



**AQUIND Limited**

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# **AQUIND INTERCONNECTOR**

## **Environmental Statement – Volume 1 – Chapter 15 Landscape and Visual Amenity**

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations  
2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

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Environmental Statement – Volume 1 –  
Chapter 15 Landscape and Visual Amenity

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# 15. LANDSCAPE AND VISUAL AMENITY

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## 15.1. SCOPE OF THE ASSESSMENT

### 15.1.1. INTRODUCTION

15.1.1.1. This chapter reports the assessment of likely significant effects arising from the Proposed Development on the landscape and on visual amenity. The Landscape and Visual Impact Assessment ('LVIA') deals with the separate, but interlinked, issues of:

- Landscape<sup>1</sup>: Landscape effects are direct physical changes to the landscape caused by the Proposed Development or indirect changes to landscape character and how the landscape is perceived following the Proposed Development. Landscape impact assessment considers these effects both in terms of the individual components of the landscape and on the structure, coherence and character of the landscape as a whole.
- Visual: Visual effects are changes in the composition and character of views available in the area affected by the Proposed Development. Visual impact assessment considers the response of the people who experience these effects, who may be living or working in the area, enjoying recreational activities or simply passing through. The assessment considers the overall consequence of the effects on the visual amenity – the pleasantness of the view or outlook – that the people affected enjoy.

15.1.1.2. The Proposed Development that forms the basis of this assessment is described in Chapter 3 (Description of the Proposed Development) of the Environmental Statement ('ES') Volume 1 (document reference 6.1.3). This chapter (and its associated figures and appendices) is intended to be read as part of the wider ES, with references to:

- Chapter 16 (Onshore Ecology) of the ES Volume 1 (document reference 6.1.16);
- Chapter 21 (Heritage and Archaeology) of the ES Volume 1 (document reference 6.1.21);
- Converter Station and Telecommunication Buildings Parameter Plans Sheet 1 to 3 (document reference 2.6);
- Optical Regeneration Station Parameter Plan Sheet 1 (document reference 2.11);
- Design Principles included within the Design and Access Statement (document reference 5.5); and
- Outline Landscape and Biodiversity Strategy (document reference 6.10).

15.1.1.3. The LVIA considers the "present day" effects on those heritage assets that are also landscape or visual receptors because they form distinctive landscape features

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and/or are tourist/visitor attractions where views are an important contributory factor to the experience.

15.1.1.4. The LVIA considers activities during construction, over the operational life of the Proposed Development and during decommissioning. This includes:

- Construction, operation and decommissioning works associated with Section 1 (the Converter Station) and associated infrastructure (including the Access Road, up to two Telecommunications Buildings containing Fibre Optic Cable ('FOC') Infrastructure and associated compound, security fencing, and Laydown Area/Works Compound) and movement of vehicles during all three stages of the Proposed Development.
- Construction works associated with Sections 2 to 9 (the Onshore Cable Corridor from the Converter Station at Lovedean to the Landfall at Eastney).
- Construction, operation and decommissioning works associated with Section 10 (the Landfall) including two Optical Regeneration Stations ('ORS') associated with the FOC, construction of underground infrastructure, temporary vehicular routes for construction vehicles, temporary Laydown Area/Works Compound and construction vehicle movements.

## 15.1.2. STUDY AREA

15.1.2.1. The Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition, (Landscape Institute, IEMA, 2013) para 5.2 clarifies how study areas should be determined on a project by project basis. GLVIA states that *"[T]he study area should include the site itself and the full extent of the wider landscape around it which the proposed development may influence in a significant manner. This will usually be based on the extent of Landscape Character Areas likely to be significantly affected either directly or indirectly. However, it may also be based on the extent of the area from which the development is potentially visible, defined as the Zone of Theoretical Visibility, or combination of the two."*

15.1.2.2. For the purposes of this LVIA, the study area was divided into three areas for Section 1, one area for Section 2 to 9 and a further area for Section 10 as summarised below.

### **Section 1 – Lovedean (Converter Station Area)**

- 15.1.2.3. An 8 km study area was considered for the LVIA as shown in Figure 15.1 of the ES Volume 2 (document reference 6.2.15.1) centred on the location of the Converter Station for Option B(i). This study area was informed by a site assessment and Zones of Theoretical Visibility based on Option B(i) and B(ii) presented within the parameter envelope (discussed in further detail later in this chapter, section 15.4.5). The study area was also informed by initial consultations with Winchester City Council ('WCC'), East Hampshire District Council ('EHDC'), Havant Borough Council ('HBC') and the South Downs National Park Authority ('SDNPA'). This area was deemed as suitable to inform an initial baseline review, including the identification of national/county/district level landscape character assessments and long-distance views for potential landscape and visual impacts of the Converter Station Area.
- 15.1.2.4. It was agreed with SDNPA, WCC and EHDC that a smaller, more detailed 3 km study area was appropriate for the purposes of local, district and city landscape character and views from the nearest visual receptors around the Converter Station Area.
- 15.1.2.5. A 1.2 km study area was also selected for the assessment for the assessment of close range views from the nearest residents of residential properties.

