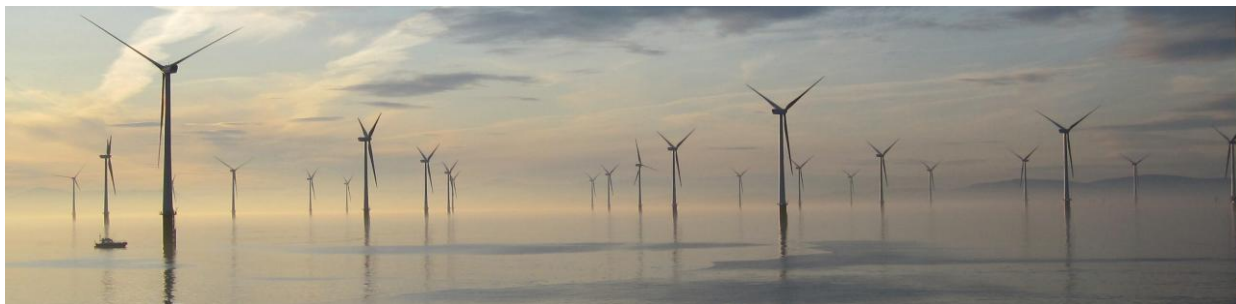




Rampion Offshore Wind Farm



ES Section 26 – Landscape & Visual Impact Assessment

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26 LANDSCAPE AND VISUAL IMPACT

26.1 Introduction

- 26.1.1 This section of the Environmental Statement (ES) reports the findings of a landscape and visual impact assessment (LVIA) undertaken for the proposed onshore cable route and onshore substation for the Rampion Offshore Wind Farm (the Project).
- 26.1.2 The landscape assessment has considered the effects of the onshore cable route and substation on the landscape as an environmental resource, specifically:
- The effect on the landscape fabric (identifiable as physical components that make up the landscape, such as woodlands and hedgerows); and
 - The effect on landscape character (identifiable as areas exhibiting a distinct, recognisable and consistent pattern of landscape elements).
- 26.1.3 The visual assessment has considered the effect of visual change on receptors (identified as residents, visitors to the area, people working in the area etc).
- 26.1.4 Both assessments have been undertaken in parallel, and have been informed by a combination of desk and site based appraisal techniques and professional judgement.
- 26.1.5 This assessment should be read in conjunction with Section 12 (Seascape, Landscape and Visual Impact), which assesses the landscape and visual impacts of the offshore components of the Project.

26.2 Legislation and Policy Context

National Policy

- 26.2.1 The National Policy Statement (NPS) for Energy Infrastructure (EN-1) contains the following statements which are of relevance to landscape/visual amenity:
- 26.2.2 Paragraph 1.7.2 states that: *“The development of new energy infrastructure, at the scale and speed required to meet the current and future need, is likely to have some negative impacts on biodiversity, landscape/visual amenity and cultural heritage ... the impacts on landscape/visual amenity in particular will sometimes be hard to mitigate.”*
- 26.2.3 Paragraph 5.9.1 states that: *“The landscape and visual impacts of energy projects will vary on a case by case basis according to the type of development, its location and the landscape setting of the proposed development. In this context, references to landscape should be taken as covering seascape and townscape where appropriate.”*

26.2.4 Paragraph 5.9.18 states that: *“All proposed energy infrastructure is likely to have visual impacts for many receptors around proposed sites. The [Secretary of State] will have to judge whether the visual impacts on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast.”*

26.2.5 The NPS for Renewable Energy Infrastructure (EN-3) contains the following statements which are of relevance to landscape/visual amenity:

26.2.6 Paragraph 2.4.2 states that: *“Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity.”*

26.2.7 The assessment has been undertaken in accordance with the National Planning Policy Framework (NPPF), which outlines Government policy on the treatment of landscape and visual amenity within the local planning process.

Policy Guidance

26.2.8 Adopted and emerging policies that are relevant to the Project are addressed in Section 4 (Planning Policy Context).

Regional Policy

26.2.9 The Regional Spatial Strategy for the South East of England (‘The South East Plan’) (May 2009) provides a planning framework at the regional level.

26.2.10 The South East Plan includes a series of core regional and sub-regional policies of relevance to landscape and visual interests; these specifically relate to the protection of the countryside, and the built and historic environment.

County Policy

26.2.11 The West Sussex Structure Plan 2001 – 2016 provides a broad planning framework for the West Sussex area.

26.2.12 This document acknowledges the exceptional character of West Sussex and contains a number of ‘saved’ strategic policies that allow for:

- Protecting and reinforcing the distinctiveness of the main natural character areas;
- Safeguarding the Areas of Outstanding Natural Beauty (AONB);
- Protecting woodlands and forests;
- Protecting rivers, waterways and the coast;

- Retaining the separate identities of towns and villages; and
- Protecting and enhancing towns and villages and the historic heritage of the County.

Local Policy

26.2.13 Section 4.1.5 of EN-1 notes that Development Plan Documents, or other documents in the Local Development Framework, may be relevant.

26.2.14 A number of established and emerging documents provide the local policy framework across the boroughs and districts of Adur, Horsham, Worthing, Mid Sussex, and the South Downs National Park.

26.2.15 Collectively these documents contain a series of environmental policies and management objectives that seek to ensure protection, conservation and enhancement of valued landscape, townscape, ecological, and recreationally important areas at the local level.

26.3 Assessment Methodology

Scope of the Assessment

26.3.1 Preliminary scoping of the LVIA was undertaken as part of a wider environmental impact assessment (EIA) scoping exercise, the findings of which were recorded in the Scoping Report (E.ON/RSK, September 2010) for the Project.

26.3.2 The report outlined the proposed approach to the LVIA, the form of methodologies to be followed, and the nature of potential impacts that could occur. Key issues identified during scoping were as follows:

- Construction of the onshore elements of the Project could involve the loss or fragmentation of important and distinctive landscape components (hedgerows, woodland, trees, and field patterns);
- The scale and form of the onshore elements of the Project could prove inappropriate and intrusive in the context of existing landform, settlement and character;
- The onshore elements of the Project could introduce activity, features and forms out of keeping with established cultural or historic landscapes; and,
- The onshore elements of the Project could alter the composition and quality of available views.

- 26.3.3 The Scoping Report concluded that landscape and visual impacts would occur during the construction of both the proposed cable route and substation, but that operational impacts would only be associated with the proposed substation - this forming the only permanent above-ground element of the proposals.
- 26.3.4 The Scoping Report was submitted to the Infrastructure Planning Commission (IPC) in September 2010. A Scoping Opinion (IPC, October 2010) was received from the IPC in October 2010 incorporating comments from a wide range of consultees. A copy of the Scoping Report and Scoping Opinion is included in Appendix 5.1 and Appendix 5.2.
- 26.3.5 The information and advice received during the scoping process with regard to LVIA is summarised in Table 26.1.

Table 26.1: Scoping Response Summary

Scoping response	Consideration within the assessment
IPC	
Scoping Response October 2010	
1. Reference should be made to the comments on landscape from West Sussex County Council (WSCC).	Consideration of WSCC comments on landscape matters is discussed in this table below.
2. Recognised guidelines should be used.	This guidance has been considered and referenced in this assessment.
3. The landscape and visual assessment should include the assessment of any access roads required for permanent access and temporary access during construction.	The assessment has covered these aspects, based on available Project details.
4. The assessment should include the consideration of any lighting required for the substation, access road to the substation and any lighting required on the National Grid apparatus.	The assessment has covered these aspects, based on available Project details.
5. Cross reference should be made to recreation regarding any visual impacts on public rights of way (PRoW) identified in the LVIA.	Reference is made to Section 28 (Onshore Socio-Economics).
6. Cross reference should be made to transport regarding the potential locations of construction compounds and lay down areas identified during the construction phase.	Reference is made to Section 29 (Transport).
Fulking Parish Council	
Scoping Response 29 September 2010	
1. There should be no overhead cables over the South Downs.	The entire cable route will be laid underground.
2. Potential long term damage and scarring to the land should be assessed.	The potential impacts of the proposed development have been assessed. Mitigation measures and reinstatement of the land following installation of the cable has been addressed as part of the LVIA and ES

Scoping response	Consideration within the assessment
3. There should be no digging in the Downs – any cables laid under the Downs should be laid using Horizontal Directional Drilling (HDD).	HDD of approximately 15km of cable route though the South Downs National Park would not be feasible. HDD will be employed where it is not possible to install the cable in open cut trenches, and to minimise impacts to sensitive features e.g. woodland. Refer to Section 2b - Project Description (Onshore) for the locations of these points.
4. A route next to the River Adur from Shoreham should be considered.	A cable route adjacent to the River Adur was considered as an alternative as part of the cable routeing study. The cable routeing study has been reported further in Section 3 (Route Selection and Consideration of Alternatives).
South Downs National Park Authority Scoping Response 8 October 2010	
1. Potential visual impacts from areas of coastline within the National Park, and from higher ground in the Downs, should be included in a visual impact assessment.	Potential visual impacts from within the National Park, and from higher ground in the Downs, particularly those from the South Downs Way, has been assessed as part of the LVIA. A meeting was held on 2 August 2011 with WSCC and South Downs National Park to further discuss critical views and visual impacts.
West Sussex County Council Scoping Response 12 October 2010	
1. Reference the Mid-Sussex Landscape Capacity Study 2007 (MS LCS 2007) by Hankinson Duckett Associates.	A meeting was held with WSCC on 16 November to further discuss the scoping response, where the MS LCS 2007 was discussed.
2. Need to establish the planting restrictions in proximity to the cable route and its impact on restoration.	Planting restrictions are outlined in 26.5 Construction and Design Mitigation, and Section 2b - Project Description (Onshore).
3. Include assessment of long term impacts of the following: Loss of historic field boundaries and mature trees. Any possible long-term opportunities for landscape restoration in accordance with WSCC Land Management Guidelines.	The potential impacts of the proposed development have been assessed. The LVIA and ES includes details of mitigation and reinstatement proposals as well as any proposed monitoring. The WSCC Land Management Guidelines has been used as a guide where necessary. There is also further detail in Section 23 (Ecology) and Section 25 (Archaeology and Cultural Heritage).
East Sussex County Council Scoping Response 11 October 2010	
1. Visual impact on recreational users should be recorded as part of the visual assessment, notably from open access areas on the South Downs.	The LVIA assesses visual impacts to recreational users including those within the South Downs.

Scoping response	Consideration within the assessment
Natural England Scoping Response 12 October 2010	
1. New development should consider the character and distinctiveness of the area and the EIA process should detail the layout alternatives and justification of the selected option in terms of landscape impact and benefit.	Refer to Section 3 (Route Selection and Consideration of Alternatives).
2. The EIA should detail the measures to be taken to ensure the design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.	Refer to Section 3 (Route Selection and Consideration of Alternatives).
3. Accurate maps of protected sites and designated sites should be included in the ES showing the spatial extent of the visual influence of the proposal.	In consultation with Horsham and WSCC it was agreed a Zone of Theoretical Visibility (ZTV) was not necessary for the assessment of the proposed substation due to the nature of the development, and the surrounding topography and vegetation. Regarding the cable route, a ZTV is not typically produced for underground and temporary works.
4. Protected landscapes must be assigned the highest level of sensitivity in the LVIA. Natural England would wish to see these special characteristics conserved and sustained.	Visual receptors along the South Downs Way National Trail and the landscape character of the South Downs National Park have been classified as being of high sensitivity.
5. Any other associated infrastructure development should be incorporated into the impact assessments.	The temporary construction, access roads and lay down areas have been included within the LVIA. Refer to Section 2b - Project Description (Onshore).
6. Good LVIA's will demonstrate how the impact assessment process was carried out iteratively and how these have informed the proposed development.	Refer to Section 3 (Route Selection and Consideration of Alternatives).
7. Guidance the applicant should consider (but not exclusively) includes: Guidelines for Landscape and Visual Impact Assessment (GLVIA); Second Edition, Spon Press, copyright by The Landscape Institute and the Institute of Environmental Management and Assessment, 2002.	This guidance has been considered and referenced.
8. The Environmental Statement should include full details of any mitigation or compensation that might be required.	The LVIA has included an assessment of direct and indirect effects, details of avoidance and mitigation measures proposed.
Woodmancote Parish Council Scoping Response 11 November 2010	
1. Please be aware of the small piece of Common Land at Hundred Steddle close to the route. The Council wish to be kept in consultation throughout the whole process.	The cable has been routed to avoid this Common Land. The Council has been informed directly at various points in the development process, e.g. to notify them

Scoping response	Consideration within the assessment
	of the consultations.

- 26.3.6 In addition to formal scoping, written consultation and meetings were undertaken with WSCC and Horsham District Council early in the assessment process to identify and agree viewpoints representative of potential visual impact, define appropriate study area extents and agree approaches to minimising and/or mitigating impacts.
- 26.3.7 For the proposed onshore substation and cable route it was considered appropriate to focus the LVIA on a study area extending 2km beyond the substation site and cable route corridor, as the process of scoping concluded that the nature and form of the proposals are such that any changes would – in the main – not be perceptible beyond this distance (due to a combination of topography, intervening vegetation and existing built form). Field survey work confirmed the limit of views within the immediate vicinity of the substation site, and the appropriateness of the 2km study area. This included views into and out of the High Weald AONB, which is located 2.3km north of the substation at its closest point.
- 26.3.8 Notwithstanding this, discussions identified a need to consider the potential implications of the proposed substation in more elevated, long distance views beyond the 2km study area. An additional viewpoint at Devil's Dyke (located approximately 10km south of the proposed substation site) was accordingly identified and brought into the overall assessment scope, as it was noted that the existing Bolney substation (located adjacent to the proposed substation site) is visible in the outlook from this promoted viewpoint.
- 26.3.9 The scope of the LVIA was modified accordingly to take into account the above consultee responses and the opinions of the IPC, the findings of which were reported in the Draft ES.

Formal Pre-application Consultation

- 26.3.10 As detailed in Section 5 - EIA Methodology, an extensive programme of engagement and consultation has been undertaken with regard to the Project, this included publication of the Draft ES as part of the Section 42 and Section 48 consultation.
- 26.3.11 Following a review of consultee feedback on the Draft ES, the following modifications were made to the Project and overall assessment scope:
- The addition of details related to the construction method including temporary compounds, cut-off drains and the locations of some side accesses;
 - The addition of further details regarding the engineering and chalk grassland reinstatement method at Tottington Mount;

- A review of the landscape character sensitivity assessment;
- Selection of a preferred substation site;
- A slightly revised substation layout; and,
- An update to the photomontages for viewpoints 1, 3 and 9 to reflect new substation dimensions. In line with the use of the “Rochdale Envelope” (see Section 5 (EIA Methodology)), the assessment has been based on a development scenario, which is considered to be the worst case. National Grid Technical Standard NGTS2.2 for substations states the maximum height of 400kV equipment is 12.5m; the substation photomontages have now been modelled to reflect this.

26.3.12 Full details of the consultation process and associated outcomes are documented in Document 5.1 [Consultation Report].

Assessment Guidance

26.3.13 This assessment has been undertaken in accordance with the methods outlined in the following best practice guidance:

- Guidelines for Landscape and Visual Impact Assessment (Second Edition), published by the Landscape Institute and the IEMA (2002) (GLVIA).
- Landscape Character Assessment: Guidance for England and Scotland, published by Scottish Natural Heritage and the Countryside Agency (2002).
- Landscape Institute Advice Note 01/2011: Photography and photomontage in landscape and visual assessment.

Stages in Landscape and Visual Impact Assessment

26.3.14 The following key tasks have been undertaken as part of the LVIA:

- Analysis and recording of the existing landscape character and visual context of the study area through desk based and field based appraisal, and computer modelling techniques;
- Appreciation of the nature, forms and features of the onshore elements of the Project;
- Assessment of the sensitivity of the existing landscape and identified visual receptors to change and the magnitude of impact predicted to result from implementation of the onshore elements of the Project;
- Identification of mitigation measures appropriate to the onshore elements of the Project and the receiving landscape; and,

- Identification of the residual effects to landscape character and visual amenity, and their overall significance (assuming implementation and establishment of mitigation).

