun Valley Sides and F4 Arun Floodplain) and the A24 is routed through a dry valley to the east.

3.3.10 Roads and villages are mainly concentrated in the river valleys and the northern and southern edges of the SDNP, whilst the open downs are sparsely settled with scattered farmsteads. The South Downs Way National Trail crosses this area of the SDNP just back from the main northern chalk escarpment, from which there are panoramic views to the north. Perceptual qualities include tranquillity and a lack of built development particularly in the Open Downs and along the edge of the escarpment where there are panoramic views across the lower lying landscapes to the north including the High Weald AONB in the distance.

3.3.11 The landscape character within the SDNP is documented in the *South Downs Landscape Character Assessment* (South Downs National Park, 2020) and the following LCAs are located within the SDNP and the LVIA Study Area. These are assessed in **Section 2** and illustrated in **Figures 18.5bi-iii, Volume 3** of the ES (Document Reference: 6.3.18):

- G4 Arun Valley Sides;
- F4 Arun Floodplain;
- R1 South Downs Upper Coastal Plain;
- B4 Angmering and Clapham Wooded Estate Downland;
- A3 Arun to Adur Open Downs;
- I3 Arun to Adur Downs Scarp; and
- J3 Arun to Adur Scarp Footslopes.

3.3.12 Significant landscape character and visual effects have been identified within the LVIA that will affect receptors within or close to the SDNP during the construction phase with more limited effects identified during the operation and maintenance

phase. The onshore cable corridor therefore has the potential to effect aspects of the SLQs and natural beauty of the SDNP as well as its setting and integrity.

3.3.13 During the construction phase, the onshore cable corridor will significantly affect the landscape character and associated elements (treelines, woodland, hedges and scrub) within part of 14 LCAs crossed by the onshore cable corridor as follows:

- Part 1: Climping to SDNP
  - 31. Climping Lower Coastal Plain;
  - 34: Middle Arun Valley Floor;
  - 35: Lower Arun Valley Floor;
  - 40: Lyminster-Angmering Coastal Plain; and
  - 41: Black Ditch Rife.
- Part 2: SDNP
  - R1: South Downs Upper Coastal Plain;
  - B4: Angmering and Clapham Wooded Estate Downland;
  - A3: Arun to Adur Open Downs; and
  - J3: Arun to Adur Scarp Footslopes.
- Part 3: SDNP to Oakendene / Bolney
  - D1: Amberley to Steyning Farmlands;
  - F1: Pulborough Chiltington & Thakeham Farmlands;
  - G1: Ashurst & Wiston Wooded Farmlands;
  - O3: Steyning & Henfield Brooks; and
  - J3: Cowfold & Shermanbury Farmlands.

3.3.14 The geographical extent of these effects will be contained within one or two field boundaries (approximately 250m of the onshore cable corridor) due to the screening effects of existing trees, woodland and hedgerows. However, the effects will extend to within approximately 650m of the onshore cable corridor when viewed from hill tops and open areas within the A3: Arun to Adur Open Downs LCA.

Summary of effects on Views and Visual Amenity within the South Downs National Park

3.3.15 The visual assessment is documented in **Appendix 18.4: Visual assessment, Volume 4** of the ES (Document Reference: 6.4.18.4) and covers the visual effects on views likely to be experienced by people in settlements, on transport and recreational routes (including long distance routes such as the South Downs Way) and other recreational, visitor and tourist attractions. This work is supported by the analysis of a series of viewpoints agreed through consultation with the SDNP Authority and a number of other stakeholders and has been assisted by the *South*

Downs National Park: View Characterisation and Analysis, Final Report, (South Downs National Park, 2015b).

3.3.16 A total of 57 visualisations of the onshore cable corridor are illustrated in **Figures 18.19 to 18.75, Volume 3** of the ES (Document Reference: 6.3.18), as well as a sequential assessment for the South Downs Way **Figure 18.76, Volume 3** of the ES (Document Reference: 6.3.18). Each of the viewpoints are assessed in **Appendix 18.2: Viewpoint analysis, Volume 4** of the ES (Document Reference: 6.4.18.2).

3.3.17 Within the SDNP, there are a total of 29 viewpoints ranging between 22m to 11.9km distance. Of the 29 viewpoints, 13 have been assessed as significant and viewpoint analysis indicates that significant visual effects (during the construction phase) are likely to extend approximately 650m distance from the onshore cable corridor, although the majority are within approximately 300m of the onshore cable corridor and limited to within 1-2 field boundaries. The significantly affected viewpoints are listed as follows:

- F3: PRoW 2173 North of Blackpatch Hill;
- H1: Junction of The Pike and A283, Washington;
- H5a: Footpath off Swillage Lane;
- H6a: Footpath south of Angmering Park Stud Farm;
- H7b: Harrow Hill bridleway;
- H7d: Blackpatch Hill;
- H7h: Barnsfarm Hill, South Downs Way;
- J4: A283 at Lower Chancton Farm;
- LD1: PRoW 2173, south of Chanty Post;
- LD2: PRoW 2092, east of Chanty Post;
- LD4: PRoW 2208/2, south east of Harrow Hill;
- NP3: PRoW 2208, Selden Fields (Viewpoint: NP3, **Figure 18.71, Volume 3** of the ES (Document Reference: 6.3.18)); and
- NP5: PRoW 2282, East of Sullington Hill.

3.3.18 During the construction phase, there will be significant visual effects on the views experienced by people from receptor locations as follows:

- Settlements – there will be no effects on the views from settlements.
- Transport Routes:
  - A295, Ferry Road, Church Lane, Railway: Littlehampton/Arundel/Ford, A284 Lyminster Road, Poling Street, A283 The Pike, B2116, Kings Lane, Kent Street and Wineham Lane; and
  - One of these (A283 The Pike) follows the northern boundary of the SDNP.
- Recreational routes:

- South Downs Way National Trail;
- England Coast Path / Arun Way;
- Sustrans NCR 2 / South Coast Cycle Route;
- Sustrans NCR 223 / Downs Link cycle route.
- 47 PRoWs (24 of which are within the SDNP); and
- Barpham Hill and Sullington Hill open access land.