### **Section 2 - Anmore to Section 10 Eastney**

- 15.1.2.6. For the Onshore Cable Corridor, the LVIA study area is 120 m on either side of the Onshore Cable Corridor (Figure 15.2 to 15.4 of the ES Volume 2 (document reference 6.2.15.2 – 6.2.15.4). The area defined was on the basis that whilst temporary effects would be generated these would be short term and the scale of construction works minimal. Works would be below ground and features reinstated following construction.

### **Section 10 – Eastney (Landfall)**

- 15.1.2.7. A 300 m study area around the Landfall was agreed with Portsmouth City Council ('PCC') representative landscape officer as shown in Figure 15.4 and this study area was considered adequate based on proposals for the ORS buildings. At the scoping stage, PINS agreed that an assessment of seascape character and coastline was not required as effects were considered to be negligible (Appendix 15.1 (Consultation Responses) of the ES Volume 3 (document reference 6.3.15.1) provides further detail). This was agreed on the basis that the Landfall Horizontal Directional Drilling ('HDD') operations would drill surface to surface boreholes under the intertidal area, thus limiting disturbance to the environment including Eastney Beach.

## **15.2. LEGISLATION, POLICY AND GUIDANCE**

- 15.2.1.1. This assessment has taken into account the current legislation, policy and guidance relevant to the LVIA. These are listed below, with a comprehensive review of relevant policies provided in Appendix 15.2 (National and Local Policy Review) of the ES Volume 3 (document reference 6.3.15.2).

## 15.2.2. LEGISLATION

- Countryside and Rights of Way Act (HM Government, 2000); and
- European Landscape Convention (Council of Europe, 2000).

## 15.2.3. PLANNING POLICY

### National Policy

- Overarching National Planning Policy Statement for Energy ('EN-1') (Department for Energy and Climate Change (DECC), 2011)); and
- National Planning Policy Framework (Ministry of Housing, Communities and Local Government, February 2019)).

### National Policy Statement

15.2.3.1. The Overarching National Policy Statement for Energy ('EN-1') Department for Energy and Climate Change (DECC, 2011) includes a number of statements of relevance to the landscape including green infrastructure and visual impacts of energy infrastructure in general.

15.2.3.2. Section 5.9 of EN-1 sets out the requirements for assessing and mitigating landscape and visual impacts of proposed energy projects of national significance. The key points are set out below:

- Paragraph 5.9.5: *"[T]he landscape and visual assessment should include references to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project"*.
- Paragraph 5.9.6: *"[A]ssessment should include the effects during construction of the project and the effects of the completed development and its operation on landscape components and landscape character"*.
- Paragraph 5.9.7 *"[T]he assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include light pollution effects, including on local amenity, and nature conservation"*.
- Paragraph 5.9.8: *"[V]irtually all nationally significant infrastructure projects will have effects on the landscape." and "[P]rojects need to be designed carefully, taking into account the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate"*.

- Paragraph 5.9.9: *"National Parks, the Broads and AONBs have been confirmed by the Government as having the highest status of protection in relation to landscape and scenic beauty" and that "the conservation of the natural beauty of the landscape and countryside should be given substantial weight by the IPC [Secretary of State] in deciding applications for development consent in these areas".*
- Paragraph 5.9.12: [T]he duty to have regard to nationally designated areas also applies and that *"the aim should be to avoid compromising the purposes of the designation and such projects should be designed sensitively given the various siting, operational and other relevant constraints".* In addition, consideration should be given to the impact on nationally designated areas where proposals lie outside the boundaries of protected landscapes as well as highly valued landscapes which are protected by a local designation.
- Paragraph 5.9.15: Which relates to developments outside of nationally designated areas states that: *"[T]he scale of such projects means that they will often be visible within many miles of the site of the proposed infrastructure. The Secretary of State should judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project."*
- Paragraph 5.9.16: *"[I]n reaching a judgement, the Secretary of State should consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the Secretary of State considers reasonable."*
- Paragraph 5.9.18: *"[A]ll proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The IPC [Secretary of State] will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project."*
- Paragraph 5.9.21: In respect of the mitigation of landscape and visual amenity impacts, states *"reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing scale or otherwise amending design of a proposed energy infrastructure project may result in significant operational constraint and reduction in function".*
- Paragraph 5.9.22: *"[W]ithin a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration."*

- Paragraph 5.9.23: *"[D]epending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista."*

15.2.3.3. EN-1 is the principal policy document against which the landscape and visual impacts of the Proposed Development are considered. As such, the relevant policies detailed above were taken into account when considering its impacts.