26.3.15 The assessment process has been iterative, whereby the analysis of baseline conditions and the evaluation of potential effects resulting from the onshore elements of the Project has informed the development process and incorporation of mitigation measures into the design of the onshore elements.

Desk Studies

26.3.16 Preliminary identification, description and evaluation of the existing landscape and visual context of the study area involved a desk based review, mapping and interrogation of the following information sources:

- Responses obtained through the scoping and consultation processes;
- Ordnance Survey mapping and aerial photography relating to existing landform, vegetation, settlement patterns, promoted viewpoints and drainage regimes;
- Development plans containing information relating to landscape designations at the local, regional and national level;
- Engineering data and schematic plans relating to the proposals and their construction;
- National landscape character areas (LCAs), as defined by the Countryside Commission in conjunction with English Nature (now collectively called Natural England) in the 'Character of England Map';
- Local LCAs, as published and defined in: A Landscape Character Assessment for Mid Sussex (2005); Horsham District Landscape Character Assessment (2003); West Sussex Landscape Character Assessment (2003); and the South Downs Integrated Landscape Character Assessment (2005); and,
- Published studies on Historic Landscape Character (HLC) prepared by WSCC.

26.3.17 In relation to local landscape character, the assessment has relied on the boundaries and descriptions contained within the WSCC document, as this single study provides a comprehensive appraisal of existing landscape character across the entire study area at a level comparable to the size and scale of the proposals.

26.3.18 Adoption of the WSCC study for the onshore assessment also reflects the approach adopted in the assessment of the offshore components of the project, as set out in Section 12 (Seascape, Landscape and Visual Impact).

Field Study

26.3.19 Field surveys were undertaken to verify desk based information and inform the prediction of impacts of the onshore elements of the Project. Fieldwork involved the following activities:

- Three site visits, in April and October 2011 and February 2012, involving a line walk of the proposed route corridor and appraisal of the substation site;
- Annotation of Ordnance Survey plans to confirm character zone boundaries, record key landscape components and determine their contribution to overall character;
- Identification of principal views and representative viewpoints within the study area and recording of existing receptor outlook; and,
- Photographic recording of local LCAs, viewpoints and receptor locations to illustrate principal landscape components and existing visual relationships within the study area.

Computer Modelling

26.3.20 The assessment of the proposed substation has been aided by the preparation and review of visually representative material. A series of indicative computer-generated photomontages were produced from a number of agreed viewpoint locations within the study area; this was achieved by way of a comprehensive photographic study using 360-degree high-resolution digital photography.

26.3.21 Viewpoint locations were visited and photographed using a Canon EOS 550D digital SLR camera with a 30mm lens to achieve the same view as that of a 50mm lens on a standard 35mm film SLR camera. Panoramic photography was then merged and stitched using Autopano software.

26.3.22 Indicative photomontages were subsequently used in conjunction with the field surveys to assist the prediction of potential impacts and their order of magnitude.

Landscape Character Assessment

26.3.23 The existing landscape has been appraised from the national level down to a local scale commensurate to the study area. The description and classification of existing landscape character (informed by published studies and field surveys), analysis of intrinsic quality, and appreciation of value have informed the assessment.

26.3.24 Quality relates to the aesthetic appeal demonstrated by an individual LCA within the landscape. Areas of highest quality are those considered to comprise a clear composition of valued landscape components in robust form and health, free of disruptive visual detractors, exhibiting a strong sense of place and structure and containing distinct features worthy of conservation. Conversely, the poorest quality areas are those considered to lack valued landscape components or those comprising degraded, disturbed or derelict features, lacking any aesthetically pleasing composition with a dominance of visually detracting elements, exhibiting mixed land uses which conceal the baseline structure. Five grades of quality have been adopted in the assessment: highest quality; very attractive; good; ordinary; and poor.

26.3.25 Landscape value relates to LCAs of particular scenic quality or those displaying important historic and cultural associations. Landscape value is frequently addressed by reference to international, national, regional and local designations. An absence of a formal designation does not, however, indicate that a landscape is necessarily of low value; factors such as accessibility and local scarcity can render areas of unremarkable quality as a highly valuable local resource. Three grades of value have been adopted in the assessment: high, medium and low.

Landscape Sensitivity

26.3.26 The evaluation of sensitivity to change has involved consideration of the key characteristics, quality and value of individual LCAs. Criteria used to define landscape sensitivity are summarised below.

Table 26.2: Landscape Sensitivity

Sensitivity	Examples/Descriptors
High	Typically, a highly valued landscape of international and/or national landscape or conservation importance such as: National Parks; Areas of Outstanding Natural Beauty; and Registered Parks and Gardens of Historic Interest Most landscape elements remain intact and in good repair and most building styles and materials are local vernacular Small-scale landform/land cover/development; human-scale indicators; fine grained, enclosed with narrow views; sheltered Absence of man-made elements; traditional or historic settlements; natural features and 'natural' forms of amenity parkland, perceived as natural 'wild land' lacking in man-made features, land-use elements and detractors Sense of peace, isolation or wildness; remote and empty; no evident movement
Medium	Typically a valued landscape of regional or local landscape of conservation importance such as: Special Landscape Areas; and Unregistered Parks and Gardens of Historic Interest Some landscape elements remain intact and in good repair; some building styles/materials are local vernacular Medium-scale landform/land cover/development; textured; semi-enclosed with middle-distance views

Sensitivity	Examples/Descriptors
	Some evidence of man-made elements, which may be partially out of scale with the landscape and may be only partially consistent with vernacular styles Some noise is evident, but human activity/development is not dominant; noticeable movement
Low	Typically an undesignated landscape with some local community importance such as: parks; recreation areas; or the landscape has a value expressed in local publications Few landscape elements remain intact and in good repair; few buildings and material are in local vernacular Large-scale landform/land cover/development; featureless; coarse grained; open with broad views Frequent presence of utility, infrastructure or industrial elements; contemporary structures e.g. masts, pylons, cranes, silos and/or industrial sheds that have vertical emphasis; functional, man-made land-use patterns and engineered aspects evident Busy and noisy with obvious human activity and development; prominent movement.

Magnitude of Landscape Impact

26.3.27 Magnitude of impact in landscape terms considers the extent to which the proposed development would emerge as a new component in the landscape and change the balance between components that currently constitute existing character.

26.3.28 Determination has taken account of:

- The nature and scale of the change associated with the onshore elements of the Project;
- The likely duration of the change; and
- The degree of modification to key landscape characteristics, components and/or relationships of identified landscape character areas.

26.3.29 Magnitude of impact has been defined on the following five point scale.

Table 26.3: Magnitude of Landscape Impact

Magnitude	Definitions
Very Large	The development would result in a total loss of or major alteration to the balance or relationship of existing landscape elements or characteristics, or the addition of a dominant new landscape element(s). Change is likely to cause a direct adverse permanent impact on the integrity/value of the element(s).
Large	The development would result in a substantial loss of or alteration to the balance or relationship of existing landscape elements or characteristics, or the addition of a prominent new landscape element/s. Change is likely to cause a direct adverse long-term impact (of more than 10 years) on the integrity/value of the element(s).

Magnitude	Definitions
Medium	The development would result in a partial loss of or alteration to the balance or relationship of existing landscape elements or characteristics, or the addition of a noticeable new landscape element/s. Change is likely to impact adversely the integrity/value of the element/s, but recovery is predicted in the medium term (5–10 years); no permanent impact on its integrity is predicted
Small	The development would result in a minor loss of or alteration to the balance or relationship of existing landscape elements or characteristics, or the addition of an apparent, small new landscape element/s. Change is likely to adversely impact the integrity/value of the receptor but recovery is expected in the short term (1–4 years).
No Change	The development would not change the balance or relationship existing landscape elements or characteristics.

Visual Impact Assessment

26.3.30 The visual assessment for the onshore substation has been based on a detailed consideration of representative viewpoints; these have been selected to reflect key visual relationships from a variety of directions and distances from the identified substation site.

26.3.31 The visual assessment for the cable route is based on a series of principal views, located throughout the immediate hinterland of the study area and elevated vantage points coincident with the South Downs National Park. Identification was aided by splitting the route into a total of seven linear sections, the extents of which reflect the local LCA boundaries through which they pass.

26.3.32 The identification and selection of principal views and representative viewpoints for inclusion in the visual assessment was informed by the outcomes of the desk based and field based surveys, recommendations received during scoping and discussions held with relevant local authorities.

Visual Sensitivity

26.3.33 Visual sensitivity has considered the nature, location and existing visual context of identified receptors or viewpoints.

26.3.34 Criteria used to define visual sensitivity are summarised below. In cases where different categories of visual receptor are present at a selected representative viewpoint, the primary receptor category (i.e. the more sensitive) has been used in the assessment.

Table 26.4: Sensitivity of Visual Receptor

Sensitivity	Typical Receptors
High	Visual receptors with a particular interest in their surroundings or prolonged viewing opportunities: Occupants of residential locations; Visitors to special recreational sites; Users of nationally or locally recognised footpaths and cycle routes; and/or Users of recognised scenic

Sensitivity	Typical Receptors
	drives or promoted tourist routes.
Medium	Visual receptors with a general interest in their surroundings or with transient viewing opportunities: Users of general footpaths; Users of residential and local road; and/or Users of public spaces.
Low	Visual receptors with a limited or passing interest in their surroundings: People at places of employment; Users of indoor facilities; Users of commercial and industrial buildings; and/or Commuters.

Magnitude of Visual Impact

26.3.35 Magnitude of impact in visual terms considers the extent to which the proposals would modify the existing outlook.

26.3.36 Determination has taken account of: receptor type; context of the existing view; percentage of the existing view occupied by the proposals; viewing distance; and the viewing angle and position of the proposals in relation to the receptor.

Table 26.5: Magnitude of Visual Impact

Magnitude	Definitions
Very Large	The development would form the dominant element of the view, resulting in a dramatic change to the quality and character of the view. Commanding, controlling the view.
Large	The development would form a prominent element within the view, resulting in a prominent change to the quality and character of the view. Standing out, striking.
Medium	The development would form a conspicuous element within the view, resulting in a conspicuous change to the quality and character of the view. Noticeable, distinct, clearly visible, well defined.
Small	The development would form an apparent small element within the view, without affecting the overall quality and/or character of the view. Evident.
Negligible	The development would form an inconspicuous minor element within the view, without affecting the overall quality and/or character of the view. Lacking sharpness of definition, not obvious, indistinct, not clear.

Significance of Landscape and Visual Effects

26.3.37 The significance of the landscape or visual effects have been determined by assessing sensitivity against the magnitude of impact, taking account of any mitigation measures to be implemented as part of the proposals.

26.3.38 The following matrix has been used as an indicator to assist identification of effect significance.

Table 26.6: Significance of Landscape and Visual Effects

	Sensitivity		
Magnitude	High	Medium	Low
Very Large	Major	Major	Major/Moderate
Large	Major	Major/Moderate	Moderate
Medium	Major/Moderate	Moderate	Moderate to Minor
Small	Moderate	Moderate to Minor	Minor
Negligible/ No Change	Minor/Neutral	Neutral	Neutral

Approach to the Assessment

26.3.39 The assessment of impacts and evaluation of effects has been undertaken on the basis that all landscape mitigation measures form an integral part of the proposed scheme design, and will achieve their intended function over time. The principle of considering the evolving nature of effects is consistent with best practice procedure and guidance.

26.3.40 Assessments have therefore been undertaken to consider the progressive establishment and effectiveness of landscape mitigation at representative timeframes during the establishment and operation of the proposed development, relating to the construction phase, the winter year of opening, and the summer of year 15.

26.3.41 The assessment of the construction phase considers the range of activities which may give rise to temporary establishment effects. The assessment at winter year of opening considers the initial operational phase, when the degree of visual exposure is potentially greatest, when the screening effect of surrounding vegetation is diminished and prior to the establishment of mitigation planting. The assessment of effect at summer year 15 allows for a relative degree of maturity within mitigation planting and thereby takes account of the effectiveness of landscape measures associated with the scheme, in combination with the influence of surrounding vegetation in leaf.

26.3.42 The assessment of the effects over time demonstrates the contribution made by the mitigation measures to reducing the adverse effects of the scheme at different stages. Accordingly, a summary is provided of the proposed landscaping, its objectives, and effectiveness as a means of mitigating predicted impacts.

Rochdale Envelope Principles

26.3.43 In line with the use of the “Rochdale Envelope” (see Section 5 (EIA Methodology)), the assessment in this section has been based on a development scenario which is considered to be the worst case in terms of landscape and visual impacts.

- 26.3.44 Rochdale Envelope principles relating to the landscape and visual environment from the proposed onshore works relate primarily to the maximum development parameters associated with the cable route and substation (i.e. area of construction works and the final form of the development).
- 26.3.45 Installation of the cable route will require a working width no wider than 30m (except at the locations where HDD is proposed), within which will be a 15m permanent easement along the length of the route. The working area will incorporate storage space for excavated material (a 4m wide subsoil storage area and a 6m wide topsoil storage area) and a haul road (5m wide) for the safe passage of construction personnel and machinery alongside the cable trench.
- 26.3.46 The cable easement will not necessarily be central to the working width. Therefore, the Development Boundary generally encompasses a working width of 40m along the cable route. A 40m working width has therefore been taken to represent the worst case scenario for the assessment of landscape and visual impacts associated with the onshore cable route.
- 26.3.47 The LVIA has been based on an indicative layout at the substation site and maximum dimensions of plant, equipment and infrastructure such as transformer bays. The National Grid Technical Standard NGT2.2 for substation states the maximum height of 400kV equipment is 12.5m; a height of 12.5m has therefore been used for the tallest feature, the 400kV transformer bushings. The indicative layout is depicted on Figure 2b.3, and reflects those components presented in Section 2b: Project Description (Onshore).

Uncertainty and Technical Difficulties Encountered

- 26.3.48 Land access permission was not obtained for all land parcels along the proposed cable route. In these instances, assessments were made based on available information, aerial photography and views obtainable from nearby publicly accessible locations. At various points along the route there will be a requirement to install temporary site compounds. The exact locations of the compounds have not yet been identified as the principal contractor will have an input into the decision process. The location of one construction compound however, has been established at the base of Tottington Mount.
- 26.3.49 Two side accesses have been included within the assessment. Should further side accesses be required, then applications will be made to the Local Planning Authority as appropriate.

26.4 Baseline Conditions

Landscape Designations and Protected Features

- 26.4.1 The following planning designations and protected features of national significance are contained within or adjacent to the study area and are depicted on Figure 26.1.

- **South Downs National Park:** Established as Britain's newest National Park in 2011, the proposed cable route passes through the South Downs National Park within the southern extents of the study area.
 - **South Downs Way National Trail:** The proposed cable route crosses the 160km long South Downs Way, south east of Upper Beeding.
 - **High Weald AONB:** This historic designated area is located towards the northern extremities of the study area near Bolney.
 - **National Trust Land:** Three areas of National Trust land and features (Cissbury Ring, Shoreham Gap, and the Fulking Escarpment) are collectively set within the study area and fall within the South Downs National Park boundary.
- 26.4.2 Full details of historic, culturally and/or archaeologically important features within the landscape of the study area including reference to the HLC are provided in Section 25 (Archaeology and Cultural Heritage).
- 26.4.3 Full details of PRoW are provided in Section 28 (Onshore Socio-Economics).
- 26.4.4 The study area also contains numerous designated features and protected assets of relevance at the county and local level, comprising: Ancient Woodland; Tree Preservation Orders (TPOs); local landscape designations; recreational and outdoor land; footpaths and informal trails.
- 26.4.5 In respect of TPOs, information provided by Worthing Borough Council has identified the locally protected trees and tree groups. The following features are all located along or in close proximity to the proposed cable route corridor and are depicted on Figure 26.1:
- One individual tree, Camperdown Elm, located along the north-western part of Brooklands Golf Course (referenced as T3 within the Worthing Borough Council TPO plan for Brooklands Pitch and Putt Golf Course);
 - Group of 7 trees, comprising 2 Lombardy Poplar, 4 Whitebeam and 1 Elm, located along the north-western side of Brooklands Golf Course (referenced as G2);
 - Group of 2 Wych Elm trees, located along the northern part of Brooklands Golf Course (referenced as G3); and
 - Woodland, comprising Ash, Aspen, and Lombardy Poplar species, located along the north western perimeter of Brooklands Golf Course (referenced as W3).
- 26.4.6 The proposed cable route corridor also traverses a number of potentially historic field boundaries and 'important' hedgerows (classified under the Hedgerow Regulations 1997).