- Recreational / Tourist destinations:
  - Littlehampton West Beach (Climping Beach); and
  - three tourist facilities at Climping Camp Site, Climping Caravan Park and Washington Caravan Park.

3.3.19 During the operation and maintenance phase, residual effects arising from the loss of landscape elements (treelines, woodland, hedges and scrub) during the construction phase will affect the views from A283 The Pike, Sustrans NCR 223 / Downs Link and up to 20 PRoW (seven of which are in the SDNP). New replacement planting will be undertaken and maintained for 10 Years in accordance with the **Outline LEMP** (Document Reference 7.10) to mitigate these effects.

3.3.20 There would be no effect on the South Downs International Dark Sky Reserve or 'dark skies' within the SDNP due to the implementation of embedded environmental measures within the **Commitments Register** (Document Reference: 7.22) (C-22, C-66, and C-200)

3.3.21 In some cases, affecting long range 360° views from hill tops, the effects will be cumulative with other whole Proposed Development effects, namely the offshore wind turbines as assessed in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15).

3.3.22 No significant cumulative effects resulting from the onshore cable corridor and other development were identified. This is because of the limited occurrence of other development within the SDNP, the large intervening distances between other development and the onshore cable corridor, limited theoretical visibility, and the existence of other development within the existing LVIA baseline (e.g., Rock Common Quarry and Sandgate Park Quarry).

Selection of relevant Special Landscape Qualities

3.3.23 Of the seven special qualities of the SDNP, it is considered that three special qualities 1, 3, and 5 encapsulate the SLQ which are the focus of this assessment covering landscapes and views, tranquillity, and recreation (such as the South Downs Way).

3.3.24 Special qualities 2, 4, 6 and 7 relate to nature conservation and ecology, landuse, heritage and socioeconomics which are covered in **Chapter 17: Socio-economics, Volume 2** of the ES (Document Reference: 6.2.17), **Chapter 22: Terrestrial ecology and nature conservation, Volume 2** of the ES (Document

Reference: 6.2.22), and **Chapter 25: Historic environment, Volume 2** of the ES (Document Reference: 6.2.25).

3.3.25 Each of the three SLQs are described further drawing on the detailed descriptions provided by the South Downs National Park (SDNPA) (South Downs National Park, 2015a). The most relevant parts to this assessment are underlined.

- *"1. Diverse, inspirational landscapes and breathtaking views:*

  The geology of the South Downs underpins so much of what makes up the special qualities of the area: its diverse landscapes, land use, buildings and culture. The rock types of the National Park are predominately chalk and the alternating series of greensands and clays that form the Western Weald. Over time a diversity of landscapes has been created in a relatively small area which is a key feature of the National Park. These vary from the wooded and heathland ridges on the greensand in the Western Weald to wide open downland on the chalk that spans the length of the National Park, both intersected by river valleys. Within these diverse landscapes are hidden villages, thriving market towns, farms both large and small and historic estates, connected by a network of paths and lanes, many of which are ancient.

  There are stunning, panoramic views to the sea and across the Weald as you travel the hundred mile length of the South Downs Way from Winchester to Eastbourne, culminating in the impressive chalk cliffs at Seven Sisters. From near and far, the South Downs is an area of inspirational beauty that can lift the soul."

- "*3. Tranquil and unspoilt places:*

  The South Downs National Park is in South East England, one of the most crowded parts of the United Kingdom. Although its most popular locations are heavily visited, many people greatly value the sense of tranquillity and unspoilt places which give them a feeling of peace and space. In some areas the landscape seems to possess a timeless quality, largely lacking intrusive development and retaining areas of dark night skies. This is a place where people seek to escape from the hustle and bustle in this busy part of England, to relax, unwind and re-charge their batteries."

- "*5. Great opportunities for recreational activities and learning experiences:*

  The South Downs offers a wide range of recreational and learning opportunities to the large and diverse populations living both within and on the doorstep of the National Park, and to visitors from further afield.

  With 3,200 kilometres (2,000 miles) of public rights of way and the entire South Downs Way National Trail within the National Park there is exceptional scope for walking, cycling and horse riding. Many other outdoor activities take place such as paragliding, orienteering and canoeing. There is a chance for everyone to walk, play, picnic and enjoy the countryside, including at Queen Elizabeth Country Park in Hampshire and Seven Sisters Country Park in East Sussex.

  The variety of landscapes, wildlife and culture provides rich opportunities for learning about the South Downs as a special place, for the many school and college students and lifelong learners. Museums, churches, historic houses,

outdoor education centres and wildlife reserves are places that provide both enjoyment and learning. There is a strong volunteering tradition providing chances for outdoor conservation work, acquiring rural skills, leading guided walks and carrying out survey work relating to wildlife species and rights of way.

Stage 3: Assessment of the SDNP

Overview

3.3.26 This part of the assessment draws collectively on the LVIA to form a judgement on the likely effects of the onshore cable corridor on the SLQs, setting and integrity of the SDNP.

SLQ 1. Diverse, inspirational landscapes and breath-taking views.

Overview

3.3.27 Notably its "*diverse landscapes*" that "*vary from the wooded and heathland ridges on the greensand in the Western Weald to wide open downland on the chalk that spans the length of the National Park, both intersected by river valleys*." And the "*stunning, panoramic views to the sea and across the Weald as you travel the hundred mile length of the South Downs Way from Winchester to Eastbourne*…" (South Downs National Park, 2015a).

3.3.28 The sensitivity of this SLQ to the onshore cable corridor is assessed as High.

Effect during the construction phase

3.3.29 The onshore cable corridor will not alter the geology or extent of landscape diversity, but it will temporarily, introduce a new and detracting feature to the to the landscape during the construction phase. The linear nature of the cable corridor has the ability to affect landscape character simultaneously and sequentially and from some elevated areas it will be visible extending into the distance and / or connection with offshore elements of the Proposed Development.