### Local Policy

15.2.3.4. The LVIA study area covers Hampshire County Council ('HCC'), spans four local authority boundaries namely WCC, EHDC, HBC and PCC, and lies on the edge of the SDNP. The applicable local planning policy framework is detailed below with policies of relevance to this chapter set out in Appendix 15.2.

- Havant Borough Council Core Strategy, March 2011 Local Development Framework, (Havant Borough Council, March 2011).
- Havant Borough Local Plan (Allocations) Adopted Version, (Havant Borough Council, 2014).
- Havant Borough Design Guide SPD, (Havant Borough Council, December 2011).
- East Hampshire District Local Plan: Joint Core Strategy, (East Hampshire District Council and South Downs National Park Authority, adopted June 2014).
- East Hampshire Local Plan, Second Review, adopted version, (East Hampshire District Council, 2006).
- Winchester District Local Plan Part 1 Joint Core Strategy, adopted version (Winchester City Council and South Downs National Park, March 2013).
- Winchester District Local Plan Part 2 Development Management and Site Allocations, adopted version March 2017 (Winchester City Council and South Downs National Park, March 2017).
- Winchester District Local Plan Review, adopted version, (Winchester City Council, 2006).
- High Quality Places, SPD, adopted version, (Winchester City Council, March 2015).
- The Portsmouth Plan – Portsmouth Core Strategy, adopted version (Portsmouth City Council, January 2012).
- Portsmouth Local Plan 2001-2011, adopted July 2006 and amended July 2007, July 2009 and January 2012, (Portsmouth City Council, 2012).

- Eastney Beach Habitat Restoration and Management Plan, SPD, (Portsmouth City Council, 2014).
- Seafront Masterplan, SPD, (Portsmouth City Council, 2013).
- SDNP Local Plan, adopted 2019, (South Downs National Park Authority, 2019).

#### 15.2.4. GUIDANCE

- 15.2.4.1. The following guidance documents were used during the preparation of this chapter:
- The Guidelines for Landscape and Visual Impact Assessment ('GLVIA3') (Landscape Institute, IEMA, 3rd Edition, 2013).
  - An Approach to Landscape Character Assessment (Natural England, 2014).
  - Photography and photomontage in landscape and visual impact assessments (Landscape Institute Advice Note 01/11 March (2011). Visual Representation of Development Proposals/Landscape Institute Technical Guidance Note 02/17 (31 March 2017).
  - Photograph and Photomontage in Landscape and Visual Impact Assessment – Technical Guidance Note, Public Consultation, Draft (Landscape Institute, June 2018).
- 15.2.4.2. The LVIA, as emphasised in GLVIA3 is also reliant on professional experience and judgement.
- 15.2.4.3. Throughout this chapter reference is also made to other documents where relevant.

### 15.3. SCOPING OPINION AND CONSULTATION

#### 15.3.1. SCOPING OPINION

- 15.3.1.1. As detailed in Chapter 4 (Methodology) of the ES Volume 1 (document reference 6.1.4), a Scoping Opinion including comments on the LVIA approach was received by the Applicant from PINS (on behalf of the Secretary of State ('SoS')) on 7 December 2018. The Scoping Opinion included scoping responses from consultees. The following section summarises how the comments raised in the Scoping Opinion have been addressed, where relevant.
- *PINS agreed that landscape and seascape effects relating to the Marine Components could be scoped out of the ES:* It was noted and agreed.
  - *Effects on visual receptors associated with the Converter Station beyond a 3 km study area needs to be considered:* It was agreed that the extent of the study area would be widened to consider visual receptors beyond 3 km but within an 8 km study area for the Converter Station. This study area was agreed in discussions with the Local Planning Authorities ('LPAs') and SDNPA alongside the viewpoints proposed, methodology, photomontages and wirelines. *The assessment should consider an assessment of landscape and seascape*



*character effects, including heritage assets arising from the proposed landfall works:* The LVIA includes an assessment of impacts of the ORS buildings and cable route at the Landfall on landscape and visual amenity based on an agreed study area of 300 m with a focus on landscape rather than seascape character given the position of the Landfall relative to Eastney Beach, the built-up nature of the surrounding area as well as the negligible impact associated with Landfall HDD operations under the Intertidal Area limiting disturbance to the environment. Effects on heritage assets are considered in Chapter 21 (Heritage and Archaeology).

- *Effects on visual receptors was scoped out for the Onshore Cable Corridor:* The LVIA considers the construction stage effects on visual receptors within a 120 m buffer on either side of the Onshore Cable Corridor and within 3 km of the Converter Station.
- *Clear figures are required to show landscape and visual effect receptors:* Figures providing the location of landscape and visual receptors are included as Figures 15.5 to 15.8 and 15.38 to 15.43 of the ES Volume 2 (document reference 6.2.15.5 – 6.2.15.8 and 6.2.15.38 – 6.2.15.43) of this chapter.
- *The relationship of heritage, archaeology and ecology needs to be considered:* The LVIA considers heritage, archaeology and biodiversity assets where these are distinctive landscape features and inform landscape value and/or are tourist/visitor attractions where views are an important contributory factor to the experience. Mitigation measures were prepared in close consultation with the ecology assessment.