26.4.7 Full details of hedgerow features are provided in Section 24 (Ecology).

National Landscape Character Areas

26.4.8 The study area contains four National Landscape Character Areas (LCAs). These are listed below and defined as areas of landscape comprising significant tracts of land that exhibit a broad, cohesive character.

- **Character Area 126** – South Coast Plain: This LCA contains the southern sections of the cable route between the A27 corridor and the coastal landfall at East Worthing.
- **Character Area 125** – South Downs: This LCA is positioned adjacent to the South Coastal Plain and extends across the study area northwards towards the settlements of Upper Beeding and Fulking.
- **Character Area 121** – Low Weald: This LCA covers a significant proportion of the study area between the South Downs LCA and the A272 south of Bolney.
- **Character Area 122** – High Weald: This LCA covers a very small part of the northern extents of the study area.

26.4.9 Figure 26.2 illustrates the National LCAs within the study area. Full details of the key characteristics of each National LCA are presented in Appendix 26.1

Local Landscape Character Areas

26.4.10 The landscape of the study area is characterised within three published local landscape character assessments: West Sussex Landscape Character Assessment (WSLCA); South Downs Integrated Landscape Character Assessment (SDILCA); and, Horsham District Landscape Character Assessment (HDLCA).

26.4.11 The WSLCA is the only one of these studies which covers the entire length of the cable route and the substation location. Therefore the boundaries of the landscape character areas defined within the WSLCA were used to inform the division of the cable route into sections which were then subsequently assessed.

26.4.12 There are seven Local LCAs from the WSLCA that are directly associated with the proposed cable route and proposed substation site. These have been individually described below in terms of coverage within the study area and appraised in relation to their quality, value and sensitivity towards change of the type proposed. It should be noted that this appraisal fully considers the information contained within the other published landscape character studies named above. Full details of the key characteristics of each of the Local LCAs identified within each of the other published studies, which are potentially affected by the proposed development, are presented in Appendix 26.1.

- 26.4.13 Figure 26.2 illustrates the Local LCAs from the WSLCA within the study area. Figures 26.1.1 and 26.1.2 within Appendix 26 illustrate the SDILCA and HDLCA character areas.

Cable Route Landscape Character Sections

- 26.4.14 Seven individual Cable Route landscape character sections (Character Section) have been defined by the boundaries of the WSLCA LCAs and are used within the assessment. Refer to Figure 26.4 for the locations of the Character Sections.

Character Section 1

- 26.4.15 Within this section, the proposed cable is routed through the following landscape character areas, all of which have contributed towards the description and sensitivity rating of this section:

- **National LCA:** 126 South Coast Plan.
- **WSLCA LCA:** SC13: Worthing and Adur Fringes.

- 26.4.16 Forming a narrow strip of land bound by the dominant urban fringes of Worthing and Lancing, this Character Section is characterised by a low lying flat open landscape with medium scale arable farming and market gardening.

- 26.4.17 Rows of large light-reflective glasshouses, equestrian facilities, horse paddocks and light industry form strong suburban influential elements in the area, itself bisected by the South Coast railway line connecting neighbouring towns. Visual detractors are present in the form of overhead transmission lines, a sewage treatment plant, and industrial buildings located along the periphery of the Character Section.

- 26.4.18 The landscape framework is limited, comprising in the main low density intact hedgerows with hedgerow trees and occasional shelterbelts afforded protection by way of TPOs. Brooklands Pleasure Park and Golf Course provides a recreational buffer between neighbouring urban settlements and the coastline.

- 26.4.19 Although views are offered from local lanes outwards towards the sea, the area exhibits a sense of 'industry in the countryside' with limited accessibility. However, the local importance of retaining this area of green space within the continuous settlement along the coastline was highlighted in consultation. The area is therefore considered of medium value.

- 26.4.20 Accordingly, the sensitivity of this Character Section is considered to be in the order of **Medium**.

Character Section 2

26.4.21 Within this section, the proposed cable is routed through the following landscape character areas, all of which have contributed towards the description and sensitivity rating of this section:

- **National LCA:** 125 South Downs.
- **SDILCA LCA:** A3 Arun to Adur Open Downs.
- **HDLCA LCA:** A2 Amberley to Steyning Downs; C2 Washington to Steyning Scarp.
- **WSLCA LCA:** SD3: Central Downs

26.4.22 Forming one of the larger tracts of landscape within the southern extents of the study area, this Character Section comprises a distinctive landscape of exposed elevated rolling chalk hills with a steep north facing escarpment and softer dip slope to the south.

26.4.23 This expansive landscape exerts a sense of remoteness in some areas, reinforced by an absence of trees and hedgerows. Woodland areas are limited in the main to narrow belts along the edge of the scarp slope.

26.4.24 Exhibiting strong cultural associations in the form of hill forts, cross dykes, chalk tracks and other historic features. Isolated farmsteads and barns form prominent features in the landscape and, where farming activity is present, this is typified by large rectilinear arable fields.

26.4.25 The area offers spectacular panoramic views over the Low Weald to the north, and has an extensive network of footpaths and bridleways across the landform which enables a high degree of human interaction with the landscape. The South Downs Way National Trail forms a key recreational route through this zone and provides connectivity to the wider landscape.

26.4.26 Being wholly located within the boundary of the South Downs National Park, this Character Section is generally devoid of detracting features and is one in which its components combine to frame a landscape of very good quality and high value.

26.4.27 Accordingly, this Character Section is considered to be of **High** sensitivity.

Character Section 3

26.4.28 Within this section, the proposed cable is routed through the following landscape character areas, all of which have contributed towards the description and sensitivity rating of this section:

- **National Character:** 125 South Downs.

- **South Downs Integrated Landscape Character Assessment:** A3 Arun to Adur Open Downs; G3 Adur Valley Sides; F3 Adur Floodplain; A2 Adur to Ouse Open Downs; H2 Adur to Ouse Downs Scarp.
- **Horsham District Landscape Character Assessment:** O4 Lower Adur Valley.
- **West Sussex Landscape Character Assessment:** SD5: Downland Adur Valley.

26.4.29 Centred along the meandering River Adur and sandwiched between Upper Beeding and the A27 corridor, this steep area of chalk downland sweeps in gentle slopes to the valley floor and floodplain which are set within the South Downs National Park.

26.4.30 The valley is a mixture of arable farmland and chalk grassland with small hamlets and farmsteads; these are occasionally interspersed with busy roads, including the A27, a disused cement works and electricity transmission towers.

26.4.31 The wide valley floor exhibits a fairly open character with a dense network of small woodlands and hedgerows on the tributaries, set within significant areas of farmland that extend up the lower slopes. A network of small lanes and bridges of brick construction further contribute to the overall character of the area.

26.4.32 Recreational routes in the form of disused railways and the Downs Link along the River Adur offer good accessibility across the area.

26.4.33 The sense of partial enclosure associated with this Character Section derives from the combination of landform, hydrological features and accessibility. Impressive views are available across the valley, some of which include the striking Lancing College from elevated positions.

26.4.34 The presence of occasional visually detracting elements has a marked effect on the quality of the area; localised areas of reduced quality renders this an area of good to very attractive quality. However the value of the area remains high due to it forming an intrinsic component of the wider South Downs National Park.

26.4.35 Accordingly, this Character Section is considered to be of **High** sensitivity.

Character Section 4

26.4.36 Within this section, the proposed cable is routed through the following landscape character areas, all of which have contributed towards the description and sensitivity rating of this section:

- **National Character:** 125 South Downs.
- **South Downs Integrated Landscape Character Assessment:** A2 Adur to Ouse Open Downs; H2 Adur to Ouse Downs Scarp.

- **Horsham District Landscape Character Assessment:** O4 Lower Adur Valley; A1 Beeding Downs; C1 Beeding to Edburton Scarp.
- **West Sussex Landscape Character Assessment:** SD6: Eastern Downs.

26.4.37 Broadly defined by the A27 corridor to the south and the settlements of Fulking and Edburton to the north, the northern extents of this Character Section are well defined by a distinctive scarp ridgeline that features a number of recognised hills, including Tottington Mount. The scarp ridgeline has a steep north facing slope and is much indented by rounded combs. Predominantly chalk grassland, with occasional patches of scrub, there are few distinctive field boundaries. The slopes allow panoramic views northwards over the surrounding lowlands, as does the ridgeline across the wider landscape, which is followed by the South Downs Way.

26.4.38 The settlement pattern is highly dispersed across the rolling landform, and is principally characterised by farmsteads and hamlets of traditional rural construction focused on higher areas of the downland, with occasional more isolated farms and barns positioned on the lower lying slopes.

26.4.39 Key features within the landscape comprise chalk quarries and pits, occasional masts and overhead transmission lines, and pockets of recreational land under the management of the National Trust. The tranquillity of the area markedly reduces nearer the fringes of the downland where major routes and busy lanes are present.

26.4.40 The cultural significance of the area is visible in the form of its many landmarks and historic landscape features such as barrows and motte and baileys. A network of PRoW exists that connect to the South Downs Way National Trail, itself set on a major ridgeline with historic connections.

26.4.41 There is a clear predominance of open arable and grassland cultivation with irregular, smaller pastures, woodland patches and hedgerows in the chalk valleys and on parts of the scarp.

26.4.42 Falling entirely within the South Downs National Park boundary, this Character Section is considered to be a highly distinctive landscape that is valued for its open, scenic qualities and recreational offering. The combination of positive and distinctive characteristics set within the boundary of the National Park frame an area that is of good to very attractive quality, and high value.

26.4.43 Accordingly, this Character Section is considered to be of **High** sensitivity.

Character Section 5

26.4.44 Within this section, the proposed cable is routed through the following landscape character areas, all of which have contributed towards the description and sensitivity rating of this section:

- **National Character:** 125 South Downs; 121 Low Weald.
- **South Downs Integrated Landscape Character Assessment:** I2 Adur to Ouse Scarp Footslopes; H2 Adur to Ouse Downs Scarp.
- **Horsham District Landscape Character Assessment:** D2 Henfield and Small Dole Farmlands.
- **West Sussex Landscape Character Assessment:** LW11: Eastern Scarp Footslopes.

26.4.45 Forming the largest single area of character within the study area, this Character Section is defined by the Eastern Downs to the south and extends northwards to include the town of Henfield. The southern sections of this character area partially fall within the South Downs National Park, the boundary of which terminates near the settlement of Woodmancote.

26.4.46 The scarp footslopes east of the Adur Valley comprise an undulating relief of low sandstone ridges and gentle clay vales. The landscape comprises a mosaic of small and large scale arable and pastoral fields bound by hedgerows and trees, and a network of country lanes and footpaths traverse the area.

26.4.47 Pockets of ancient woodland that have survived on the heavier soils of the Gault Clay form prominent features in the landscape, particularly around Edburton and Woodmancote. Small historic commons and orchards form notable features around Henfield to the north of this Character Section.

26.4.48 Several of the intimate, unobtrusive spring-lined villages and farmsteads are generally dispersed throughout the area, many of which are of traditional rural construction using a diverse range of materials such as flint and render. The line of a major Roman road cuts through the area in an east-west direction at Woodmancote.

26.4.49 The steep downland scarp dominates views to the south, which brings a scenic quality to views.

26.4.50 This is an area exhibiting many quiet rural qualities with clear historic linkage, abundant 'naturalness', and an absence of recreational/visitor attractions. The combination of few detracting features, partial National Park designation and high degree of visual exposure from the Downs results in this Character Section being of very attractive quality and high value.

26.4.51 Accordingly, this Character Section is considered to be of **High** sensitivity.

Character Section 6

26.4.52 Within this section, the proposed cable is routed through the following landscape character areas, all of which have contributed towards the description and sensitivity rating of this section:

- **National Character:** 121 Low Weald.
- **Horsham District Landscape Character Assessment:** P2 Upper Adur Valleys.
- **West Sussex Landscape Character Assessment:** LW9: Upper Adur Valley.

26.4.53 The Upper Adur Valley forms a relatively small component of the study area, being focused around two distinct areas immediately north of Henfield and west of Wineham, both relating strongly to the Cutlers and River Adur watercourses respectively.

26.4.54 The character of this Character Section within the study area is one that is dominated by a number of isolated farmsteads, small lanes and access roads, and woodland pockets. Hedgerows containing significant numbers of established trees bind irregular sized fields under arable and pastoral management, some of which relate back to the post-medieval period.

26.4.55 Longer distance views are generally limited due to the area's low-lying position in the landscape; however views across the flat farmland and watermeadows are expansive in places from the network of footpaths and bridleways.

26.4.56 Recent development pressures have resulted in some visible changes to the landscape pattern and framework. The visual intrusion associated with a line of electricity towers and overhead lines traversing both areas of this Character Section forms a key detractor, along with sewage works north-east of Henfield. Traffic growth on local roads has generally resulted in increased pervasiveness of movement and noise.

26.4.57 This Character Section has a number of distinctive features and has a coherent, readily identifiable structure; however it is acknowledged to provide a limited contribution to the overall character of the study area. Both pockets of this Character Section are deemed to constitute good quality landscape. Its position outside the South Downs National Park boundary renders this an area of medium value.

26.4.58 Accordingly, this Character Section is considered to be of **Medium** sensitivity.

Character Section 7

26.4.59 Within this section, the proposed cable is routed through the following landscape character areas, all of which have contributed towards the description and sensitivity rating of this section:

- **National Character:** 121 Low Weald.
- **Horsham District Landscape Character Assessment:** P2 Upper Adur Valleys; J3 Cowfold and Shermanbury Farmlands.

- **West Sussex Landscape Character Assessment:** LW10: Eastern Low Weald; LW9: Upper Adur Valley.

- 26.4.60 Constituting one of the larger tracts of landscape character, this Character Section covers the northern section of the study area and is constrained by the A272 corridor to the north and the Upper Adur Valley to the south.
- 26.4.61 This Character Section sits predominantly within the Mid Sussex and Horsham Districts, and is landscape characterised by a lowland mixed pastoral and arable farming contained by a strong hedgerow pattern. Scattered blocks of deciduous woodland form a prominent component within the overall landscape framework, the pattern of which dates back to the post-medieval period.
- 26.4.62 The position of this area is such that it lies over low ridges and clay vales and is drained by the upper Adur streams, with views dominated by the steep downland scarp to the south and the High Weald fringes to the north. Woodland and marginal vegetation features along the many stream banks.
- 26.4.63 The area is crossed by A and B classification roads running north-south, a network of narrow rural lanes, and many footpaths which provide access across the landscape. Buildings exhibit traditional forms of construction with materials such as timber-framing, weatherboarding and stone roofing prevalent. Visual detractors are present in the form of the Bolney electricity substation and associated overhead infrastructure north of Wineham.
- 26.4.64 There is a clear perception of 'naturalness' and rural quality; the strong woodland cover and hedgerow network combines with the area's many small villages and hamlets which collectively form the essence of the landscape.
- 26.4.65 The more elevated hills and slopes are exposed to views from the Downs and accordingly have a higher visual sensitivity than other parts of the Character Section. Although not afforded formal designation, this Character Section is considered to be a prime contributor to the overall landscape within the study area. It is deemed to be of good quality and of medium value.
- 26.4.66 Accordingly, this Character Section is considered to be of **Medium** sensitivity.