3.3.30 The onshore cable corridor will be approximately 40m wide, comprising perimeter stock fencing, open cut cable installation with internal temporary construction haul road, associated construction machinery and soil storage as indicated in **Graphic 4.19, Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4). The trenchless crossing compounds will be used for material / equipment storage, some welfare facilities, and trenchless crossing activities.

3.3.31 The duration of these effects will be short-term, with temporary construction work along the onshore cable corridor completed in discrete sections (typically 600m – 1,000m of onshore cable corridor) with progressive backfill and reinstatement commenced in as shortest timeframe as practical (embedded environmental measures C-19 and C-20, **Section 18.7, Table 18-25** in **Chapter 18: Landscape and visual impact, Volume 2** (Document Reference: 6.2.18) of the ES).

3.3.32 The nature of these construction effects will be both direct and indirect, adverse and in some cases cumulative with other whole Proposed Development and other development included in the cumulative assessment.

3.3.33 The following significantly affected viewpoints are relevant to this assessment:

- **Viewpoint NP5: PRoW 2282, East of Sullington Hill** (**Figure 18.73, Volume 3** of the ES (Document Reference: 6.3.18)) is located on the chalk escarpment at Sullington Hill and provides an example of a 'breath-taking view' with some diverse and inspirational landscape (I3 Arun to Adur Downs Scarp and J3: Arun to Adur Scarp Footslopes). Whilst the temporary construction activity would add further interest in terms of engineering there would be significant and adverse effects on this viewpoint.
- **Viewpoint H7d: Blackpatch Hill** (**Figure 18.45, Volume 3** of the ES (Document Reference: 6.3.18)) provides a further example of a 'breath-taking view' with some diverse and inspirational landscape (B4: Angmering and Clapham Wooded Estate Downland and A3: Arun to Adur Open Downs). The 180° illustrated view extends from the wooded chalk escarpment in the south across the undulating open south downs. The onshore cable corridor would be intermittently visible across the view. **Viewpoint H7b: Harrow Hill bridleway** (**Figure 18.43, Volume 3** of the ES (Document Reference: 6.3.18)) provides a closer view of the wooded chalk escarpment and intermittently visibility of the onshore cable corridor, the topography and in this case, trees provide some screening. Viewpoints LD1, LD2 and LD4 are all similar and illustrate the onshore cable corridor routed through the undulating A3: Arun to Adur Open Downs landscape as follows:
  - **Viewpoint LD1: PRoW 2173, south of Chantry Post** (**Figure 18.66, Volume 3** of the ES (Document Reference: 6.3.18));
  - **Viewpoint LD2: PRoW 2092, east of Chantry Post** (**Figure 18.67, Volume 3** of the ES (Document Reference: 6.3.18)); and
  - **Viewpoint LD4: PRoW 2208/2, south east of Harrow Hill** (**Figure 18.68, Volume 3** of the ES (Document Reference: 6.3.18)).
- **Viewpoint H5a: Footpath of Swillage Lane** (**Figure 18.40, Volume 3** of the ES (Document Reference: 6.3.18)) is located within R1: South Downs Upper Coastal Plain and **Viewpoint H6a: Footpath south of Angmering Park Stud Farm:** (**Figure 18.41, Volume 3** of the ES (Document Reference: 6.3.18)) is located within B4: Angmering and Clapham Wooded Estate Downland. Whilst not 'breath taking' they have extensive woodland (including ancient woodland) and provide a diversity of landscape that complements the open downs further north.
- **Viewpoint J1: PRoW 2709 at All Saints Church, Wiston** (**Figure 18.50, Volume 3** of the ES (Document Reference: 6.3.18)) is outwith the SDNP boundary but illustrates a viewpoint to the north within the SDNP setting where Chanctonbury Ring is visible in addition to the onshore cable corridor. The temporary construction activity would not block the view of the Chanctonbury Ring skyline, although it would appear in the setting of the SDNP. **Viewpoints J2** and **J5** (**Figures 18.43 and 18.45, Volume 3** of the ES (Document Reference: 6.3.18)) are similar but would not be significantly affected and do

not constitute a significant effect on the setting of the SDNP due to the greater intervening distance.

3.3.34 The magnitude of change affecting these views ranges from High to Medium.

3.3.35 Conversely, viewpoints to the south of the SDNP do not illustrate views of the onshore cable corridor in addition to views of the SDNP, the boundary of the SDNP being tightly contained by the A27 and a network of woodland and field boundaries to the south which restrict visibility.

3.3.36 Particular examples of 'breath-taking views' include **Viewpoint I: Chanctonbury Ring** (**Figure 18.49, Volume 3** of the ES (Document Reference: 6.3.18)) and **Viewpoint E: Arundel Castle** (**Figure 18.25, Volume 3** of the ES (Document Reference: 6.3.18)). The onshore cable corridor will not significantly affect either of these views, although there will be a whole project effect on Viewpoint E due to the offshore elements of the Proposed Development which are assessed in **Chapter 15: Seascape, landscape and visual impact assessment, Volume 2** of the ES (Document Reference: 6.2.15).

Effect during the operation and maintenance phase

3.3.37 There will be no significant effects on landscape character during the operation and maintenance phase.

3.3.38 By the end of the construction phase, all areas of the onshore cable corridor, including temporary construction compounds at Climping and Washington, trenchless crossing construction compounds and construction accesses will have been reinstated. As a minimum, the onshore cable corridor fencing and temporary construction haul road would be removed, topsoil reinstated and where required grass / pasture reinstated.

3.3.39 Taking account of the reinstatement there will be no residual effects on SLQ 1 and "*Diverse, inspirational landscapes and breathtaking views"*.