15.3.1.2. Appendix 15.1 (Consultation Responses) includes the full responses to the Scoping Opinion.

### **15.3.2. INFORMAL CONSULTATION PRIOR TO PEIR**

15.3.2.1. Pre-application consultations have taken place with technical specialists in LPAs and SDNPA to agree the scope of the LVIA, the extent of the study area, representative viewpoints, necessity for winter views, verified photomontages and wirelines and to obtain datasets. Discussions have included WCC, EHDC/HBC and SDNPA due to the proximity of the Proposed Development to the SDNP boundary.

15.3.2.2. The first round of informal consultation prior to the PEIR sought comments on the study area and preliminary viewpoints. Following site visits a further round of consultation took place over the representative viewpoints, the necessity for winter views and field verified visualisations, i.e. photomontages.

15.3.2.3. Appendix 15.1 (Consultation Responses) includes a summary of consultation undertaken and outcome of discussions for this topic.

### **15.3.3. PEIR CONSULTATION**

15.3.3.1.

Consultation on the PEIR was undertaken between February and April 2019. Key comments are summarised in italics below alongside how these were addressed. Further detail on responses relating to the Converter Station design is provided in more detail in the Design and Access Statement and the Consultation Report (document reference 5.1).

**Converter Station:**

- *The main comments related to the scale and prominence of the buildings which appear functional, industrial and utilitarian in an area which is essentially rural in setting and character. Comments were also received on the importance of understanding the wider landscape within which the building sits together with comments on the proposed colour palette (needing to be darker and recessive to reduce the bulk of the building).* Since the PEIR, further analysis and consultation has taken place with LPAs and SDNPA to inform the Converter Station and Telecommunication Buildings Parameter Plans Sheet 1 to 3, Design Principles and indicative landscape mitigation plans which form part of the Application and seek to address these comments and minimise the landscape and visual impact of the Converter Station.
- *Site contours, cut and fill and the relationship to other infrastructure needs to be considered.* The design will seek to integrate the Converter Station and associated infrastructure sympathetically into the surrounding topography, and where practicable and subject to environmental constraints would be cut into the hill slope to reduce local visual effects in discussions with the LPAs and SDNPA. These proposals are reflected in Design Principles secured through the Development Consent Order ('DCO')



- *Even with landscape screening in place, concerns were raised that the proposed buildings will remain visible and harm local views to points of interest to the south. Furthermore, that the buildings will be visible in panoramic views from elevated positions and close to breaking the skyline.* Since the PEIR, further analysis and consultation has taken place with LPAs and the SDNPA to inform the Design Principles which are secured through the DCO. Requirements and form part of the Design and Access Statement. These Design Principles provide a series of guidelines for the future detailed design of the Converter Station with regard to its siting, massing and appearance, including cladding and colours. The Converter Station does not break the skyline from representative elevated viewpoints within the SDNP (see viewpoint 2, 16 and 17, Figures 15.19, 15.33 and 15.34 of the ES Volume 2 (document reference 6.2.15.19, 6.2.15.33 and 6.2.15.34).

### **Access Track/Road:**

- *Concerns were raised over the prominence of the access road and associated landscape and visual effects, together with the impact on historic field boundaries, character of Broadway Lane and severance of connectivity with ancient woodland.* The design team have considered the siting and landscape design of the Access Road and have sought to avoid its visual prominence by providing screening in the form of hedgerows and trees along the edge of the road. The nature of the permanent surface of the road and landscaping will be agreed at detailed design maintaining some flexibility to integrate it into its immediate surroundings.
- *Questions were raised as to whether the Converter Station could be accessed via the existing Lovedean Substation rather than a new access road.* The Applicant considered this as an alternative routing, although this was ruled out due to security issues and the impact on existing woodland and planting. Further details on the alternatives considered by the Applicant are provided in Chapter 2 (Consideration of Alternatives) of the ES Volume 1 (document reference 6.1.2).

### **Mitigation Strategy:**

- *Comments were raised that landscape mitigation should maximise opportunities to enhance ecological networks/corridors and biodiversity benefits.* Opportunities to maximise biodiversity and connectivity were informed by discussions with the LPAs and SDNPA and have been incorporated within indicative landscape mitigation plans (Figures 15.48 and 15.49 of the ES Volume 2 (document reference 6.2.15.48 and 6.2.15.49)) and Outline Landscape and Biodiversity Strategy (document reference 6.10).