Local Landscape Context

Cable Route

- 26.4.67 A detailed description of key landscape features and components associated with the local landscape context of the proposed cable route corridor is provided in Appendix 26.2; this is supported by photography contained in Figure 26.1.3 in Appendix 26 which visually illustrates the existing landscape of the corridor.

26.4.68 The description is presented in the form of seven discreet linear sections, the boundaries of which reflect the respective local LCAs through which the corridor will pass.

Substation

26.4.69 The site for the substation is entirely located within LCA LW10: Eastern Low Weald, as depicted on Figure 26.2.

26.4.70 The site is located immediately east of Bolney substation and covers three medium sized fields, two of which are under pastoral management and the remainder subject to arable regimes. Ground levels across the site vary from around 30m Above Ordnance Datum (AOD) at the western end to 18m AOD to the north eastern side.

26.4.71 A PRoW runs through the site on the boundary of two of the fields between Bob Lane and Coombe House.

26.4.72 The site is generally covered in semi-improved grassland and is enclosed by hedgerow boundaries containing deciduous species and hedgerow trees. Mature, mixed species woodland copses adjacent to the site's northern and south-western boundaries provide a degree of containment, and overhead transmission lines and associated towers pass over the site in an east-west direction. Although the combination of boundary vegetation and wider landscape features visually contains the site from many of the surroundings, views of the site are available from residential properties, local roads and the PRoW network within approximately 0.5km of the site.

Visual Environment

Cable Route

26.4.73 Principal views and receptors from which construction of the proposed cable route would potentially feature in the overall outlook are described below. Photographs depicting the existing visual context and outlook from key locations across the study area are contained in Figure 26.4. Refer to Figure 26.3 for the locations of the plates within the various Character Sections.

Character Section 1

26.4.74 Principal receptors comprise:

- Road users along the A259, Upper Brighton Road, and A27 Sompting Bypass (Medium Sensitivity).
- Residential properties located along the urban fringe of Lancing and Sompting (High Sensitivity).
- Recreational users of Shoreham shingle beach (Medium Sensitivity).

- Recreational users within Brooklands Pleasure Park and Golf Course (Medium Sensitivity).

26.4.75 Within this section, Plate 1 in Figure 26.4 depicts the outlook from the shoreline East of Worthing, looking northeast along the coastline. Plate 2 in Figure 26.4 shows a typical view from within Brooklands Pleasure Park looking southeast towards the coastline, and Plate 3 depicts the view from Loose Lane (looking west) towards the eastern urban fringe of Broadwater.

Character Section 2

26.4.76 Principal receptors comprise:

- Road users along Coombes Road, Titch Hill and Lambleys Lane (Medium Sensitivity).
- Residential receptors including Lambleys Barn, Titch Hill Farm, Applesham Farm, and New Cottages (High Sensitivity).
- Users of the PRow network, including those at Steep Down (Medium Sensitivity). There are 8 instances in this section when PRow are crossed by the route.
- Users of the South Downs Way (High Sensitivity).

26.4.77 Plate 4 in Figure 26.4 depicts road user views from Titch Hill Road looking eastwards towards the chalk grassland at Steep Down. Plate 5 in Figure 26.4 provides the view from Bostal Road looking eastwards towards Tottington Mount, and is representative of views available from the South Downs Way.

Character Section 3

26.4.78 Principal receptors comprise:

- Road users along Coombes Road, Steyning Road and Mill Hill Road (Medium Sensitivity).
- Isolated residential receptors including Old Erringham Farm, New Erringham Farm, and New Cottages, and residents located in the settlement of Coombes (High Sensitivity).
- Properties to the eastern fringes of Upper Beeding (High Sensitivity).
- Recreational users at Mill Hill Nature Reserve (High Sensitivity).
- Users of the local PRow network (Medium Sensitivity), and the National Cycle Route 'The Downs Link' (High Sensitivity). There are 3 instances in this section when PRow are crossed by the route.

26.4.79 Plate 6 in Figure 26.4 provides the view from Coombes Road looking east towards the disused Shoreham Cement Works. Plate 7 in Figure 26.4 depicts the outlook from a PRow looking east towards the chalk grassland on the lower slopes of Mill Hill, and Plate 8 demonstrates the view from Mill Hill Nature Reserve, looking west across the Adur Valley towards Lancing College.

Character Section 4

26.4.80 Principal receptors comprise:

- Residential receptors located at scattered farmsteads around Truleigh Hill (High Sensitivity).
- Users of the South Downs Way (High Sensitivity).
- Users of the local road and PRow network (Medium Sensitivity), including the named footpath, 'Monarch's Way' (High Sensitivity). There are 4 instances in this section when PRow are crossed by the route.

26.4.81 Plates 9 in Figure 26.4 provides a view from Mill Hill Road, which runs alongside the South Downs Way, looking northeast towards Tottington Mount. Plate 10 in Figure 26.4 depicts the outlook from Truleigh Hill, looking southwest towards Beeding Hill, and Plate 11 in Figure 26.4 is taken from Edburton Hill, looking west towards Tottington Mount.

Character Section 5

Principal receptors comprise:

- Road users along Edburton Road, the A281 Brighton Road, and Horn Lane (Medium Sensitivity).
- Scattered residential receptors including Tottington Manor Farm, Truleigh Manor Farm, Truleigh Sands, Oreham Manor; Terry's Cross, Woodmancote Place, and Bylsborough Farm (High Sensitivity).
- Users of the scarp slope between Tottington Mount and the Devil's Dyke (High Sensitivity).
- Users of the local road and PRow network (Medium Sensitivity). There are 5 instances in this section when PRow are crossed by the route.
- Users of the South Downs Way (High Sensitivity).

26.4.82 Plate 12 in Figure 26.4 provides a view from Tottington Manor Farm, looking south towards Tottington Mount. Plate 13 in Figure 26.4 depicts the view from a PRow adjacent to Oreham Manor, looking south, and Plate 14 in Figure 26.4 gives the view from the A281 Brighton Road looking west.

Character Section 6

26.4.83 Principal receptors comprise:

- Road users of the B2116 (Medium Sensitivity).
- Scattered farmsteads including Morley Farm, Park Farm, Abbeylands Farm, and Woodhouse (High Sensitivity).
- Users of the local road and PRoW network (Medium Sensitivity). There are no instances in this section when PRoW are crossed by the route; this receptor refers to users of the distant PRoW network.

26.4.84 Plate 15 in Figure 26.4 depicts the view from a PRoW to the north of Blackstone, looking northwest towards Woodhouse Wood.

Character Section 7

26.4.85 Principal receptors comprise:

- Road users along the B2116, Wineham Lane, and Bob Lane (Medium Sensitivity).
- Residential receptors located as scattered farmsteads including Blackstone Gate Farm, Lanehurst Cottage Farm, Twineham Place Farm, Twineham Grange Cottages, Twineham Court Farm, Coombe Farm, Twineham Grange Farm, Swallow Cottage, and Great Wapses Farm (High Sensitivity).
- Users of the local road and PRoW network (Medium Sensitivity). There are 7 instances in this section when PRoW are crossed by the route.

26.4.86 Plate 16 in Figure 26.4 provides the view from B2116 Henfield Road, looking east along the road. Plate 17 in Figure 26.4 shows a typical view from a PRoW to the east of Great Wapses Farm looking north towards Twineham Grange, and Plate 18 in Figure 26.4 demonstrates an east facing view from Bob Lane adjacent to Twineham Grange Cottages.

Substation

26.4.87 The following representative viewpoints have been considered in the assessment of the proposed substation. These are illustrated in Figure 26.5.

Table 26.7: Representative Viewpoints for the Proposed Substation

VP No.	Location	Distance (km) to site and direction of view	Rationale for selection
1	PRoW, south of Coombe House	0.3km SW	Footpath user in close proximity
2	Bolney Chapel Road	0.8km W	Road user receptors
3	Twineham Grange	0.28km NW	Residential receptors in

VP No.	Location	Distance (km) to site and direction of view	Rationale for selection
	Cottages, Bob Lane		close proximity
4	Adjacent to North Lodge, Bob Lane	0.3km NE	Residential and road user receptors in close proximity
5	PRoW Wineham Lane	0.59km SE	Residential and road user receptors in close proximity
6	PRoW Priorsbush	0.4km SE	Footpath users in close proximity
7	Nyeshill Farm, Wineham Lane	0.81km SE	Footpath and residential receptors
8	PRoW adjacent to Kings, Kentstreet Lane	1.4km E	Residential / PRoW users
9	Devil's Dyke, South Downs	9.9km N	Recreational receptors at an elevated location

Viewpoint 1

26.4.88 Figure 26.7 - Viewpoint 1 presents a photograph of the existing view. Viewpoint 1 is taken from a PRoW that transects an arable field, approximately 0.1km southeast of Coombe House, and represents direct to oblique open views available to users along the PRoW and direct to oblique filtered views afforded to the occupants of Coombe House.

26.4.89 This viewpoint is located on an area of localised high ground, along the ridgeline of a small stream valley (approximately 25m AOD). The arable field in the immediate foreground slopes southwards (to 17m AOD) towards a narrow belt of mature deciduous woodland, which runs in an east to west direction along the bottom of the small stream valley, and filters views beyond.

26.4.90 Partially filtered views of the site are available through the woodland. The roofline of Twineham Grange Cottages projects above the tree cover and forms a visible feature against the skyline. Lines of electricity transmission towers and overhead lines form prominent features in foreground and mid ground views, and converge at Bolney Substation.

26.4.91 PRoW users are considered to be of **Medium** sensitivity, and occupants of Coombe House are considered to be of **High** sensitivity.

Viewpoint 2

26.4.92 Figure 26.7 - Viewpoint 2 presents a photograph of the existing view. Viewpoint 2 is taken from the western edge of Bolney Chapel Road, approximately 0.2km north of Partridge Farm, and represents oblique west-facing views available to road users.

- 26.4.93 Located at a slight elevation along the ridgeline of a small stream valley, a large scale, gently rolling field in the immediate foreground is lined along its southern boundary by a mature wet woodland that screens distant views beyond.
- 26.4.94 Field boundaries lined by tall hedgerows with mature trees link to small scattered woodlands which collectively combine to lend a well-wooded character to mid to longer distance views. Overhead electrical transmission infrastructure forms a visible detractor in the overall outlook, predominantly set against a skyline backdrop. A vertically prominent terminal tower set within the foreground forms a key feature in the view, positioned adjacent to planting around the eastern periphery of Coombe House.
- 26.4.95 The upper sections of Bolney Substation are visible in the mid-ground above a dense planting structure.
- 26.4.96 Road users have a passing interest in their surroundings. As such, receptors at this location are assessed as being of **Low** sensitivity.

Viewpoint 3

- 26.4.97 Figure 26.7 - Viewpoint 3 presents a photograph of the existing view. This viewpoint is taken from Bob Lane and represents direct views available to occupants of Twineham Grange Cottages, and oblique views available to road users travelling along the lane.
- 26.4.98 A mature, intact hedgerow lines the northern edge of Bob Lane, screening lower level views from the lane and Twineham Grange Cottages. A series of medium sized arable fields are located immediately north of the hedgerow, separated by agricultural fencing, which affords uninterrupted viewing opportunities northwards towards Coombe House in the distance.
- 26.4.99 Established deciduous planting around the entrance to Twineham Court Farm foreshortens views north-west, obscuring the farm buildings in road user views. The base structure of a terminal tower forms a principle focus in foreground views in this direction, and the upper sections of other transmission towers east of Bolney Substation form prominent vertical elements in the mid distance outlook.
- 26.4.100 Road users are considered to be **Low** sensitivity receptors, and occupants of Twineham Court Farm are considered to be of **High** sensitivity towards change.

Viewpoint 4

- 26.4.101 Figure 26.7 - Viewpoint 4 presents a photograph of the existing view. Viewpoint 4 is taken from Bob Lane immediately adjacent to North Lodge, and represents direct to oblique views available to residential occupants of the property. The viewpoint also represents oblique views afforded to road users travelling along the lane.

26.4.102 A mature, intact hedgerow lines the northern edge of Bob Lane, screening lower level views. Three grazed pastures are positioned immediately north of the hedgerow, defined by post and wire fencing, and lined along their northern extents by a deciduous woodland copse west of Twineham Court Farm.

26.4.103 A line of electrical transmission towers and overhead lines run in an east to west direction north of the viewpoint, and converge above Bolney Substation approximately 0.2km northwest. Only the upper sections of the towers are visible due to the extent and density of intervening woodland in the mid ground, which also screens views of the agricultural landscape beyond.

26.4.104 Residential receptors at this location are considered to be of **High** sensitivity to change.

Viewpoint 5

26.4.105 Figure 26.7 - Viewpoint 5 presents a photograph of the existing view. Viewpoint 5 is taken from the end point of a PRoW that transects Wineham Lane approximately 0.1km east of Westridge Place, and represents direct south-east facing views available to both PRoW and road users.

26.4.106 A fragmented line of both mature and young tree specimens lines the eastern verge of Wineham Lane and effectively filters views towards a medium sized grazed pasture. A post and wire fence provides further separation between the two features.

26.4.107 An overhead transmission tower is located to the south of the view and forms a visibly prominent element within the foreground outlook. The upper sections of Bolney Substation are visible to the south west of the view, heavily filtered by established planting.

26.4.108 The northern extents of the view are framed in the mid ground by mixed species woodland associated with the Priorsbush plantation. Mature boundary vegetation between the network of fields in the view provides further visual containment.

26.4.109 PRoW users have been assessed as being of **Medium** sensitivity at this location, and road users are considered to be of **Low** sensitivity.

Viewpoint 6

26.4.110 Figure 26.7 - Viewpoint 6 presents a photograph of the existing view. This viewpoint is taken from a PRoW at the south-western edge of Priorsbush - a small, dense ancient woodland copse – and is representative of direct to oblique views available to users.

- 26.4.111 The immediate outlook from this viewpoint is characterised by a small scale grazed pasture which is framed along its northern boundary by Priorsbush and along the eastern fringe by an established hedgerow with mature trees, the latter breaking the skyline.
- 26.4.112 A principle point of focus is a prominent transmission tower to the east of the view, which is partially obscured by planting in the foreground. The eye is drawn to various strands of overhead wiring that cross the skyline and merge at Bolney Substation, the eastern boundary of which appears as a detracting feature in the outlook to the south.
- 26.4.113 Mature planting west of Twineham Court Farm is visible in the distance and provides a partial backdrop to one of the visible towers in the centre of the view.
- 26.4.114 PRoW users at this viewpoint are considered as being of **Medium** sensitivity.

Viewpoint 7

- 26.4.115 Figure 26.7 - Viewpoint 7 presents a photograph of the existing view. Viewpoint 7 is taken from a PRoW east of Nyeshill Farm, and represents direct to oblique views available to recreational users of this route.
- 26.4.116 The PRoW runs in an east to west direction, and available views are characterised by a relatively open aspect across flat arable and pastoral fields in the foreground, which are backed by the northern fringes of Priorsbush plantation in the mid distance and boundary vegetation along the curtilage of Dawe's Farm.
- 26.4.117 Bolney Substation is located approximately 0.8km south of the viewpoint, and is partially obscured by planting which forms a dense visual barrier to views in this direction. Although the profile of the facility's upper sections punctuate the skyline, the prime focus relates strongly to the vertical form of various transmission towers which rise above the mid ground planting.
- 26.4.118 PRoW users along this route are deemed to be of **Medium** sensitivity to change.

Viewpoint 8

- 26.4.119 Figure 26.7 - Viewpoint 8 presents a photograph of the existing view. Viewpoint 8 is located along a PRoW running alongside the northern boundary of Kings, a residential property located along Kentstreet Lane, and is representative of direct to oblique east facing views.
- 26.4.120 The landscape within the view features a mosaic of small and large scale arable fields, lined by tall hedgerows and mature trees that link to small woodlands that form key features in foreground views.