3.3.40 It is however likely that localised and significant effects on particular landscape elements (trees, woodland and hedges) will be sustained through Years 1 to 10 reflecting the loss of mature trees, woodland and hedges that cannot be replaced in Year 1. These effects will be partly mitigated through the provision of new, replacement native planting as part of the **Outline LEMP** (Document Reference: 7.10). These landscape elements will be maintained for 10 Years. These localised effects on individual landscape elements will appear in isolation and will not be sufficient in number, density, pattern or distribution to sustain significant effects on landscape character. There will be no obvious 'linkage' between them due to the reinstatement of the onshore cable corridor.

3.3.41 These effects are not considered as significant in terms of preserving natural beauty or SLQ 1: *Diverse inspirational landscapes and breathtaking views* because of their smaller scale and role in terms of mitigation.

Cumulative and Whole Proposed Development effects

3.3.42 The effects of the offshore elements of the Proposed Development are restricted to visual effects only and assessed in the SLVIA reported in **Chapter 15:**

Seascape, landscape and visual assessment, Volume 2 of the ES (Document Reference: 6.2.15). That assessment concludes that south facing views from the A3: Arun to Adur Open Downs LCA will be significantly affected (**Moderate**).

3.3.43 The likelihood of significant visual effects occurring concurrently due to the visibility of the offshore elements of the Proposed Development (installation and commissioning of the offshore substation and wind turbines) and the construction of the onshore cable corridor will be limited to approximately 12 months due to the overlap of the indicative construction programme.

Conclusion

3.3.44 The onshore cable corridor and associated trenchless crossing construction compounds will have a **Major to Moderate** and **Significant** effect on the landscape character within the SDNP and the adjacent landscapes along the boundary of the SDNP which define its landscape setting. The geographical extent of these effects will extend to areas within approximately 250m to 650m of the onshore cable corridor and in particular within the A3: Arun to Adur Open Downs LCA.

3.3.45 This will constitute a significant effect on the part of the SLQ 1 – the "*Diverse, inspirational landscapes and breathtaking views*" limited to the construction phase.

3.3.46 The duration of these effects will be short-term, with temporary construction work along the onshore cable corridor completed in discrete sections (typically 600m – 1,000m of onshore cable corridor) with progressive backfill and reinstatement commenced in as shortest timeframe as practical (embedded environmental measures C-19 to C-20, **Section 18.7, Table 18-25** in **Chapter 18: Landscape and visual impact, Volume 2** (Document Reference: 6.2.18) of the ES).

SLQ 3. Tranquil and unspoilt places

Overview

3.3.47 The supporting text to this special quality is relatively short as follows:

> *"The South Downs National Park is in South East England, one of the most crowded parts of the United Kingdom. Although its most popular locations are heavily visited, many people greatly value the sense of tranquillity and unspoilt places which give them a feeling of peace and space. In some areas the landscape seems to possess a timeless quality, largely lacking intrusive development and retaining areas of dark night skies. This is a place where people seek to escape from the hustle and bustle in this busy part of England, to relax, unwind and re-charge their batteries."* (South Downs National Park, 2015a)

3.3.48 This is supported by GLVIA 3 which defines tranquillity as:

> *"A state of calm and quietude associated with peace, considered to be a significant asset of the landscape."*

3.3.49 It is a perceptual quality of the landscape and is '*influenced by things that people can both see and hear in the landscape around them'* (SDNPA, 2017).

3.3.50 However, across the SDNP tranquillity is a variable quality which is illustrated in Appendix 1, of the SDNPA Tranquillity Study (2017) which shows a map of relative tranquillity, based on Campaign to Protect Rural England (CPRE) (2008) data. Areas of lowest tranquillity coincide with the outer edges of the SDNP and the main transport routes and built-up areas along the A27 in the south and the A283 in the north. The greatest intensity is experienced in the central areas of the SDNP which are remote from people with a heightened sense of perceived naturalness (ancient woodland and chalk grassland) wide open spaces and views and the ability to see the stars at night. These qualities are strongest and typical of the A3: Arun to Adur Open Downs LCA, but also within the quite areas of woodland and fields within the B4 Angmering and Clapham Wooded Estate Downland and the I3 Arun to Adur Downs Scarp LCAs.

3.3.51 These characteristics are referred to in the Arun to Adur Open Downs A3 where one of the key characteristics is noted in the South Downs Landscape Character Assessment (LCA) (South Downs National Park, 2020) as a:

> "*A strong sense of remoteness and tranquillity with pockets of deep remoteness associated with hidden dry valleys and higher reaches of the dip slope.*"

3.3.52 Tranquillity is also referred to as a key characteristic of the Arun Valley Sides G4:

> "*The limited road network ensures the valley sides provide a tranquil, rural setting to the River Arun and its floodplain.*"

3.3.53 The sensitivity of this SLQ to the onshore cable corridor is assessed as High.

Effect during the construction phase

3.3.54 Factors that adversely affect perceptions of tranquillity include the presence of other people, visibility and / or the sound of man-made development such as urban areas, roads, airports, power lines, mineral extraction, wind farms and industrial development. Temporary construction activity along the onshore cable corridor is therefore likely to adversely affect the perception of tranquillity within part of the SDNP and in particular those LCAs where it is noted as a key characteristic.

3.3.55 The noise assessment is reported in **Chapter 21: Noise and vibration, Volume 2** of the ES (Document Reference: 6.2.21). It is anticipated that temporary construction activities along the onshore cable corridor will result in noise levels of up to 75dB, occurring between 07:00 to 19:00 hours Monday to Friday and 08:00 to 13:00 hours on Saturday with only exceptional activities occurring on Sundays and public / bank holidays. However, the worst-case noise levels when the works are sufficiently close to result in these levels (within 50m) will be for a maximum of two days. Other sources of noise within the SDNP will be from the Washington construction compound adjacent to the northern boundary of the SDNP which is predicted to result in 65 – 70 dB within the SDNP at the highest noise level, trenchless crossings, 55 – 75 dB within the SDNP at the highest noise level dependant on drill rig location, and construction and use of access routes, 41 – 59 dB within the SDNP. Notably construction noise will affect tranquillity in areas where it can be heard but may not be visible due to landform or vegetation

screening. The duration of these effects is likely to be limited to a few days as the works pass through the landscape.