- *Comments were raised that the landscape mitigation plan in the PEIR showed a limited amount of mitigation and that 'off-site' mitigation should be considered.* Further work has been undertaken to review the potential for additional mitigation measures in consultation with the LPAs and SDNPA. Additional planting is now proposed from that presented in the PEIR to increase visual screening, improve landscape character and connectivity. As a result, the Order Limits have been extended from those presented in the PEIR to accommodate the additional areas of planting.
- *There should be information on the long-term management of proposals in a coherent landscape strategy.* This is reflected in the Design Principles and the Outline Landscape Biodiversity Strategy which covers the long-term management of planting for the Converter Station Area and the Landfall.
- *The retention of woodland to the west of the Converter Station location must be considered alongside bunding and earthworks.* The retention of this woodland has been considered as part of the design. This would be achieved by the development envelope as defined by the Parameter Plan (Option Bii) but is dependent on agreement with National Grid to secure land to the west of Lovedean Substation (See Chapter 3 (Description of the Proposed Development) for further details). Bunding and earthworks have been considered to screen the Converter Station in the form of reprofiling, and these are shown on the indicative landscape mitigation plans.
- *Biodiversity net gain needs to be considered.* The opportunities to maximise biodiversity have been incorporated within the indicative landscape mitigation plans (see Figures 15.48, 15.49 and 15.50 of the ES Volume 2 (document reference 6.2.15.48, 6.2.15.49 and 6.2.15.50) and the Outline Landscape and Biodiversity Strategy.
- *Can existing overhead wires/pylons be undergrounded?* Existing overhead cables are the property and responsibility of National Grid and therefore cannot be undergrounded by the Applicant. One local distribution 11 kv cable close to Broadway Cottages, the entranceway and Broadway/Day Lane and running across the Access Road into Lovedean Substation would be undergrounded in connection with the Access Road for the Converter Station.

### **South Downs National Park:**

- *Concerns were raised over the impacts on the landscape and visual setting of SDNP and that the mitigation measures presented in the PEIR were not commensurate with the likely levels of harm.* The LVIA has undertaken a more local landscape character assessment of a range of features including historic landscape features and considered the impact of the Converter Station on the setting of SDNP. This assessment is summarised in the ES chapter and presented in detail in Appendix 15.5 (South Downs National Park) of the ES Volume 3 (document reference 6.3.15.5). Additional embedded mitigation measures have also been included within the Order Limits from that which was presented in the PEIR.
- *Impact on Monarch's Way.* The visual amenity and impact on visual receptors utilising this public right of way has been considered in the assessment see viewpoints 3, 12 and 13 (Figures 15.19, 15.29 and 15.30 of the ES Volume 2 (document reference 6.3.15.19, 6.3.15.29 and 6.3.15.30)
- *Tranquillity is a special quality of the SDNP and needs to be considered in terms of landscape character as well as impacts on residents, users of PRow and other visitors.* The LVIA considers tranquillity in the context of the Converter Station and its immediate surroundings see Appendix 15.5 (South Downs National Park).

15.3.3.2. Appendix 15.1 (Consultation Responses) includes the full responses to the PEIR consultation in relation to this topic and how these were addressed.

#### 15.3.4. POST PEIR CONSULTATION

15.3.4.1. Consultations continued following publication of the PEIR with the LPAs (WCC, EHDC) and SDNPA as well as PCC and Natural England ('NE') to discuss the parameter envelope and Parameter Plans, the design of the Converter Station, mitigation proposals within the Converter Station Area, need for visualisations and extent of the study area at the Landfall. Summaries of these consultations undertaken between April and August 2019 are provided in Appendix 15.1 (Consultation Responses).

15.3.4.2. Key issues raised were:

- Mitigation proposals associated with the Converter Station covering landform, planting, the Access Road and need to accommodate existing and proposed offsets.
- Design of the Converter Station with reference to materials, colour, cladding and angles.

- Parameter Plans for the Converter Station presenting two different options and Design Principles.
- Impact on residential receptors within a 1.2 km study area.
- Mitigation proposals to screen the ORS buildings at the Landfall as well as verified baseline photographs and wirelines.

15.3.4.3. Full details of consultation undertaken to date is presented within the Consultation Report (document reference 5.1).

### 15.3.5. ELEMENTS SCOPED OUT OF THE ASSESSMENT

15.3.5.1. The elements shown in Table 15.1 are not considered to give rise to likely significant effects as a result of the Proposed Development and therefore are scoped out of the ES. This has been discussed and agreed with consultees through the Scoping and PEIR stages.

**Table 15.1 - LVIA Topics and elements scoped out of the assessment**

<b>Element Scoped Out</b>	<b>Justification</b>
<b>Converter Station: Landscape and Visual Receptors beyond 8 km study area from the Converter Station</b>	Whilst there may be long distance views from elevated locations within the SDNP, landscape and visual effects beyond the agreed study area of 8 km from the proposed Converter Station are not expected to be significant.
<b>Converter Station: Specific Landscape and Visual receptors within 8 km study area from the Converter Station</b>	The ZTV indicates restricted visibility from a number of areas within the 8 km study area and the landscape and visual effects from those areas outwith the ZTV would either not be available or are predicted not to be significant. These specific landscape and visual receptors are identified and scoped out in the baseline section.
<b>Onshore Cable Corridor: Operational Impacts</b>	Given the very limited above ground features proposed, permanent significant operational effects on landscape and visual receptors within and beyond the 120 m buffer on either side of the Onshore Cable Corridor are not expected and therefore scoped out.
<b>Landfall: Landscape and Visual Receptors beyond 300 m</b>	Given the small scale of the Landfall with limited above ground features, potential significant effects on onshore landscape and visual receptors is not anticipated beyond 300 m from the Landfall elements.