- 26.4.121 Overhead transmission towers run in a northwest to southeast direction in the view, and form focal features within the overall outlook from this location. The associated overhead lines draw the eye towards planting in the mid ground view.
- 26.4.122 Bolney Substation is located approximately 1km to the southeast, but is not discernable in the view due to the screening effect of intervening woodland.
- 26.4.123 PRoW users at this location are considered to be of **Medium** sensitivity towards change.

Viewpoint 9

- 26.4.124 Figure 26.7 - Viewpoint 9 presents a photograph of the existing view. Viewpoint 9 is located at Devil's Dyke (north of the Devil's Dyke Hotel and Restaurant) and is representative of elevated long distance views across the landscape.
- 26.4.125 The orientation of the view is directed northwards, and is characterised by features within the middle to long distance outlook. Notable elements in the view comprise a rich, clearly defined mosaic of arable and pastoral fields interspersed with farmsteads and small settlements.
- 26.4.126 Field boundaries are well defined by mature hedgerows and hedgerow trees that bring a visible structure to the landscape. The elevated, exposed nature of the viewpoint affords viewers wide ranging appreciation of the gently undulating topography.
- 26.4.127 Prominent stands of woodland and electricity transmission infrastructure contrast against the background landscape pattern.
- 26.4.128 An interpretation board at the viewpoint illustrates various landmarks across the landscape, identifying Bolney Substation, which is partially visible at distance but forms a relatively small element in the overall outlook in expansive views north-west.
- 26.4.129 In recognition of its promoted viewpoint status, receptors at this location are considered to have a principal interest in the surroundings and are accordingly assessed as being of **High** sensitivity.

26.5 Construction and Design Mitigation

Principles

- 26.5.1 The design-development process has run in parallel with the assessment of the Project, and has sought to avoid direct impacts on existing landscape features such as Ancient Woodlands, established woodlands, field boundaries and notable tree specimens where possible.

- 26.5.2 In addition, the cable has been routed to avoid the brows of hills and to follow the established pattern of the landscape i.e. routed to closely follow the line of existing field boundaries as far as is practicable.
- 26.5.3 Where it has not been possible to achieve avoidance of existing landscape features, a combination of appropriate construction techniques (in the form of reinstatement proposals) and a compensatory/new planting strategy have been developed as an integral part of the overall design of the proposals, the prime objectives being:
- The restoration and reinstatement of disturbed sections of the onshore cable route corridor, to enable their previous condition to be re-established;
 - To maintain the open aspect and general character of the existing local landscape of the onshore cable route corridor;
 - Mitigation for the loss of established landscape features associated with construction of the onshore cable route and substation, achieved through targeted planting of trees and shrubs and the application of reseeding techniques on disturbed areas;
 - Physical and visual integration of the substation into the local landscape pattern;
 - To provide a degree of visual softening, screening and containment around the final location of the proposed substation; and
 - To take into account the landscape management objectives identified within The West Sussex Landscape Land Management Guidelines

Construction Mitigation

- 26.5.4 In relation to the installation of the onshore cable route, the following measures have either been incorporated into the overall design or will be employed during construction:
- **Working Width:** The working width will be confined as far as possible to a corridor no greater than 30m to minimise the construction footprint on the receiving landscape. The working width will be extended in various places to facilitate the construction of the cable across the various road, watercourse and service crossings and where trenchless crossing techniques (e.g. HDD) are proposed. Existing trees in close proximity to the working width will be protected by fencing to ensure that branches and roots remain undisturbed during construction.

- **Soil Strip and Storage:** The limited stripping of soil will reduce the necessity for storage of material. Stripping and storage of material will be undertaken in accordance with a vegetation clearing/soil management plan. Material will be stored in low lying mounds along the working width, not longer or at greater depths than recommended best practice. Storage along the working width will assist in visually screening open trench works and activity within the corridor.
- **Cut-off Drains:** The proposed cable route predominantly passes through arable farmland where agricultural drainage systems may exist in some locations. Interruption of a drainage system can have a negative impact on the land on the cable system itself and there is the potential for cable trenches to act as drainage channels for surface water run off or lead to the drainage of the near surface water table. The drainage of the near surface water table could in turn effect the growth of landscape features, for example trees and hedgerows. As such, any existing drains that have to be crossed as part of the construction works will be restored following the duct laying and backfilling operations. Furthermore, in areas of steep slopes, for example Tottington Mount, or where there is a flood risk, measures will be employed to prevent the flow of water along the trench, for example baffles being installed in trenches at regular intervals to disperse water evenly across the slope. Reference should also be made to Section 23 (Surface Water, Hydrology and Flood Risk).
- **Site Compounds:** The storage of materials and vehicles will be limited to a series of temporary site compounds along the proposed cable route, which will be kept tidy and well maintained at all times during the works. Existing disused farm buildings and hard standings which will already have sufficient access for long and/or wide vehicles and negate the need to construct buildings, access roads, etc will be utilised where possible as compound locations thereby minimising the visual impacts of construction compounds. Compounds will have some artificial lighting installed, which will be faced inwards and downwards toward the compound. The main activities at compounds will take place during daylight hours. It is possible that 24 hour working involving lighting will be used for the relatively small number of HDD operations.
- **Site Operations:** Generally, construction works along the corridor will be between 7am and 7pm, and are not anticipated to require night working or illumination of any part of the route, which will avoid night-time illumination of the corridor. However, in winter, some illuminations may be required in the early evening. It is also possible that 24 hour working involving lighting will be used for the relatively small number of HDD operations.

- **Reinstatement:** Following construction of the cable route, all areas of disturbed ground (including the temporary construction sites) will be restored to their original levels and profiles using the stored subsoil and topsoil, to minimise landscape and visual impacts and enable previous conditions to be re-established. Where the proposed cable route will result in the disturbance of hedgerows, their removal will be kept to a practical minimum with replacements being planted and fenced off during the first planting season following construction, to minimise landscape and visual impacts, and enable previous conditions to be re-established.
- **Seeding:** Topsoil will be prepared and seeded using an appropriate seed mix or returned to arable cultivation. The area will be fenced where required and maintained until a thick grass sward establishes. These measures will minimise landscape and visual impacts by ensuring the restoration and reinstatement of disturbed sections of the onshore cable route corridor to their previous condition as soon as possible.
- **Fencing:** Where necessary, a combination of post and wire fencing and stock proof fencing will be installed as per the local vernacular; these are considered to be in keeping with the agricultural character of the surrounding area and will result in minimal visual intrusion.

26.5.5 In relation to the installation of the onshore substation, the following measures have either been incorporated into the overall design or will be employed during construction:

- **Access:** A dedicated construction access will be created from Wineham Lane into private land, traversing east toward the new substation through two grazed pastures. The semi-permanent access would be in place for the duration of the construction works, and be limited to a 16m width. Gaps between trees will be utilised at field boundary crossings where possible in order to minimise the loss of landscape features. Topsoil will be stripped as part of the access road construction and stored adjacent to the access strip for the 2 year duration and sufficiently protected during this time. The top soil will be replaced and supplemented by harvested seed following completion of the construction works at the substation. These measures will minimise landscape and visual impacts by ensuring the restoration and reinstatement of the access road land to its previous condition as soon as possible.
- **Site Operations:** Construction works are not anticipated to require night time working, although in winter some illuminations may be required in the early evening. Low level security lighting may be required at night throughout the construction period. Under normal operating conditions the substation will not be illuminated at night. Lighting will be used only when required for maintenance outages or emergency repairs occurring at night. The lights will be directed downward, and shielded to reduce glare outside the facility.

- 26.5.6 Best practice construction management techniques will be employed during the construction of the substation to ensure the retention and protection of valued landscape features immediately adjacent to and surrounding the site(s).

Design Mitigation

- 26.5.7 Specific mitigation measures will be put in place for each affected landscape feature. Further detail can be found in Section 24 - Ecology, 24.6 Mitigation Measures.

Agricultural Land

- 26.5.8 Much of the cable route is routed across agricultural land, comprising arable land, and both improved and semi-improved grassland, which has scope to be fully reinstated, provided that land drainage is replaced, topsoil carefully handled and fields re-seeded.
- 26.5.9 For arable land, the working width will be handed back to the farmer immediately upon completion of the construction phase so that it can be ploughed and prepared for cropping along with the rest of the field.
- 26.5.10 In all grassland areas (outside of the chalk grassland areas), the topsoil will be stripped, stored and replaced to retain the seed bank. Reinstatement of improved grassland areas may be supplemented by seeding at the discretion of the landowner. In neutral grassland areas natural regeneration is preferred and no supplementary seeding will be used.
- 26.5.11 The right-of-way fencing will remain in place for up to a year to exclude livestock and allow the grass to establish after which the fencing will be removed. Therefore, the land along the majority of the route will be reinstated within 1 year of construction completion.

Chalk Grassland

- 26.5.12 The proposed cable route crosses chalk grassland in two locations: east of Lambleys Barn and Tottington Mount, both of these areas are on steep slopes. The chalk grassland at Lambleys Barn will be reinstated with the standard grassland method stated above.
- 26.5.13 The mitigation for the chalk grassland areas on Tottington Mount is complex and is described in full in Section 2b Project Description (onshore). Detailed surveys will be conducted to ascertain the depth of the chalk grassland. If it is determined that the turf in this area of chalk grassland can be removed successfully, the topsoil will be removed in defined sections and reinstated back on the ground to its original position after the work is complete. Each turf section will be up to 1.0m x 1.2m in area, cut in depths of up to 300mm, and laid to the side of the working area in single layers. The turves will be stored on a porous geotextile membrane as close as possible to the trench.

- 26.5.14 Measures will be taken to ensure that drainage of the temporary works will not cause erosion or other detrimental effects on the site. The design of the replacement backfill will incorporate measures to ensure that the excavated trenches do not become natural water courses and it is expected that impervious barriers will be placed at regular intervals (4-6m) along the trench above the ducts. The frequency of these barriers will be determined by the gradient of the terrain. It is also expected that the selected backfill will incorporate a quantity of cement which, once hardened, will prevent future erosion, especially as the ducts surfaces will form a natural water line.
- 26.5.15 The construction programme in this area will be kept to a minimum to reduce the length of time any lifted turf/topsoil is stored. In addition, the installation of the cables in the ducts will be sequenced to follow on immediately after the ducts are installed to allow closure of the haul road and the final replacement of the turf as soon as possible. The works will be programmed at the optimum time for minimum rainfall as compaction and chalk handling should not be carried out during periods of rain.
- 26.5.16 If it is determined that the turf cannot be removed successfully due to an insufficient depth of turf, then the trench will be excavated in a single operation, ducts laid, and re-seeded.
- 26.5.17 Turfing will greatly minimise the impact to chalk grassland at Tottington Mount by enabling quicker reinstatement and retaining the natural seed bank and topsoil mix; however it will not eliminate all the impacts. Impacts associated with shading and compaction of adjacent areas of chalk grassland where turfs have been stored will remain. There will also be a residual risk that turfs will not reinstate properly or that indirect impacts such as settlement in the trench area, changing soil conditions and plant death leading to areas of bare ground and increased erosion will occur.
- 26.5.18 Post-construction monitoring will be undertaken at Tottington Mount to assess the success of the reinstatement method and to identify any additional post reinstatement management and aftercare that may be required to control such issues as increased weed populations or to carry out re-vegetation of bare areas. The monitoring strategy and a written scheme of restoration will be presented and discussed with relevant stakeholders prior to the construction works.
- 26.5.19 Full reinstatement of the chalk grassland to its former state could take up to five years.

Amenity Grassland

- 26.5.20 The areas of amenity grassland crossed by the proposed cable route have scope to be fully reinstated within 1 year of construction completion, provided that land drainage is replaced, topsoil carefully handled and fields re-seeded. Areas of shrub and ornamental trees will be reinstated with semi-mature stock matching what has been removed.

Field Boundaries

- 26.5.21 The cable route has been routed to avoid hedgerows and hedgerow trees as far as possible. Gaps or weak points have been selected as the crossing point of hedges to reduce visual impact where possible. Where the impact on hedgerows is unavoidable, vegetation removal within the working width will be reduced.
- 26.5.22 Hedgerow reinstatement will be undertaken using indigenous species, preferably of local provenance. Any sections of hedgerow severed by the cable route will be reinstated during the first appropriate planting season following site restoration, on the basis of a survey in accordance with the Hedgerow Regulations 1997. Planting will be suitably protected from animal damage by, for example, the use of rabbit fencing, individual tree protectors or by planting between fences. In ecologically sensitive areas special restoration may be necessary.
- 26.5.23 The prompt reinstatement of hedge banks and ditches and planting of shrubs will achieve considerable recovery in the first 2–3 years. The time required for overall recovery of the hedgerow to the original condition will depend upon the age, diversity and management history of the individual hedgerow, being longer for more species-rich and complex hedgerows.
- 26.5.24 The time taken for full establishment will depend upon factors such as the height of the adjacent sections of hedge. Therefore, visible integration of the hedge could take between 5 and 10 years (for managed hedgerows) and 10 or more years for unmanaged hedges/tree lines.

Watercourses

- 26.5.25 The River Adur will be crossed using HDD to avoid impacts to the adjacent saltmarsh area and the river itself.
- 26.5.26 For all other river crossings, open cut techniques will be used. The Environment Agency will be consulted during the detailed design phase to determine the most appropriate method for each crossing and the appropriate method statements will be prepared.

- 26.5.27 Crossing points will be chosen to minimise impacts and preserve valuable features as far as possible. Bank-side vegetation will be retained, with trees and shrubs coppiced rather than grubbed-out where practicable. Bank and bed materials removed for construction will be stored separately and replaced in the reverse order in which they were removed, to promote the re-establishment of appropriate habitat. Trees and shrubs will be replanted and the reinstated areas will be fenced off to prevent damage (including poaching) by livestock. Geotextile matting will be used, wherever necessary, to reinforce banks during reinstatement.
- 26.5.28 The timing of the works will be carefully selected and periods of low flow will be chosen wherever practicable.
- 26.5.29 Recovery of the banks is expected within one and five years depending on the nature of the vegetation removed.

Woodlands and Trees

- 26.5.30 The route generally avoids woodlands, and wherever practicable, has been sensitively routed to avoid mature trees. A pre-construction walkover survey will be undertaken by an appropriately experienced arboriculturalist as soon as a detailed working area has been agreed. They will define specific mitigation measures required for all trees situated in or adjacent to the working width.
- 26.5.31 Where the working width is in close proximity to trees, every effort will be made to reduce the working width for cable route construction to avoid individual mature trees and their roots. The guidance in BS 5837: 2012 Trees in Relation to Construction will be followed, and measures such as the erection of protective fencing will be put in place in order to minimise impacts on trees and their roots. Wherever possible, established trees will be fenced off and worked around.
- 26.5.32 Areas of Ancient Semi-Natural Woodland (ASNW) will be avoided and clearly marked to indicate their sensitivity during construction.
- 26.5.33 For the area of Paddock Wood ASNW which is shown to be crossed by the proposed working width (and which has been highlighted as important for foraging and commuting bats) the working width will be reduced to 20 m and a buffer of between 5m to 15m will be maintained between the ASNW site boundary and the edge of the working width.

Shingle Beach

- 26.5.34 The cable route landfall will occur along the shoreline East of Worthing. The lower foreshore comprises unvegetated shingle in between rock groyne, while the upper foreshore has a 10m strip of vegetated shingle.

26.5.35 The impact of light plant on vegetated areas will be minimised by reducing the width of the access track to the foreshore as far as possible and using light machinery only. In addition, aluminium matting will be laid on the foreshore during landfall operations to further protect the vegetated areas.

Substation Landscaping Strategy

26.5.36 The final form of the substation will be finished to a high standard of design, using quality materials and integrated into the surrounding environment through the adoption of a robust, sustainable landscape planting strategy.