3.3.56 Effects on SLQ 3 Tranquil and unspoilt places will be both visual and audible, significantly affecting the four LCAs within the SDNP including the R1: South Downs Upper Coastal Plain; the B4: Angmering and Clapham Wooded Estate Downland the A3: Arun to Adur Open Downs and the J3: Arun to Adur Scarp Footslopes. Within the A3: Arun to Adur Open Downs LCA in particular the temporary construction activity along the onshore cable corridor will have an acute contrast with the perceptual qualities of this LCA which contribute to the strong sense of tranquillity and include a simple landscape, stillness, quiet, and perceived naturalness. Many of the viewpoints illustrate intermittent visibility of the onshore cable corridor through this landscape and the effects of construction noise will ensure that effects on perceived tranquillity will extend to areas where the onshore cable corridor may be screened by landform or vegetation.

3.3.57 Effects on tranquillity are also likely to affect some areas of the SDNP setting as indicated by **Viewpoint J1: PRoW 2709 at All Saints Church, Wiston** (**Figure 18.50, Volume 3** of the ES (Document Reference: 6.3.18)) within parts of the F1: Pulborough Chiltington & Thakeham Farmlands and G1: Ashurst & Wiston Wooded Farmlands which border the SDNP to the north.

3.3.58 The geographical extent of these effects will be contained within one or two field boundaries (approximately 250m of the onshore cable corridor) due to the screening effects of existing trees, woodland and hedgerows. However, the effects will extend to within approximately 650m of the onshore cable corridor when viewed from hill tops and open areas within the A3: Arun to Adur Open Downs LCA. The magnitude of change affecting these views ranges from High to Medium.

Effect during the operation and maintenance phase

3.3.59 By the end of the construction phase, all areas of the onshore cable corridor, including trenchless crossing construction compounds will have been reinstated. As a minimum, the onshore cable corridor fencing and haul road would be removed, topsoil reinstated and where required grass / pasture reinstated.

3.3.60 Localised and significant effects on landscape elements (trees, woodland and hedges) will be partly mitigated through the provision of new, replacement native planting as part of the **Outline LEMP,** (Document Reference: 7.10).

3.3.61 Taking account of the reinstatement and replacement planting there will be no residual effects on SLQ 3 and perceived tranquillity.

Cumulative and Whole Proposed Development effects

3.3.62 The effects of the offshore elements of the Proposed Development are restricted to visual effects only and assessed in the SLVIA reported in **Chapter 15: Seascape, landscape and visual assessment, Volume 2** of the ES (Document Reference: 6.2.15). That assessment concludes that the magnitude of change and level of effect SLQ 3 and perceived tranquillity will be **Moderate** and **Not Significant.**

3.3.63 The landscape and visual effects of the onshore elements of the Proposed Development in combination with the A27 Arundel Bypass (ID 1) are unlikely to lead to significant cumulative effects on perceptions of tranquillity due to the presence of the existing A27 corridor and associated traffic already in the baseline.

Conclusion

3.3.64 The onshore cable corridor and associated trenchless crossing construction compounds will have a **Major to Moderate** and **Significant** effect on part of the landscape character within the SDNP and the adjacent landscapes along part of the northern boundary of the SDNP which define its landscape setting. The geographical extent of these effects will extend to areas within approximately 250m to 650m of the onshore cable corridor when viewed or heard from areas of the landscape along the onshore cable corridor and in particular from within the A3: Arun to Adur Open Downs LCA.

3.3.65 This will constitute a significant effect on the SLQ 3 and perceived tranquillity, limited to the construction phase.

3.3.66 The duration of these effects will be short-term, with temporary construction work along the onshore cable corridor completed in discrete sections (typically 600m – 1,000m of onshore cable corridor) with progressive backfill and reinstatement commenced in as shortest timeframe as practical (embedded environmental measures C-19 and C-20, **Section 18.7, Table 18-25** in **Chapter 18: Landscape and visual impact, Volume 2** (Document Reference: 6.2.18) of the ES.

SLQ 5. Great Opportunities for Recreational Activities and Learning Experiences

Overview

3.3.67 The supporting text notably refers to "*3,200 kilometres (2,000 miles) of public rights of way and the entire South Downs Way National Trail*" which provide "*exceptional scope for walking, cycling and horse riding.*" Other noted activities such as paragliding, orienteering and canoeing are less sensitivity to the onshore elements of the Proposed Development and will not be significantly affected. Walking in particular involves a strong appreciation or connection with the landscape whereas the other activities are more sports orientated.

3.3.68 The sensitivity of this SLQ, as it relates to walking and related recreational activity is assessed as High.

Construction phase effects

3.3.69 An assessment of the effects on the views and visual amenity experienced by people on PRoWs, including the South Downs Way, open access land and at other recreational / visitor attraction locations are set out in **Appendix 18.4: Visual assessment, Volume 4** of the ES (Document Reference: 6.4.18.4).

3.3.70 During the construction phase, the views and visual amenity of relatively short sections of approximately 25 PRoWs and part of the South Downs Way will be **Significantly** affected by the onshore cable corridor during the construction phase. The Monarch's Way will be crossed via a trenchless crossing and not

significantly affected. None of the PRoW will be closed during the construction phase, but they will be subject to temporary diversions, allowing works to progress. There are a number of hilltops and areas of open access land within the SDNP that will also be **Significantly** affected in terms of their views and visual amenity. These include, Barpham Hill (**Viewpoint F1 and F1a:** PRoW 2191_2 Barpham Hill, **Figure 18.28, Volume 3** of the ES (Document Reference: 6.3.18)) and Sullington Hill **Viewpoint NP5: PRoW 2282, East of Sullington Hill** (**Figure 18.73, Volume 3** of the ES (Document Reference: 6.3.18)).