Element Scoped Out	Justification
<b>Marine Component: Landscape and seascape assessment</b>	Impacts on seascape and the coastline were scoped out due to the resultant negligible effect that is likely to be generated.

### 15.3.6. IMPACTS SCOPED INTO THE ASSESSMENT

#### Construction Stage

15.3.6.1. The following impacts are considered to have the potential to give rise to temporary significant effects during construction of the Proposed Development and have therefore been considered within the ES:

#### Converter Station

- Effects on landscape character based on a current and future baseline, from construction and plant activities within 3 km study area; and
- Effects on visual amenity of surrounding visual receptors, including residential properties and users of local PRow, based on a current and future baseline from construction and plant activities within 8 km study area.

#### Onshore Cable Corridor

- Effects on landscape character and features associated with the construction of the Onshore Cable Corridor; and
- Effects on visual receptors within the 120 m buffer on either side of the Onshore Cable Corridor.

#### Landfall

- Effects on landscape character of the Landfall, based on a current and future baseline, from construction and plant activities; and
- Effects on visual amenity of surrounding visual receptors, including from residential properties and recreational users of PRow based on a current and future baseline, from construction and plant activities within 300 m study area of the Landfall.

15.3.6.2. Specific construction impacts which may generate a landscape and visual amenity effect include:

- Erection of hedgerow and tree protection measures;
- Site clearance, removal of vegetation and topsoil stripping including cut and fill to form the Converter Station platform, the presence of temporary spoil heaps and the creation of the attenuation ponds;
- Creation of temporary Works Compounds and Laydown Areas;
- Creation of temporary and permanent routes (Onshore Cable Corridor, Landfall and Converter Station Area) and movement and activity of construction vehicles;
- Site lighting during morning and evening in winter to enable a full working day;
- Active change as development progresses and the gradual emergence of the Proposed Development;
- Visual presence of large machinery including HDD drilling equipment at Eastney Landfall and other locations referred to in Table 3.6 of Chapter 3 (Description of the Proposed Development);
- Construction work associated at Landfall to erect two ORS buildings;
- Creation of new landscape landforms with bare earth visible until planted/seeded;
- Implementation of landscape mitigation within the Order Limits unaffected by construction works, and after construction works have been completed; and
- Impact on the setting of the SDNP within 3 km of the Converter Station.

### **Operational Stage**

- 15.3.6.3. The following impacts are considered to have the potential to give rise to temporary and permanent significant effects during the operational life of the Proposed Development and have therefore been considered within the ES:

#### **Converter Station Area**

- Effects of the Converter Station/Converter Station Area and siting on landscape character within the 3 km study area during operation; and
- Effects of the Converter Station/Converter Station Area and siting on the visual amenity of surrounding visual receptors within the 8 km study area.

#### **Landfall**

- Effects of the two ORS buildings and associated compound within the 300 m study area during operation on landscape character; and
- Effects of the two ORS buildings and siting on the visual amenity of surrounding receptors within the 300 m study area.

- 15.3.6.4. To take account of the planting works that form part of the embedded mitigation, the ES has considered these impacts at three stages as agreed with the LPAs and SDNPA:



- Immediately post-completion (year 0);
- Ten years after completion (year 10); and
- Twenty years after completion (year 20).

15.3.6.5. Once constructed, the joint bays, like the rest of the route, will not be visible. Accordingly, it is considered that the cable route features would be negligible in terms of landscape character and visual amenity effects.

15.3.6.6. Link Boxes (Pillars) are also proposed. Whilst the exact location and dimensions of any associated above ground Link boxes (Pillars) or cabinets is yet to be determined, it is anticipated that five to six Link Boxes (Pillars) would be required along the whole route and that these would be very small structures that could be either below (approximately 0.8 x 0.8 x 0.6 m) or above ground (approximately 1.0 m x 1.0 m x 0.6 m). These features would be negligible in terms of landscape character and visual amenity effects and have therefore not been considered further in the assessment.

15.3.6.7. Specific operational stage impacts include:

- Direct loss or alteration to landscape features including vegetation (hedgerows, field pattern, change in land use and topography);
- Introduction of permanent features including the Converter Station buildings and associated infrastructure, including security fencing and Telecommunications Buildings;
- Presence of a permanent Access Road for occasional operational traffic for maintenance;
- Creation of new hard and soft landscaping features;
- Increase in vegetation cover following mitigation planting;
- Enhancement and protection of existing planting; and
- Impact on the setting of the SDNP within 3 km of the Converter Station.