26.5.37 The landscaping strategy centres on the planting of multi-age native tree and shrub species, the establishment of which is considered essential in achieving integration into the local and wider existing landscape framework.

26.5.38 The strategy has taken account of species commonly found throughout West Sussex, prevailing site conditions, and the WSCC Land Management Guidelines and associated objectives for the local area.

26.5.39 A Phase 1 Habitat Survey undertaken at the substation site identified that woodland type 'NVC W8 *Fraxinus excelsior* – *Acer campestre* – *Mercurialis perennis* woodland' is typical throughout the local woodlands in the lowlands of southern and eastern Britain. In combination with the WSCC Land Management Guidelines: LW10 Eastern Low Weald, this has accordingly been used as the basis in the development of an appropriate planting mix which will draw on the following components:

- **major components:** *Crataegus monogyna* (Hawthorn); *Corylus avellana* (Hazel); and *Prunus spinosa* (Blackthorn).
- **minor components:** *Fraxinus excelsior* (Ash); *Viburnum opulus* (Guelder Rose); *Acer campestre* (Field maple); *Quercus robur* (Pedunculate Oak); *Cornus alba* (Dogwood); *Salix cinerea* (Grey willow); and *Salix caprea* (Goat willow).

26.5.40 Indicative landscape proposal have been prepared for the substation site, and are described in the following section and illustrated in Figure 26.6. The final form and detail of these proposals will be subject to agreement with WSCC.

Indicative Landscaping Proposals

26.5.41 Indicative landscaping proposals prepared for the substation site involve the introduction of specimen trees and shrub planting in small groupings and linear belts within and around the site to reflect existing vegetation patterns commonly found within the wider landscape.

- 26.5.42 Planting will comprise native species, planted as transplants and/or whips, with a concentration of larger feathered and standard to semi mature trees (where appropriate) to provide immediate landscape structure and some instant screening effect. The use of such planting would also enable achievement of a robust visual screen within approximately 8-10 years.
- 26.5.43 Planting is proposed along the northern boundary of the site to reinforce the existing vegetation and contribute to screening views from the north from properties including Coombe House.
- 26.5.44 An area of planting is proposed along the south eastern boundary, adjacent to Bob Lane, and along the entrance track; this will assist the visual integration of the substation entrance and will provide a visual buffer for properties located along Bob Lane, including Twineham Grange Cottages. The planting along the southern boundary will also provide connectivity for the great crested newt community, creating a linkage between a pond located in the woodland to the west of Twineham Court Farm, and the smaller ponds located to the east of the substation footprint. Refer to Section 24 - Ecology for further details.
- 26.5.45 Planting will also mitigate for the loss of existing vegetation within and along the boundaries of the site.
- 26.5.46 The use of techniques such as earth mounding in combination with native planting, and the use of coniferous and evergreen species will also be considered during the refinement of the substation layout during detailed design if additional screening is found to be required.

Landscape Maintenance and Management

- 26.5.47 All planting will be implemented, managed and maintained to realise its intended environmental functions.
- 26.5.48 Planted areas will be implemented and managed during the establishment period for the duration of 5 years, with subsequent periodic thinning to retain the desired species balance.
- 26.5.49 No tree species will be planted within 6m of the centreline of existing or proposed overhead cables (in accordance with established guidelines for this type of development); only hedgerow species will be planted directly below overhead cables to achieve visual screening and integration functions. In addition, no tree species are to be planted within 6m of the centreline of existing or proposed underground cables or high-pressure gas pipelines in accordance with National Grid guidelines. Only shallow rooting hedgerow species will be planted directly above for visual screening purposes.
- 26.5.50 Post construction, it is predicted that the following changes will occur over time:

- Existing and retained younger vegetation will achieve greater growth and height;
- Newly planted hedgerow and hedgerow tree species will attain greater height and density with regular management, and will achieve effective visual screening of the lower level components (particularly during summer months);
- New woodland planting will become established, and with careful management will achieve a height that provides effective mid-level visual screening; and
- Materials that form the external envelope and roof of substation buildings will have been exposed to natural weathering, and will achieve more subdued neutral tones.

26.6 Predicted Impacts and Effects – Landscape Character

Cable Route

Construction Phase

- 26.6.1 The construction of the cable route will involve a range of activities along the working width and at temporary construction compounds, which will give rise to localised adverse effects on landscape character. Collectively, equipment including heavy plant, machinery, heavy goods vehicles, temporary site compounds and construction materials will be present along the identified cable corridor. Cut-off drains and side accesses have been assessed as part of the construction activities.
- 26.6.2 Although such activity will form a character influencing feature in the local landscape, effects will be temporary in nature and will be set against a context of established visual detracting features, and regular activity associated with ongoing farming practices within the wider landscape.
- 26.6.3 The following direct temporary impacts and effects on landscape character are predicted during construction of the cable route; these assume construction mitigation measures outlined above are fully implemented.

Character Section 1

- 26.6.4 Approximately 3.1km of cable and two side accesses (along the foreshore next to the A259 Brighton Road and track off St Paul's Avenue) will be installed through this Character Section. The following landscape components will be passed through:
- Coastal shingle beach;

- Amenity grassland within Brooklands Pleasure Park and adjacent golf course, with assorted amenity shrubs and trees;
 - Intact, mature hedgerows and fragmented hedgerows; and
 - Agricultural land containing arable and improved and semi-improved grassland (located between the urban edges of Broadwater and Sompting).
- 26.6.5 There will also be temporary disturbance to landscape features including shingle beach and open green spaces (the latter including Brooklands Pleasure Park).
- 26.6.6 Given the relatively small size of this Character Section, cable construction and installation will introduce a noticeable but temporary change to the perception of this Character Section, particularly from adjacent urban fringe locations where activities will form a new feature in the landscape that will change the balance of characteristics.
- 26.6.7 The combination of valued vegetation loss and visual awareness of construction within the western fringes of the area will render an adverse impact of **Medium** magnitude on this Character Section.
- 26.6.8 A temporary effect of **Moderate** significance is predicted within this Character Section during construction.

Character Section 2

- 26.6.9 Approximately 5.8km of cable will be installed through this Character Section, which will pass through the following landscape components:
- Mature, intact hedgerows and fragmented hedgerows along field boundaries;
 - Chalk grassland, east of Lambley's Barn; and
 - Agricultural land containing arable and improved and semi-improved grassland.
- 26.6.10 Temporary disturbance will occur on defining features of this Character Section, principally associated with construction within the visually exposed, elevated rolling chalk hills. Disturbance of this distinctive feature, in a landscape which is currently devoid of detracting features, would alter the current perception of the landscape and have a marked effect on the quality and perception of the area.
- 26.6.11 Given that the sense of isolation will be temporarily compromised through development progression, and as a result of the impacts on valued chalk landscape, the impact of cable construction on this Character Section will be adverse and of **Large** magnitude.

26.6.12 A temporary effect of **Major** significance is predicted within this Character Section during construction.

Character Section 3

26.6.13 Approximately 2.7km of cable will be installed through this Character Section, which will pass through the following landscape components:

- Mature, intact hedgerows and fragmented hedgerows located along field boundaries;
- Scrub; and
- Agricultural land, including arable and improved and semi-improved grassland.

26.6.14 Construction of the cable will induce temporary disturbance to the characteristic valley floor and floodplains of this Character Section, which will adversely affect the perception of character within the area.

26.6.15 HDD techniques will be employed to cross the River Adur – a defining feature of this Character Section – which will reduce disturbance to this landscape component and reduce awareness of activity in this area.

26.6.16 The relatively low value of landscape components that will be affected by the works, coupled with the presence of existing detracting features and short length of cable route through the Character Section, will reduce the impact on this Character Section.

26.6.17 It is considered that the temporary works in this Character Section will not form a key characteristic in the landscape, and will accordingly render an impact of **Medium** magnitude.

26.6.18 A temporary effect of **Major/Moderate** significance is predicted within this Character Section during construction.

Character Section 4

26.6.19 Approximately 3.8km of cable and a temporary construction compound at the base of Tottington Mount will be installed through this Character Section, which will pass through the following landscape components.

- Agricultural land containing arable and improved and semi-improved grassland; and
- Tottington Mount's steep scarp slope and associated chalk grassland.

- 26.6.20 The key implications of cable construction within this Character Section relate to a change in the perception of the quality of the landscape, the value of its open, scenic quality. This includes the temporary disturbance to the chalk grassland at Tottington Mount.
- 26.6.21 The temporary construction compound will be located in a field of improved grassland, where existing farm access points can be utilised.
- 26.6.22 Although the construction activities will be confined to the western fringes of this Character Section, they will induce temporary disturbance into Tottington Mount, a key character forming feature, that will be perceptible from local roads, PRoWs crossed by the route, and exposed locations to the north.
- 26.6.23 The construction compound will be located in an area of improved grassland.
- 26.6.24 The impact on this Character Section is considered to be adverse and will be of **Large** magnitude.
- 26.6.25 A temporary effect of **Major** significance is predicted within this Character Section during construction.

Character Section 5

- 26.6.26 Approximately 5.8km of cable will be installed through this Character Section, which will pass through the following landscape components.
- Agricultural land containing arable and improved and semi-improved grassland;
 - Mature, intact hedgerows; fragmented hedgerows;
 - Wet and dry drainage ditches; and
 - Marshy grassland.
- 26.6.27 Progression of construction in this Character Section will introduce activities that will result in temporary disturbance to the landscape pattern of the area, specifically mosaic of small and large scale arable and pastoral fields bound by hedgerows and trees.
- 26.6.28 Corridor activities will be visible from many of the local roads and PRoWs which the cable route will interface with, resulting in a marked but temporary change in the perception of rural landscape quality in the area. The absence of visually detracting features will heighten the perception of construction, resulting in considerable visual exposure to the works within a landscape of acknowledged quality and value.

26.6.29 The implications on landscape character within this Character Section will be evident due to the scale of operations and the loss of character framing features; this will combine to render a temporary adverse impact of **Medium** magnitude.

26.6.30 A temporary effect of **Moderate** significance is predicted within this Character Section during construction.

Character Section 6

26.6.31 Approximately 1.2km of cable will be installed through this Character Section, which will pass through the following landscape components:

- Agricultural land containing arable and improved and semi-improved grassland;
- Mature, intact hedgerows and fragmented hedgerows; and
- Wet and dry drainage ditches.

26.6.32 Although disturbance will occur to notable landscape features (primarily areas of flat farmland and watermeadows), construction works will form a very small element in this Character Section with visual appreciation of the operations limited due to the presence of hedgerows with mature trees near the corridor.

26.6.33 The resultant impact on this Character Section is considered to be of **Medium** magnitude.

26.6.34 A temporary effect of **Moderate** significance is predicted within this Character Section during construction.

Character Section 7

26.6.35 Approximately 4.6km of cable will be installed through this Character Section, which will pass through the following landscape components:

- Agricultural land containing arable and improved and semi-improved grassland;
- Mature, intact hedgerows and fragmented hedgerows;
- Wet and dry drainage ditches; and
- A small woodland copse (located north of the Albourne Road).

26.6.36 The scale of construction operations within this Character Section is such that they will form an apparent new feature in the landscape pattern.

- 26.6.37 Temporary disturbance will occur to landscape features that contribute to framing the character of this Character Section, specifically mixed pastoral and arable farmland contained by mature hedgerows.
- 26.6.38 Given the loss of features, coupled with the visual awareness of the works from settlements, roads and PRowS, progression of construction will result in a temporary adverse impact of **Medium** magnitude.
- 26.6.39 A temporary effect of **Moderate** significance is predicted within this Character Section during construction.

Year of Opening

- 26.6.40 Post construction of the cable corridor, there will be an impact of Small to Medium on landscape resources and character within Character Sections 1, 2, 3, 5, 6, and 7 in the first year of operation.
- 26.6.41 Many landscape features have scope to be fully reinstated within the year of opening, including arable land, amenity grassland, and both improved and semi-improved grassland. However, the full establishment and visual integration of hedgerows (which are present in every one of these Character Sections) can take between 5 and 10 years.
- 26.6.42 This will render an effect of **Minor to Moderate** in Character Section 1; Character Section 6; and, Character Section 7, a **Moderate** effect in Character Section 3; and, Character Section 5, and a **Major/Moderate** effect in Character Section 2.
- 26.6.43 In Character Section 4, there will be an impact of **Medium to Large** in the first year of opening as the chalk grassland at Tottington Mount will still be reinstating.
- 26.6.44 There are two proposed methods of reinstatement for the chalk grassland at Tottington Mount; reseeding and turfing. There is a risk that the chalk grassland will not reinstate properly with either method, and the construction area will be visible once the work is complete.
- 26.6.45 Turfing will greatly minimise the impact to chalk grassland at Tottington Mount by enabling quicker reinstatement and retaining the natural seed bank and topsoil mix; however it will not eliminate all the impacts. Impacts associated with shading and compaction of adjacent areas of chalk grassland where turfs have been stored will remain.
- 26.6.46 In addition to the direct impacts, there are a number of indirect impacts that could occur as a result of the proposed works, as summarised below:
- Potential settlement in the trench areas due to the backfill material used - this has the potential to become a natural watercourse which would increase the risk of erosion;

- Changing soil conditions through compaction or mixing of soil layers – this can affect the nutrient status and pH which can result in a different plant community arising; and
- Loss of individual plants due to damage of the turfs – this will result in areas of bare ground which will have an increased risk of erosion by wind, water and animals.

26.6.47 This will render an effect of **Major/Moderate** in the first year of opening.

Year 15

26.6.48 The assessment of effect at summer year 15 allows for a relative degree of maturity within mitigation planting and thereby takes account of the effectiveness of landscape measures associated with the scheme, in combination with the influence of surrounding vegetation in leaf.

26.6.49 Dependant upon the landscape crossed and the features affected, the residual effects will gradually reduce over time as the mitigation measures take effect and as replacement vegetation establishes and matures. 15 years post construction of the cable corridor, there will be an impact of **No Change** on landscape resources and character within the seven Character Sections, as all components will be buried below ground and the landscape reinstated to its former condition.

26.6.50 This will render an effect of **Neutral** significance on landscape character.

Table 26.8: Summary of Impacts on Landscape Character along the Cable Route

Character Section	Sensitivity	Construction		Year of Opening	
		Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect
Character Section 1	Medium	Medium	Moderate	Small	Minor to Moderate
Character Section 2	High	Large	Major	Medium	Major / Moderate
Character Section 3	High	Medium	Major / Moderate	Small	Moderate
Character Section 4	High	Large	Major	Medium to Large	Major / Moderate
Character Section 5	High	Medium	Moderate	Small	Moderate
Character Section 6	Medium	Medium	Moderate	Small	Minor to Moderate
Character Section 7	Medium	Medium	Moderate	Small	Minor to Moderate

Substation

Construction Phase

- 26.6.51 Construction activity at the substation site will temporarily introduce elements (e.g. man-made structures and equipment) into the existing landscape framework associated with LCA LW10: Eastern Low; such features will influence existing landscape quality and will, for a short time, be slightly at odds with it.
- 26.6.52 Perceptible changes to the character and appearance of this LCA will principally derive from the following actions, which will appear as new components within the existing landscape framework.
- Site clearance and removal of existing vegetation;
 - Site formation, excavation and earthworks;
 - Temporary construction access from Wineham Lane, through private land;
 - Erection of temporary site fencing, welfare facilities and soil mounds;
 - Movement and operation of vehicles, plant equipment and machinery;
 - Erection of substation components;
 - Site demobilisation; and
 - The potential for trees to be removed at the junction of Wineham Lane and Bob Lane to facilitate the site establishment phase at the beginning of the works.
- 26.6.53 The perception of construction works within the site will be set against the context of the adjacent Bolney Substation.
- 26.6.54 Construction will result in a direct loss of the following landscape components:
- An area of arable land (semi-improved grassland) currently on rotation;
 - Approximately 380m of dense, intact hedgerow containing several mature *Quercus robur* (Pedunculate Oak) specimens;
 - Approximately 200m of an intact field hedge comprising mainly *Crataegus monogyna* (Hawthorn) and *Prunus spinosa* (Blackthorn) species, and small amounts of *Quercus robur* (Pedunculate Oak) and *Rosa canina* (Dog-rose); and
 - Approximately 80m of scattered scrub along a double fence-line
- 26.6.55 As a result of the temporary construction access, there will be a direct loss of the following landscape components:

- As a result of the temporary construction access, approximately 16m wide strip of intact field hedge comprising mainly *Crataegus monogyna* (Hawthorn) and *Prunus spinosa* (Blackthorn) species;
- Approximately 16m wide strip of woodland along Wineham Lane, comprising mostly semi-natural *Fraxinus excelsior* (Ash) trees; and
- Disturbance to grazed pasture due to the laying of a semi-permanent road for the duration of the construction works.