3.3.71 There are approximately 62.35km of PRoW within the SDNP, that are within the ZTV and 1km distance from the onshore cable corridor, the views from which could be significantly affected. This represents just under 2% of the PRoW resource within the SDNP and a similarly low percentage of the South Downs Way which is 160km length in total. Although these PRoW routes are significantly affected on an individual and local basis, collectively the SLQ "*Great opportunities for recreational activities*" will not be significantly diminished. Walkers in particular will still be able to access the open access land and PRoW including the South Downs Way and undertake recreational activities, walking through these areas and passing through and beyond the linear onshore cable corridor to continue with their activity. The magnitude of change is assessed as **Negligible-Zero** and the level of effect will be **Minor** and **Not Significant**.

3.3.72 Although PRoW along the boundary and within the setting of the SDNP will be crossed by the onshore cable corridor and significantly affected, these PRoW routes tend to be separated from the SDNP by major roads (A27, A24 and A283) such that the effects pathway linking effects on these PRoW to the SDNP and its setting are interrupted.

3.3.73 The construction works will be a major piece of environmental planning and engineering to support offshore renewable energy generation in response to climate change. It represents an important learning and experiential opportunity.

Operation and maintenance phase effects – Year 1

3.3.74 Post-reinstatement of the onshore cable corridor there will be **No Significant** effects on recreational activities.

Cumulative and Whole Proposed Development effects

3.3.75 The effects of the offshore elements of the Proposed Development are restricted to visual effects only and assessed in the SLVIA reported in **Chapter 15: Seascape, landscape and visual assessment, Volume 2** of the ES (Document Reference: 6.2.15). That assessment concludes **No Significant** effects on SLQ 5

3.3.76 The onshore cable corridor will not contribute significantly to cumulative development because of the limited occurrence of other development within the SDNP. The Lyminster Bypass (ID 59) will be completed by 2024 and within the future baseline and the Arundel Bypass (ID 1) is remote from the cable corridor.

Conclusion: Effects on SLQ 5 and the setting of the SDNP

3.3.77 Notwithstanding the significant effects on individual PRoW including the South Downs Way SLQ 3 "*Great opportunities for recreational activities*" will not be significantly diminished of affected either within the SDNP or its setting.

Stage 4: Statement of Significance

Overview

3.3.78 The onshore cable corridor crosses the SDNP between the A27 and the A283 and the assessment is limited to the effects of the onshore cable corridor on the SDNP special qualities, setting and integrity during the construction and the operation and maintenance phases.

3.3.79 There will be no effect on the SDNP during the decommissioning phase and no effect on the SDNP as a result of the onshore substation at Oakendene and the National Grid Bolney substation extension.

3.3.80 Two of the seven special qualities of the SDNP will be significantly affected within the Study Area:

1) diverse, inspirational landscapes and breathtaking views; and

3) tranquil and unspoilt places.

3.3.81 The nature of these effects will extend across part of the SDNP and its setting and expound from significant effects on landscape character and visual receptors that will occur during the construction phase.

3.3.82 The duration of these effects will be short-term, with temporary construction work along the onshore cable corridor completed in discrete sections (typically 600m – 1,000m of onshore cable corridor) with progressive backfill and reinstatement commenced in as shortest timeframe as practical (embedded environmental measures C-19 and C-20, **Section 18.7, Table 18-25** in **Chapter 18: Landscape and visual impact, Volume 2** (Document Reference: 6.2.18) of the ES).

3.3.83 There would be no effect on the South Downs International Dark Sky Reserve or 'dark skies' within the SDNP.

3.3.84 In terms of the integrity of the SDNP, the short duration of these effects and the largely reversable nature of the effects (in that the onshore cable corridor will be reinstated and hedgerows re-planted) indicates that the integrity of this part of the SDNP (within the LVIA Study Area) will not be adversely or significantly affected.

3.3.85 Further mitigation such as detailed construction program planning will limit the effects within the SDNP as set out in embedded environmental measure C-66 within the **Commitments Register** (Document Reference: 7.22).

3.4 High Weald Area of Outstanding Natural Beauty

3.4.1 The High Weald Area of Outstanding Natural Beaty (AONB) will not be directly affected by the onshore elements of the Proposed Development however it may be indirectly affected in terms of its special qualities, setting and integrity.

3.4.2 The High Weald AONB is described on their website (High Weald AONB, 2021) as:

> "*A medieval landscape of wooded, rolling hills, studded with sandstone outcrops; small, irregular-shaped fields; scattered farmsteads; and ancient routeways. The 1,461km^2 area covers parts of Kent, Sussex and Surrey at the heart of South East England.*"

3.4.3 Key attractions within the High Weald AONB include over 30 small manor houses, castles and parks and gardens (nine managed by the National Trust); and other visitor attractions such as Bewl Water; Harrison's Rocks; Bedgebury Forest and three steam railways.

3.4.4 The Statement of Significance 2019-24 defines what makes the High Weald special and identifies the qualities that justify its designation as a nationally important landscape (High Weald AONB, 2019, p23). Five special qualities are identified as follows:

- "*1. Geology, landform and water systems – a deeply incised, ridged and faulted landform of clays and sandstone with numerous gill streams.*
- *2. Settlement – dispersed historic settlement including high densities of isolated farmsteads and late Medieval villages founded on trade and non-agricultural rural industries.*
- *3. Routeways – a dense network of historic routeways (now roads, tracks and paths).*
- *4. Woodland – abundance of ancient woodland, highly interconnected and in smallholdings.*
- *5. Field and Heath – small, irregular and productive fields, bounded by hedgerows and woods, and typically used for livestock grazing; with distinctive zones of lowland heaths, and incised river valleys.*
- *Land-based economy and related rural life bound up with, and underpinning, the observable character of the landscape with roots extending deep into history. An increasingly broad-based economy but with a significant land-based sector and related community life focused on mixed farming (particularly family farms and smallholdings), woodland management and rural crafts.*
- *Other qualities and features that are connected to the interaction between the landscape and people and which enrich character components. Such qualities and features enhance health and wellbeing, and foster enjoyment and appreciation of the beauty of nature. These include locally distinctive features which enrich the character components such as historic parks and gardens, orchards, hop gardens, veteran trees, along with their rich and varied biodiversity, and a wide range of appealing and locally distinctive historic buildings including oast houses, farm buildings, Wealden Hall houses and their associated features such as clay-tile catslide roofs. People value the wonderful views and scenic beauty of the High Weald with its relative tranquillity. They appreciate the area's ancientness and sense of history, its intrinsically dark landscape with the opportunity to see our own galaxy – the Milky Way – and the ability to get close to nature through the myriad public rights of way.*"