15.3.6.8. During the night there would be limited or no impacts from the operation of the Converter Station except for occasional vehicle lights and security lighting. Lighting would only be used in the event of unauthorised access to the site or if emergency repair work was required on the outdoor equipment. Light fittings will be appropriately designed to ensure that light is only directed downward to the necessary areas.

15.3.6.9. As referred to in Appendix 15.1 (Consultation Responses) and 15.5 (South Downs National Park), and agreed with SDNPA whilst a lighting assessment was not required, consideration has been given to the Dark Night Skies Reserve.

#### **Decommissioning Stage**

15.3.6.10. The following impacts are considered to have the potential to give rise to temporary

and permanent significant effects during decommissioning of the Proposed Development and have therefore been considered within the ES:

### Converter Station

- Effects on local landscape character based on a current and future baseline resulting from the demolition and removal of structures within a 3 km study area; and
- Effects on visual amenity of surrounding visual receptors, including residential properties and users of the local PRoW within an 8 km study area based on a current and future baseline from construction and plant activities to demolish and remove structures.

### Landfall

- Effects on landscape character based on current and future baseline within 300 m study area to demolish and remove ORS buildings; and
- Effects on the visual amenity of surrounding receptors based on current and future baseline within a 300 m study area to demolish and remove ORS buildings.

15.3.6.11. It should be noted that post completion, many of the ground level construction activities and vehicle movements associated with the Converter Station Area during decommissioning would be screened in the wider landscape by mitigation planting.

15.3.6.12. It is assumed that no works would be undertaken to the Onshore Cable Corridor and in terms of Landfall only the above ground ORS buildings and associated infrastructure would be removed.

15.3.6.13. Specific decommissioning impacts could include:

- Erection of hedgerow and tree protection measures.
- Site clearance of structures and associated infrastructure and removal of vegetation affected by decommissioning to accommodate temporary Works Compound and Laydown Area both within the Converter Station Area and Landfall.
- Topsoil stripping including the presence of temporary spoil heaps.
- Movement and activity of construction vehicles along the access route during decommissioning and its removal thereafter.
- Site lighting morning and evening in winter to enable a full working day.
- Active change as decommissioning progresses and gradual reversion to a future baseline landscape.



- Regrading of landscape landforms associated with the Converter Station platform to marry into surrounding landscape.
- Reinstatement of any off and onsite landscape mitigation lost by decommissioning works.
- Impact on the setting of the SDNP within 3 km of the Converter Station.

## 15.4. ASSESSMENT METHODOLOGY

### 15.4.1. OVERVIEW

- 15.4.1.1. The assessment methodology outlined below has been followed when undertaking the assessment of the landscape and visual amenity effects of the Proposed Development presented in this chapter. Appendix 15.3 (Landscape and Visual Assessment Methodology) of the ES Volume 3 (document reference 6.3.15.3) provides further details of the methodology.
- 15.4.1.2. The objective of the LVIA has been to identify the likely significant landscape and visual impacts of the Proposed Development on existing receptors and determine their effects.
- 15.4.1.3. Landscape effects are defined by the Landscape Institute's GLVIA3 as *"Effects on the landscape as a resource in its own right. These effects can be positive or negative"* (Landscape Institute, IEMA, 2013).
- 15.4.1.4. Development may have a direct (physical) effect on the landscape in which it is located as well as an indirect or perceived (intangible) effect from landscape character areas surrounding it. The potential landscape effects, occurring during the construction, operational stages and decommissioning, may therefore include, but are not restricted to, the following:
- Changes to landscape elements: the addition of new elements or the removal of trees, vegetation, and buildings and other characteristic elements of the landscape character type;
  - Changes to landscape qualities: degradation, erosion, or reinforcement of landscape elements and patterns, and perceptual characteristics, particularly those that form key characteristic elements of landscape character types;
  - Changes to landscape character: landscape character may be affected through the effect on characteristic elements (including perceptual characteristics), landscape patterns and attributes and the cumulative addition of new features, the magnitude and presence of which is sufficient to alter a notable part of the overall landscape character type of a particular area; and
  - Cumulative landscape effects: where more than one development may lead to a potential landscape effect.

15.4.1.5. Visual effects are concerned wholly with the effect of development on visual receptors and general visual amenity. Visual effects are identified for different receptors (people) who would experience the view such as at their places of residence, during recreational activities, at work, or when travelling through the area. Visual effects may include the following:

- Visual effect: change in the perception and appreciation of the landscape as a result of development. This may include changes to the quality of the view, ability of the visual receptor to appreciate the view, or changes to the characteristic elements within the view. These changes can be positive (i.e. beneficial or an improvement) or negative (i.e. adverse or a detraction); and
- Cumulative visual effects: the cumulative or incremental visibility of similar types of development may combine to have a cumulative visual effect.