26.6.56 Following the completion of the substation construction phase, pasture will be reseeded, fences will be reinstated and suitable hedgerow species replanted. Hedges and any replacement planting will be carried out during the first appropriate planting season following site restoration.

26.6.57 Landscape character impacts will be greatest near to the site, but will decrease with distance due to the influence of the existing Bolney Substation and woodland that offers visual screening opportunities from nearby roads, settlements and PRowS.

26.6.58 Assuming implementation of construction best practice mitigation, the impact on the perception of landscape character during the construction phase is accordingly assessed as being of **Medium** magnitude.

26.6.59 The temporary effect associated with substation construction on this LCA from development progression will be of **Moderate** significance.

26.6.60 It is considered that construction activities will not fundamentally affect the indirect perception of landscape qualities of character within neighbouring areas beyond this LCA; any such occurrences will render an impact of no greater than **Negligible** magnitude and a worst-case effect of **Minor** significance.

Year of Opening

26.6.61 The permanent siting and operation of the substation will not result in any additional direct impacts on the existing landscape fabric over and above those arising during construction.

26.6.62 The height, materials, massing, and design of the substation – when set against the context of the existing Bolney Substation and numerous transmission towers and overhead lines within the surrounding landscape – will be in keeping with existing development form in this LCA, and will maintain existing landscape quality.

26.6.63 The magnitude of impact on landscape character in the year of opening will be **Small** this is because the development will constitute a minor alteration to the balance and relationship of existing landscape characteristics within this LCA.

- 26.6.64 The effect on landscape character at the year of opening will be of **Minor to Moderate** significance on this LCA; effects will reduce over time as landscaping measures incorporated into the design progress begin to mature and establish.
- 26.6.65 The position and relationship of development within the site, when set against the profile of adjacent and comparable infrastructure within Bolney Substation, will not give rise to any significant indirect impacts or effects on the wider perception of landscape character from neighbouring LCAs in the year of opening. This will constitute an impact of no greater than Small magnitude, and a worst-case effect of **Minor** significance.

26.7 Predicted Impacts and Effects - Visual Impact

Cable Route

Construction Phase

- 26.7.1 The construction of the cable route will involve a range of temporary construction activities that will be visible from a variety of receptors within the study area. Section 2b Project Description (onshore) provides a description of these activities.

Character Section 1

- 26.7.2 For residential receptors located along the eastern urban fringe of Lancing and Sompting, direct, uninterrupted or filtered views may be afforded of temporary construction activities.
- 26.7.3 For a representative residential receptors view, refer to Plate 3. This view is from Loose Lane, looking west, towards the urban fringe of Broadwater. Most of the views from these properties would be rear or oblique and upper storey due to the layout of the urban edge.
- 26.7.4 There will be a noticeable change in the existing view, with activities viewed against the backdrop of the industrial edge of Broadwater, Therefore the magnitude of change of construction is assessed to be **medium**.
- 26.7.5 For users along A259 Upper Brighton Road, and the A72 Sompting Bypass travelling both east and west bound. HDD is proposed under these two transport routes; Section 2b – Onshore Project Description presents the indicative siting of the entry and exit pits for the HDD operation. The HDD operation here is anticipated to last for 11.5 weeks. There will be brief, oblique, distant views of construction activities at these entry and exit pits. Due to the speed of travel along these roads, there would be a conspicuous change to the quality and character of the view. The magnitude of impact is therefore assessed as **medium**.

- 26.7.6 For recreational users within Brooklands Pleasure Park and Golf Course there will be direct and uninterrupted views of the construction activities, which will be viewed at close range. The change in the visual experience encountered by recreational receptors will result in a prominent change to the quality and character of the existing view; the magnitude of impact of construction is assessed to be **large**. For a representative recreational receptors view, refer to Plates 1 and 2. Plate 1 is a view from the shoreline East of Worthing, looking northeast along the coastline. Plate 2 is a view is from within Brooklands Pleasure Park, looking southeast towards the coastline.
- 26.7.7 For recreational users on Shoreham Beach, there will be direct and uninterrupted views of the construction activities, which will be viewed at close range. Shoreham Beach will accommodate the proposed cable landfall; HDD will be used, and views of the HDD exit pit and compound will be included within the view. There will be a prominent change to the quality and character of the view, and therefore the magnitude of impact of construction is assessed to be **large**.

Character Section 2

- 26.7.8 For residential receptors including Lambleys Barn, Titch Hill Farm, Applesham Farm, and New Cottages, direct to slightly oblique, and both uninterrupted and filtered views of the temporary construction activities may be possible. Views will predominantly be through fields and field boundaries; at worse, where views are uninterrupted, there will be a prominent change to the quality and character of the view. The magnitude of impact is therefore assessed as being **large**.
- 26.7.9 For road users along Coombes Road, Titchill and Lambleys Lane, brief, oblique, near distant views of construction activities may be afforded. These roads will be trenched. For a representative road users view, refer to Plates 4 and 5. Plate 4 depicts road user views from Titch Hill Road looking eastwards towards the chalk grassland at Steep Down. Plate 5 provides a view is from Titch Hill Road, looking east towards the chalk grassland at Steep Down. The development would result in a conspicuous change to the existing view due to the brief and oblique nature of the view, and therefore the magnitude of impact is assessed as being **medium**.
- 26.7.10 For users of the nearby and more distant PRow network, including the routes that run adjacent to Steep Down, direct and uninterrupted views may be afforded of temporary construction activities, and therefore there will be a prominent change to the quality and character of the view. The magnitude of impact is assessed to be **large**, due to the close proximity and direct nature of the view.

- 26.7.11 For users along the South Downs Way, views of the temporary construction activities will be afforded from some distance to the north and would therefore form a conspicuous element within the view, resulting in a conspicuous change to the quality and character of the view, and forming a conspicuous element within the view. The magnitude of change of construction is assessed to be **medium**.

Character Section 3

- 26.7.12 For isolated residential receptors at close proximity to the cable route, including Old Erringham Farm, New Erringham Farm, and New Cottages, and residents located in the small settlements of Coombes, direct to slightly oblique, and both uninterrupted and filtered views of the temporary construction activities may be possible. Vegetation surrounding the residential plots will filter views on occasion. At worse, where views are uninterrupted, there will be a prominent change to the quality and character of the view. The magnitude of impact is therefore assessed as being **large**.
- 26.7.13 For properties along the eastern fringes of Upper Beeding, direct uninterrupted or filtered views may be afforded of temporary construction activities. There will be a noticeable change in the existing view along the Adur Valley, with activities viewed against the backdrop of the disused Shoreham Cement Works. The magnitude of change of construction is assessed to be **medium**.
- 26.7.14 For road users along Coombes Road, Steyning Road and Mill Hill Road, which are located at close proximity to the cable route, there will be brief direct to oblique views of construction activities. The development would result in a conspicuous change to the existing view due to the brief and oblique nature of the view, and therefore the magnitude of impact is assessed as being **medium**. Plate 6 provides the view from Coombes Road looking east towards the disused Shoreham Cement Works.
- 26.7.15 For users of the nearby and more distant PRow network, direct uninterrupted or filtered views may be afforded of temporary construction activities, including the HDD operations employed across the River Adur. The duration of this HDD activity is anticipated to last for 13.5 weeks. The development would result in a prominent change to the quality of the view. The magnitude of impact of construction is assessed to be **large**, due to the close proximity and direct nature of the view. For a representative PRow users view, refer to Plate 7. This view is from a PRow looking east towards the chalk grassland on the lower slopes of Mill Hill.
- 26.7.16 For users along The Downs Link, which follows the course of the River Adur, views of the temporary construction activities would be direct to oblique, and form a conspicuous change to the quality and character of the view. Therefore the magnitude of impact of construction is assessed to be **large**.

26.7.17 For recreational users within Mill Hill Nature Reserve, there will be direct and uninterrupted views of the construction activities along the Adur Valley, which will result in a prominent change to the existing view. The magnitude of impact of construction is therefore assessed to be **large**. For a representative recreational users view, refer to Plate 8. This view is from Mill Hill Nature Reserve, looking west across the Adur Valley towards Lancing College.

Character Section 4

26.7.18 For residential receptors located at scattered farmsteads around Truleigh Hill, direct to oblique, both uninterrupted and filtered views of the temporary construction activities may be possible. Views will be filtered on occasion by the vegetation surrounding many of the residential plots. At worse, where views are uninterrupted, there will be a prominent change to the quality and character of the view. The magnitude of impact is therefore assessed as being **large**.

26.7.19 For users of the nearby and more distant PRow network, direct uninterrupted or filtered views may be afforded of temporary construction activities, including those on the chalk grassland on Tottington Mount. There will be a prominent change to the quality and character of the view, and therefore the magnitude of impact of construction is assessed to be **large**.

26.7.20 For users along Monarch's Way, views of the temporary construction activities would be direct to oblique, and form a conspicuous change to the quality and character of the view. Therefore the magnitude of impact of construction is assessed to be **large**.

26.7.21 For users along the South Downs Way, views of the temporary construction activities would be direct to oblique, and form a conspicuous change to the quality and character of the view. Therefore the magnitude of impact of construction is assessed to be **medium**. For representative views from the South Downs Way, refer to Plates 9, 10, and 11. These views are from: Mill Hill Road, which runs alongside the South Downs Way, looking northeast towards Tottington Mount; Truleigh Hill, looking southwest towards Beeding Hill; and, Edburton Hill, looking west towards Tottington Mount.

Character Section 5

- 26.7.22 For residential receptors at close proximity to the cable route, including Tottington Manor Farm, Truleigh Manor Farm, Truleigh Sands, Oreham Manor, Terry's Cross, Woodmancote Place, and Bylsborough Farm, direct to oblique, uninterrupted and filtered views of the temporary construction activities may be possible. Views will be filtered on occasion by the vegetation surrounding many of the residential plots, as well as seen across fields and field boundaries. At worse, where views are uninterrupted, there will be a prominent change to the quality and character of the view. The magnitude of impact is therefore assessed as being **large**. For a representative residential receptors view, refer to Plate 12. This view is from Tottington Manor Farm, looking south towards Tottington Mount.
- 26.7.23 For road users along Edburton Road, the A281 Brighton Road, and Horn Lane, which are located at close proximity to the cable route, brief, oblique views of construction activities may be afforded. Much of the duration of these roads are enclosed by hedgerows. The development would result in a noticeable change to the existing view, and therefore the magnitude of impact on users of these transport routes is assessed as being **medium**. For a representative road users view, refer to Plate 14. This gives the view from the A281 Brighton Road, looking west.
- 26.7.24 For users of the nearby and more distant PRow network, both direct to oblique, uninterrupted and filtered views may be afforded of temporary construction activities, many views will be seen across fields and field boundaries, and therefore the magnitude of impact of construction is assessed to be **medium**. For a representative PRow users view, refer to Plate 13. This depicts the view from a PRow to Oreham Manor, looking south.
- 26.7.25 For recreational users of the scarp slope between Tottington Mount and the Devil's Dyke, there will be direct and uninterrupted views seen at some distance of temporary construction activities. The magnitude of impact on such temporary construction impacts is therefore assessed as being **medium**.
- 26.7.26 For users along the South Downs Way, views of the temporary construction activities will be afforded from some distance to the north west and would therefore form a conspicuous element within the view, resulting in a conspicuous change to the quality and character of the view, and forming a conspicuous element within the view. The magnitude of change of construction is assessed to be **medium**.

Character Section 6

- 26.7.27 For residential receptors, including scattered farmsteads including Morley Farm, Park Farm, Abbeylands Farm, and Woodhouse, direct to oblique, uninterrupted and filtered views of the temporary construction activities may be possible.

26.7.28 Views will be filtered on occasion by the vegetation surrounding many of the residential plots. At worse, where views are uninterrupted, there will be a prominent change to the quality and character of the view. The magnitude of impact is therefore assessed as being **large**.

26.7.29 For road users along the B2116, brief, direct to oblique views of construction activities may be afforded. Much of the duration of this road is enclosed by mature hedgerows. The development would result in a noticeable change to the existing view, and therefore the magnitude of impact on users of these transport routes is assessed as being **medium**.

26.7.30 For users of the nearby and more distant PRow network, both direct to oblique, uninterrupted and filtered views may be afforded of temporary construction activities, many views will be seen across fields and field boundaries, and therefore the magnitude of impact of construction is assessed to be **medium**. For a representative PRow users view, refer to Plate 15, which depicts the view from a PRow to the north of Blackstone, looking northwest towards Woodhouse Wood.

Character Section 7

26.7.31 For residential receptors located as scattered farmsteads including Blackstone Gate Farm, Lanehurst Cottage Farm, Twineham Place Farm, Twineham Grange Cottages, Twineham Court Farm, Coombe Farm, Twineham Grange Farm, Swallow Cottage, and Great Wapses Farm, direct to slightly oblique, uninterrupted and filtered views of the temporary construction activities may be possible. The vegetation surrounding many of the residential plots will filter or screen views. At worse, where views are uninterrupted, there will be a prominent change to the quality and character of the view. The magnitude of impact is therefore assessed as being **large**.

26.7.32 For road users along the B2116, Wineham Lane, and Bob Lane, brief oblique views of temporary construction activities may be afforded. Much of the duration of these roads are enclosed by hedgerows. The development would result in a noticeable change to the existing view, and therefore the magnitude of impact on users of these transport routes is assessed as being **medium**. For a representative road users view, refer to Plates 16 and 18. Plate 16 provides the view from B2116 Henfield Road, looking east along the road, and Plate 18 demonstrates an east facing view from Bob Lane adjacent to Twineham Grange Cottages.

26.7.33 For users of the local road and PRow network, direct uninterrupted or filtered views may be afforded of temporary construction activities, many views will be seen across fields and field boundaries. Therefore the magnitude of impact of construction is assessed to be **medium**. For a representative PRow users view, refer to Plate 17. This view shows a typical view from a PRow to the east of Great Wapses Farm looking north towards Twineham Grange.

Year of Opening

- 26.7.34 Post-mitigation, the visual effects of the proposed cable route will reduce over time.
- 26.7.35 Many landscape features have scope to be fully reinstated within the year of opening, including arable land, amenity grassland, and both improved and semi-improved grassland. However, the full establishment and visual integration of hedgerows (which are present in every one of these Character Sections) can take between 5 and 10 years.

Year 15

- 26.7.36 The assessment of effect at summer year 15 allows for a relative degree of maturity within mitigation planting and thereby takes account of the effectiveness of landscape measures associated with the scheme, in combination with the influence of surrounding vegetation in leaf.
- 26.7.37 Dependant upon the landscape crossed and the features affected, the residual effects will gradually reduce over time as the mitigation measures take effect and as replacement vegetation establishes and matures. 15 years post construction of the cable corridor, there will be an impact of **No Change** from visual receptors within the seven Character Sections, as all components will be buried below ground and the landscape reinstated to its former condition.
- 26.7.38 This will render an effect of **Neutral** significance on landscape character.