3.4.5 Perceptions of scenic beauty and tranquillity are noted as relevant SLQ. Additionally, the wooded character and incised nature of some of the valleys indicates higher levels of enclosure and limited views out from the High Weald AONB towards the onshore substation at Oakendene and the National Grid Bolney substation extension as well as the interconnecting onshore cable corridors.

3.4.6 The setting of the High Weald AONB is not defined but is likely to include areas close to the boundary with common landscape character, qualities and views out from the AONB beyond the boundary to landmarks such as the chalk escarpment in the SDNP (**Viewpoint M: High Weald Landscape Trail (near Bolney)** (**Figure 18.57, Volume 3** of the ES (Document Reference: 6.3.18)). The setting also includes views back towards the High Weald AONB from the surrounding landscape.

3.4.7 Drawing from the LVIA in **Section 9**, **Chapter 18: Landscape and visual impact, Volume 2** of the ES (Document Reference: 6.2.18), no significant effects on landscape character have been identified within the High Weald AONB or along its boundary and no significant visual effects have been identified in respect of views from visual receptors within the High Weald AONB, viewing south or on views north towards landmarks within the High Weald AONB that could affect its setting. The following viewpoints are located within the High Weald AONB:

- **Viewpoint SA6: PRoW 1750 north of Aglands** (omitted due to limited visibility); and
- **Viewpoint M: High Weald Landscape Trail (near Bolney)** (**Figure 18.57, Volume 3** of the ES (Document Reference: 6.3.18)).

3.4.8 Neither of these will view the onshore elements of the Proposed Development due to the intervening distance and vegetation screening.

3.4.9 Consequently, there will be **No Effect** on the special qualities, setting and integrity of the High Weald AONB.

4. Glossary of terms and abbreviations

Table 4-1 Glossary of terms and abbreviations

Term (acronym)	Definition
AONB	Area of Outstanding Natural Beauty
Baseline conditions	The environment as it appears (or would appear) immediately prior to the implementation of the Proposed Development together with any known or foreseeable future changes that will take place before completion of the Proposed Development.
Beneficial or Adverse Types of Landscape Effect	The landscape effects may be beneficial, neutral, or adverse. In landscape terms – a beneficial effect would require development to add to the landscape quality and character of an area. Neutral landscape effects would include low or negligible changes that may be considered as part of the 'normal' landscape processes such as maintenance or harvesting activities. An adverse effect may include the loss of landscape elements such as mature trees and hedgerows as part of construction leading to a reduction in the landscape quality and character of an area.
Beneficial or Adverse Types of Visual Effect	The visual effects may be beneficial, neutral, or adverse. In visual terms – beneficial or adverse effects are less easy to define or quantify and require a subjective consideration of a number of factors affecting the view, which may be beneficial, neutral, or adverse. However it is not the assumption of this assessment that all change, including significant change is a negative experience. Rather this assessment has considered factors such as the visual composition of the landscape in the view together with the design and composition, which may or may not be reasonably, accommodated within the scale and character of the landscape as perceived from the receptor location.
Cumulative effects	Additional changes caused by a Proposed Development in conjunction with other similar developments or as a combined effect of a set of developments, taken together.
Cumulative Effects Assessment (CEA)	Assessment of impacts as a result of the incremental changes caused by other past, present and reasonably foreseeable human activities and natural processes together with the Proposed Development.

Term (acronym)	Definition
Cumulative landscape effects	Effects that 'can impact on either the physical fabric or character of the landscape, or any special values attached to it' (SNH, 2012)
Cumulative visual effects: **In combination** **In succession** **Sequentially**	Effects that can be caused by combined visibility, which 'occurs where the observer is able to see two or more developments from one viewpoint' and/or sequential effects which 'occur when the observer has to move to another viewpoint to see different developments' (SNH 2012) • In combination: Where two or more developments are or would be within the observer's arc of vision at the same time without moving his/her head (GLVIA3, 2013 Table 7.1). • In succession: Where the observer has to turn his/her head to see the various developments – actual and visualised (GLVIA3, 2013 Table 7.1). • Sequential cumulative effect. Occurs where the observer has to move to another viewpoint to see the same or different developments. Sequential effects may be assessed for travel along regularly used routes such as major roads or popular paths (GLVIA3, 2013 Table 7.1).
Decommissioning	The phase during which a development and its associated processes are removed from active operation.
Degree of change	A combination of the scale extent and duration of an effect also defined as 'magnitude'.
Designated Landscape	Areas of landscape identified as being of importance at international, national or local levels, either defined by statue or identified in development plans or other documents.
Direct effects	An effect that is directly attributable to the Proposed Development.
Elements	Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.
Embedded environmental measures	Equate to 'primary environmental measures' as defined by Institute of Environmental Management and Assessment (2016). They are measures to avoid or reduce environmental effects that are directly incorporated into the preferred masterplan for the Proposed Development.
Environmental Impact Assessment (EIA)	The process of evaluating the likely significant environmental effects of a proposed project or development over and above the existing circumstances (or 'baseline').