Table 26.9: Summary of Visual Impacts Along the Cable Route

Character Section	Receptor Type	Sensitivity	Construction		Year 15	
			Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect
Character Section 1	Residential receptors at Lancing and Sompting	High	Medium	Major / Moderate	Negligible / No Change	Minor / Neutral
	Road users along A259 Upper Brighton Road, and the A72 Sompting Bypass	Medium	Medium	Moderate	Negligible / No Change	Neutral
	Recreational users within Brooklands Pleasure Park and Golf Course	Medium	Large	Major / Moderate	Negligible / No Change	Neutral
	Recreational users on Shoreham Beach	Medium	Large	Major / Moderate	Negligible / No Change	Neutral
Character Section 2	Residential receptors including Lambleys Barn, Titch Hill Farm, Applesham Farm, and New Cottages	High	Large	Major	Negligible / No Change	Minor / Neutral
	Road users Coombes Road, Titchill and Lambleys Lane	Medium	Medium	Moderate	Negligible / No Change	Neutral
	Users of the nearby and more distant PRoW network	Medium	Large	Major / Moderate	Negligible / No Change	Neutral
	Users along the South Downs Way	High	Medium	Major / Moderate	Negligible / No Change	Minor / Neutral
Character Section 3	Isolated residential receptors at close proximity to the cable route	High	Large	Major	Negligible / No Change	Minor / Neutral
	Residential receptors along eastern fringes of Upper Beeding	High	Medium	Major / Moderate	Negligible / No Change	Minor / Neutral
	Road users along Coombes Road, Steyning Road and Mill Hill Road	Medium	Medium	Moderate	Negligible / No Change	Neutral
	Users of the nearby and more distant PRoW network	Medium	Large	Major / Moderate	Negligible / No Change	Neutral
	Users of The Downs Link	High	Large	Major	Negligible / No Change	Neutral
	Recreational users within Mill Hill Nature Reserve	High	Large	Major	Negligible / No Change	Minor / Neutral

Character Section	Receptor Type	Sensitivity	Construction		Year 15	
			Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect
Character Section 4	Residential receptors at scattered farmsteads around Truleigh Hill	High	Large	Major	Negligible / No Change	Minor / Neutral
	Users of the nearby and more distant PRow network	Medium	Large	Major / Moderate	Negligible / No Change	Neutral
	Users of Monarch's Way	High	Large	Major	Negligible / No Change	Neutral
	Users along the South Downs Way	High	Medium	Major / Moderate	Negligible / No Change	Minor / Neutral
Character Section 5	Residential receptors at close proximity to the cable route	High	Large	Major	Negligible / No Change	Minor / Neutral
	Road users along Edburton Road, the A281 Brighton Road, and Horn Lane	Medium	Medium	Moderate	Negligible / No Change	Neutral
	Users of the nearby and more distant PRow network	Medium	Medium	Moderate	Negligible / No Change	Neutral
	Recreational users of the scarp slope between Tottington Mount and the Devil's Dyke	High	Medium	Major / Moderate	Negligible / No Change	Minor / Neutral
	Users along the South Downs Way	High	Medium	Major / Moderate	Negligible / No Change	Minor / Neutral
Character Section 6	Residential receptors including scattered farmsteads	High	Large	Major	Negligible / No Change	Minor / Neutral
	Road users along the B2116	Medium	Medium	Moderate	Negligible / No Change	Neutral
	Users of the nearby and more distant PRow network	Medium	Medium	Moderate	Negligible / No Change	Neutral
Character Section 7	Road users along the B2116	Medium	Medium	Moderate	Negligible / No Change	Neutral
	Residential receptors including scattered farmsteads	High	Large	Major	Negligible / No Change	Minor / Neutral
	Users of the nearby and more distant PRow network	Medium	Medium	Moderate	Negligible / No Change	Neutral

Substation

Construction Phase

- 26.7.39 Construction of the substation will induce a focused change in the visual environment through the installation of new substation equipment and associated site-based activity.
- 26.7.40 Likely activities associated with substation construction have been identified as part of the landscape character assessment. The nature of visual impact will fluctuate throughout the different phases of construction and as progress is made on the installation and erection of equipment and structures.
- 26.7.41 Although forming new elements in key views containing the site, construction features, lighting and general activities are considered comparable to what has occurred previously in the local landscape; these will be set against the context of similar built form and vertical infrastructure within and surrounding the adjacent Bolney Substation.
- 26.7.42 Construction activities will appear in a range of both static and transient views for a short duration of time, and will be temporary in nature. Established woodland and hedgerow planting in proximity to the site will assist in restricting some available views of low-level construction activity from nearby sensitive viewpoints and receptors.
- 26.7.43 Impacts associated with construction will vary between **Negligible to Large** magnitude; those exposed to higher orders of impact will generally be receptors located in close proximity to the site.
- 26.7.44 Accordingly, as a worst case, temporary **moderate to substantial** adverse effects on visual amenity will arise for more sensitive receptors and for those afforded a high degree of visual exposure to construction operations within the site.

Year of Opening

- 26.7.45 The following visual impacts and effects are predicted to occur in the year of opening; descriptions are supported by photography contained in Figure 26.7 which depicts existing views and photomontages of the indicative substation design.

Viewpoint 1

- 26.7.46 Figure 26.7 - Viewpoint 1 depicts a winter photomontage from this viewpoint. The modified outlook in the year of opening will comprise the substation components located towards the eastern end of the site footprint.

26.7.47 The existing woodland vegetation that lines the southern boundary of the site will filter views. Substation components located in the western end of the site will be visible through the thinner sections of the intervening mature woodland.

26.7.48 The substation will result in a conspicuous change to the existing view, but will be viewed in the context of a landscape that already features electrical infrastructure. The magnitude of impact at the year of opening will be **Medium**, resulting in a worst-case visual effect of **Moderate to Major** significance for high sensitivity receptors at this location.

Viewpoint 2

26.7.49 The modified outlook in the year of opening will render the substation as an inconspicuous minor element within the outlook. The upper sections of the tallest elements within the site will be visible but set against a background containing Bolney Substation which will reduce the overall intensity of change.

26.7.50 The majority of the substation components, including lower level features, will be effectively screened by existing mature hedgerows and trees surrounding the site.

26.7.51 The presence of the substation will not affect the overall quality or character of this particular view. It would be viewed in the context of a well-wooded landscape where views of the site are heavily restricted and which are significantly influenced by overhead transmission infrastructure. The magnitude of impact at the year of opening will be **Negligible**, resulting in a visual effect of **Neutral significance** for receptors at this location.

Viewpoint 3

26.7.52 Figure 26.7 - Viewpoint 3 depicts a winter photomontage from this viewpoint. The modified outlook in the year of opening will comprise the eastern end of the substation as a prominent new element within the overall outlook. Due to proximity the substation components will form a prime focus in the view.

26.7.53 Given the degree of visual exposure and limited background context in the view, the magnitude of impact at the year of opening will be **Large**, resulting in a worst-case visual effect of **Major** significance for high sensitivity receptors at this location.

Viewpoint 4

26.7.54 The modified outlook in the year of opening will comprise the very upper levels of the western end of the substation as an inconspicuous minor element within the outlook, with the perception of lower level components restricted due to the screening effect of intervening mature trees and hedgerows.

26.7.55 The substation will be indistinct in the outlook and will not affect the overall quality or character of the view. The magnitude of impact during the year of opening will be **Negligible**, resulting in a visual effect of no greater than **Minor** significance for receptors at this location.

Viewpoint 5

26.7.56 The modified outlook in the year of opening will comprise the substation as an inconspicuous minor element within the outlook. Existing trees along the northern boundary of Wineham Lane and those surrounding arable fields in the hinterland will effectively screen the facility.

26.7.57 Parts of the tallest substation elements may be perceptible through thinner sections of the intervening vegetation, particularly during winter months.

26.7.58 As the substation will be indistinct and not be detrimental to the overall quality or character of the view, the magnitude of impact during the year of opening will be **Negligible**, resulting in a visual effect of **Neutral** significance for receptors at this location.

Viewpoint 6

26.7.59 Figure 26.7 - Viewpoint 6 depicts a winter photomontage from this viewpoint. The modified outlook in the year of opening will comprise the substation as an apparent small element within the outlook.

26.7.60 The existing mature hedgerow which lines the eastern boundary of the arable field in the foreground of the view features numerous mature hedgerow trees that will effectively screen the substation from view; the only visible element will be a small section of the boundary fenceline.

26.7.61 The substation will not affect the overall quality or character of the view and will be viewed in the context of the existing Bolney Substation. Accordingly, the magnitude of impact during the year of opening will be **Small**, resulting in a visual effect of **Minor to Moderate** significance for receptors at this location.

Viewpoint 7

26.7.62 Figure 26.7 - Viewpoint 7 depicts a winter photomontage from this viewpoint. The modified outlook in the year of opening will comprise the substation as an apparent small element within the view. The upper sections of the tallest elements will be evident through thinner sections of the intervening woodland in the mid ground view, with lower level features effectively screened.

26.7.63 The substation will be visible against a landscape context containing numerous electrical infrastructure elements including the existing Bolney Substation, transmission towers and overhead lines. Some of the site will be partially obscured by woodland at Priorsbush.

- 26.7.64 There will be no perceptual change in the overall characteristics or quality of the outlook from this location. The magnitude of impact during the year of opening will be **Small**, resulting in a visual effect of **Minor to Moderate** significance for receptors at this location.

Viewpoint 8

- 26.7.65 Intervening woodland will effectively screen views of the substation from this viewpoint location, resulting in there being no elements visible in the outlook. Accordingly, the magnitude of impact during the year of opening will be **Negligible**, resulting in a visual effect of **Neutral** significance for receptors at this location.

Viewpoint 9

- 26.7.66 The combination of the viewing distance and intervening woodland will render the substation an inconspicuous minor element within the expansive outlook at this location.
- 26.7.67 The key qualities and characteristics of this promoted viewpoint will not be affected by introduction of additional built form of the type proposed. The magnitude of impact during the year of opening will be **Negligible**, resulting in a visual effect of no greater than **Minor** significance for receptors at this location.

26.8 Residual Effects

Cable Route

- 26.8.1 The assessment has recorded that direct impacts will occur on the landscape fabric during construction of the proposed cable route within all seven Character Sections, but that careful design has sought to avoid these where possible (e.g. through adoption of a narrow construction corridor width).
- 26.8.2 Assuming implementation of appropriate construction mitigation and reinstatement measures, there will be a Neutral residual effect on both landscape character and the visual environment by Year 15 as a result of cable installation, as the condition of the landscape will have fully re-established. Dependant upon the landscape crossed and the features affected, the residual effects will reduce over time as the mitigation measures take effect and as replacement vegetation establishes and matures. All cable components will be buried below ground, except for the cable route marker posts at field boundaries. These will be visible from the ground and all marker posts will be located to minimise interference with agricultural activities.

Substation

- 26.8.3 In respect of the proposed substation, subject to the successful establishment and management of landscaping proposals to achieve their desired environmental function, the following residual effects on landscape character and visual amenity at Year 15 are predicted to remain.

Landscape Character

- 26.8.4 Post establishment of mitigation planting, by Year 15 the substation will be perceived in the landscape as a contiguous part of existing electrical infrastructure.
- 26.8.5 Boundary planting surrounding the site will provide a high degree of integration and visual screening of the taller substation structures, and will serve to replace that lost to progression of the development. Once established, landscaping measures will contribute to improving the overall landscape framework within the Character Section.
- 26.8.6 Accordingly, the effect of the substation on landscape character will render an effect of **Minor to Negligible** significance on landscape character by Year 15.

Visual Impact

- 26.8.7 In relation to Viewpoints 1 and 3, proposed woodland supplementation to the north of the substation and the proposed woodland planting surrounding the eastern end of the site will have achieved a height and density that will substantially reduce the significance of visual effects to the order of **Minor** by Year 15.
- 26.8.8 Following the establishment of planting and gradual weathering of equipment and materials over time, the significance of effect at Viewpoints 6 and 7 will marginally reduce to an order of **Minor** by Year 15.
- 26.8.9 Viewpoints 2, 4, 5, 8 and 9 will not experience any change in significance due to their limited visual relationship to the substation.

Table 26.10: Summary of Visual Effects for the Substation

VP No.	Location	Sensitivity	Visual Effects: Year of Opening		Visual Effects: Year 15	
			Magnitude of Impact	Significance of Effect	Magnitude of Change	Significance of Effect
1	PRoW, south of Coombe House	High	Medium	Moderate to Major	Small	Minor
2	Bolney Chapel Road	Low	Negligible	Neutral	Negligible	Neutral
3	Twineham Grange Cottages, Bob Lane	High	Large	Major	Negligible	Minor

VP No.	Location	Sensitivity	Visual Effects: Year of Opening		Visual Effects: Year 15	
			Magnitude of Impact	Significance of Effect	Magnitude of Change	Significance of Effect
4	Adjacent to North Lodge, Bob Lane	High	Negligible	Minor	Negligible	Minor
5	PRoW Wineham Lane	Low	Negligible	Neutral	Negligible	Neutral
6	PRoW Priorsbush	Medium	Small	Minor to Moderate	Small	Minor
7	Nyeshill Farm, Wineham Lane	Medium	Small	Minor to Moderate	Small	Minor
8	PRoW adjacent to Kings, Kentstreet Lane	Medium	Negligible	Neutral	Negligible	Neutral
9	Devil's Dyke, South Downs	High	Negligible	Minor	Negligible	Minor

26.9 Cumulative

26.9.1 The following planned developments are noted in the vicinity of the proposed substation:

- Modifications to the existing National Grid Bolney substation (associated with Rampion connection).
- Modifications to the existing National Grid Bolney substation (not associated with Rampion).

26.9.2 The modifications to the existing National Grid Bolney Substation (associated with Rampion connection) fall outside National Grid's Permitted Development rights and therefore planning consent would be required. The modifications to the existing National Grid Bolney substation (not associated with Rampion) will, however, be undertaken as Permitted Development, with pre-application consultation with the LPA expected in 2013.

26.9.3 The National Grid Bolney substation modifications will be located in close vicinity to the works required at Bolney as part of the Rampion project. It is understood that the proposed Bolney substation modifications are located within land owned by National Grid. Detailed environmental assessment reports have not yet been completed for the proposed works.

- 26.9.4 Based on the assumption that the proposed modifications to the Bolney substation will be of similar height and scale to the existing Bolney substation, with regard to the effects on landscape character, limited cumulative effects are anticipated. Both the proposed Rampion substation and the proposed modifications to the Bolney substation are located in a landscape context which features numerous existing electrical infrastructure elements, including the existing Bolney substation and the numerous overhead lines and associated towers. The proposed Rampion substation and the proposed modifications to the Bolney substation will be similar in terms of construction and appearance.
- 26.9.5 The existing Bolney substation is surrounded by a dense planting structure, and in combination with the gently rolling landscape, where fields and roads are lined by tall, mature hedgerows and trees, views of the existing substation are generally limited to those from close proximity, from receptors within the immediate vicinity such as Wineham Lane to the west and Nyeshill Farm to the north. A more distant view may be gained from the Devil's Dyke, South Downs. However, the combination of viewing distance and intervening woodland renders Bolney substation an inconspicuous minor element within the expansive outlook at this location.
- 26.9.6 Given the relative positions and size of the proposed modifications to the Bolney substation and the existing Bolney substation, and the visibility of the existing facility, together with the limited visibility of the proposed Rampion substation, in this existing electrical infrastructure context, no significant landscape or visual effects are anticipated with the introduction of the modifications to the Bolney substation.

26.10 References

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Natural England: National Landscape Character Areas (undated)

A Landscape Character Assessment for Mid Sussex (2005)

Horsham District Landscape Character Assessment (2003)

West Sussex Landscape Character Assessment (2003)

South Downs Integrated Landscape Character Assessment (2005)

The South Downs Way National Trail Management Plan 2009-2014 (2009)

The South Downs Management Plan 2008-2013 (2008)

National Grid's Sense of Place: Design Guidelines for Development Near High Voltage Overhead Lines (undated)

National Vegetation Classification: Field Guide to Woodland (2004)