Term (acronym)	Definition
Environmental Measures	Measures which are proposed to prevent, reduce and where possible offset any significant adverse effects (or to avoid, reduce and if possible remedy identified effects. (GLVIA3, 2013 Para 3.37).
Environmental Statement (ES)	The written output presenting the full findings of the Environmental Impact Assessment.
Feature	Particularly prominent or eye-catching elements in the landscape such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.
GLVIA 3	Guidelines for Landscape and Visual Impact Assessment, Third Edition, published jointly by the Landscape Institute and Institute of Environmental Management and Assessment, 2013.
Heritage	The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.
IEMA	Institute of Environmental Management and Assessment
Impact	The changes resulting from an action.
Indirect effects	Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects. Often used to describe effects on landscape character that are not directly impacted by the Proposed Development such as effects on perceptual characteristics and qualities of the landscape.
Key characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
Land cover	The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.
Landscape and Visual Impact Assessment (LVIA)	A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.
Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

Term (acronym)	Definition
Landscape Character Area (LCA)	These are single unique areas which are the discrete geographical areas of a particular landscape type.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Types (LCTs)	Distinct types of landscape which are relatively homogenous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement patterns, and perceptual and aesthetic attributes (GLVIA3 2013).
Landscape effects	Effects on the landscape as a resource in its own right. An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern here is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. (GLVIA3 2013, Para 5.1).
Landscape patterns	Spatial distributions of landscape elements combining to form patterns, which may be distinctive, recognisable and describable e.g. hedgerows and stream patterns.
Landscape qualities	A term used to describe the aesthetic or perceptual and intangible characteristics of the landscape such as scenic quality, tranquillity, sense of wildness or remoteness. Cultural and artistic references may also be described here.
Landscape quality (condition)	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal
Landscape resource	The combination of elements that contribute to landscape context, character, and value.

Term (acronym)	Definition
Landscape sensitivity	The sensitivity of the landscape to a particular development considers the susceptibility of the landscape and its value.
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
Level of effect	Determined through the combination of sensitivity of the receptor and the proposed magnitude of change brought about by the development.
Likely Significant Effects	It is a requirement of Environmental Impact Assessment Regulations to determine the likely significant effects of the Proposed Development on the environment which should relate to the level of an effect and the type of effect.
Magnitude (of change)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short term or long term in duration'. Also known as the 'degree' or 'nature' of change.
Onshore part of the Proposed DCO Order Limits	An area that encompasses all planned onshore infrastructure.
Perception	Combines the sensory (that we receive through our senses) with the cognitive (our knowledge and understanding gained from many sources and experiences).
Perceptual Aspects	A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity. (GLVIA3, 2013 Box 5.1)
Preliminary Environmental Information Report (PEIR)	The written output of the Environmental Impact Assessment undertaken to date for the Proposed Development. It is developed to support formal consultation and presents the preliminary findings of the assessment to allow an informed view to be developed of the Proposed Development, the assessment approach that has been undertaken, and the preliminary conclusions on the likely significant effects of the Proposed Development and environmental measures proposed.
Proposed Development	The development that is subject to the application for development consent, as described in **Chapter 4: The Proposed Development, Volume 2** of the ES (Document Reference: 6.2.4).

Term (acronym)	Definition
Receptor	Physical landscape resource, special interest, or viewer group that will experience an effect.
Scenic quality	Depends upon perception and reflects the particular combination and pattern of elements in the landscape, its aesthetic qualities, its more intangible sense of place or 'genius loci' and other more intangible qualities. (GLVIA3 2013, Box 5.1)
SDNP / SDNPA	South Downs National Park / South Downs National Park Authority
Seascape	Landscapes with views of the coast or seas, and coasts and adjacent marine environments with cultural, historical and archaeological links with each other.
Sense of Place (genius loci)	The essential character and spirit of an area: 'genius loci' literally means 'spirit of the place'.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor.
Significance	A measure of the importance of the environmental effect, defined by criteria specific to the environmental aspect.
Significant effects	It is a requirement of the EIA Regulations to determine the likely significant effects of the development on the environment which should relate to the level of an effect and the type of effect. Where possible significant effects should be mitigated. The significance of an effect gives an indication as to the degree of importance (based on the magnitude of the effect and the sensitivity of the receptor) that should be attached to the impact described. Whether or not an effect should be considered significant is not absolute and requires the application of professional judgement. Significant – 'noteworthy, of considerable amount or effect or importance, not insignificant or negligible'. The Concise Oxford Dictionary. Those levels and types of landscape and visual effect likely to have a major or important / noteworthy or special effect of which a decision maker should take particular note.
SLVIA	Seascape, Landscape and Visual Impact Assessment

Term (acronym)	Definition
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific Proposed Development without undue negative consequences.
Temporary or permanent effects	Effects may be considered as temporary or permanent. In the case of wind energy development the Application is for a 30 year period after which the assessment assumes that decommissioning will occur and that the site will be restored. For these reasons the development is referred to as long term and reversible.
Type or Nature of effect	Whether an effect is direct or indirect, temporary or permanent, positive (beneficial), neutral or negative (adverse) or cumulative.
Viewpoints	Selected for illustration of the visual effects fall broadly into three groups: Representative Viewpoints: selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ – for example certain points may be chosen to represent the view of users of particular public footpaths and bridleways; Specific Viewpoints: chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, such as landscapes with statutory landscape designations or viewpoints with particular cultural landscape associations. Illustrative Viewpoints: chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations. (GLVIA3 2013, Para 6.19)
Visual amenity	The overall views and surroundings, which provide a visual setting or backdrop to the activities of people living, working, recreating, visiting or travelling through an area.
Visual effect	Effects on specific views and on the general visual amenity experienced by people.
Visual Receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visual sensitivity	The sensitivity of visual receptors such as residents, relative to their location and context, to visual change proposed by development.

Term (acronym)	Definition
Visualisation	Computer visualisation, photomontage, or other technique to illustrate the appearance of the development from a known location.
Zone of Theoretical Visibility (ZTV)*	A map, usually digitally produced, showing areas of land within which a development is theoretical visible.

5. References

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Rampion 2
WIND FARM