#### 15.4.2. **DESK STUDIES**

15.4.2.1. Information on the existing ('baseline') landscape resource in the study area was collected through desk-based study incorporating reference to Local Plans, Ordnance Survey ('OS') maps, Zones of Theoretical Visibility mapping, and 3D models of the location for the Converter Station based on the Parameter Plans, websites and relevant literature published by the SDNPA, LPAs and Parish Councils.

#### 15.4.3. **SITE VISITS (SURVEYS)**

15.4.3.1. An initial field survey was undertaken by a Chartered Landscape Architect experienced in LVIA in September 2017, followed by site visits in March 2018, May 2018, October 2018, June and July 2019.

15.4.3.2. The early site visits were conducted to verify the extent of the study area, assess local landscape character and the nearest visual receptors to help inform early analysis, the site selection process and selection of representative viewpoints.

15.4.3.3. Further site visits were conducted to capture baseline photography for the LVIA in winter and summer/autumn, and a site visit with the LPA officers to confirm the Local Views to be included within the LVIA in winter.

15.4.3.4. Further site visits were undertaken at the Converter Station Area and surroundings to inform the Parameter Plans, Design Principles and indicative landscape mitigation plans. These visits included a review of the SDNP landscape character within the 3 km detailed study area and identification of the nearest residential properties within a 1.2 km study area. The proposed Onshore Cable Corridor and Landfall were also reviewed on site. These site visits considered the landscape character along the Onshore Cable Corridor (within a 120 m buffer of the cable corridor), and the visual amenity of immediate visual receptors within the 120 m study area of the Onshore Cable Corridor and 300 m study area around the Landfall.

#### 15.4.4. **VISUAL IMPACT ASSESSMENT**

##### **Zone of Theoretical Visibility and Viewpoint Analysis**

- 15.4.4.1. A Zone of Theoretical Visibility ('ZTV') was developed to identify the likely (or theoretical) extent of visibility of the development. Figures 15.9 to 15.10 of the ES Volume 2 (document reference 6.2.15.9 and 6.2.15.10) for the Converter Station (Option B(i) and Option B(ii)) present 8 km ZTVs "bare earth" (i.e. without vegetation or structures) and Figures 15.11 to 15.12 of the ES Volume 2 (document reference 6.2.15.11 and 6.2.15.12), the 3 km ZTVs (with existing vegetation and the built form).
- 15.4.4.2. ZTVs were also prepared for both study areas considering 20 years growth screening scenarios based on embedded mitigation as defined by the indicative landscape mitigation plans. The generation of the ZTVs illustrate the predicted visibility of the location(s) of the Converter Station from the surrounding area, and in turn, informed the establishment of the 8 km study area study area, and the 3 km study area detailed study area. Figures 15.13 to 15.14 of the ES Volume 2 (document reference 6.2.15.13 and 6.2.15.14) for the Converter Station (Option B(i) and Option B(ii)) present 8 km ZTVs with screening) and Figures 15.15 to 15.16 of the ES Volume 2 (document reference 6.2.15.15 and 6.2.15.16), the 3 km ZTVs (with screening).
- 15.4.4.3. The ZTVs were prepared based on a finished floor level of 85.1 m (AOD), raised 300 mm above the finished platform level of 84.8 m (AOD) in response to flood risk as referred to In Chapter 3 (Description of the Proposed Development). Four points were taken for the tallest buildings (the valve halls) based on a maximum height of 26 m above finished floor level and a further four points for external structures based on 15 m (refer to Parameter Plan Sheet 1 to 3). Lighting columns which may be used in an emergency and set at a maximum height of 15 m, and lighting masts set at a maximum height of 30 m were not considered within the preparation of the ZTVs as these are narrow slender structures and would only be discernible in more immediate views.
- 15.4.4.4. The ZTV maps illustrate the areas from where it may be theoretically possible to view all or some of the Converter Station based on Option B(i) and B(ii). In general terms, theoretical visibility is focused on the lowland and coastal areas to the south and west of the Converter Station Area, and extends into the peripheral ridge of the southern edge of the SDNP, near Hambledon, where there are slopes facing towards the coast and Portsdown.
- 15.4.4.5. The generation of the ZTV informed definition of the study area, selection of viewpoints and scope of the LVIA for the Converter Station.
- 15.4.4.6. In discussions with the landscape representative for PCC it was agreed that it was not necessary to prepare a ZTV for the ORS buildings at the Landfall.

### 8 km Study Area ZTV (baseline)

- 15.4.4.7. The ZTVs in Figures 15.9 to 15.10 were created using OS Terrain 5 Digital Terrain Modelling ('DTM') data and based on the Converter Station Option B(i) and B(ii). The ZTVs were based on a 'bare earth' mapping source, and do not account for the screening of woodland blocks or buildings within the 8 km study area defined for the ZTV.
- 15.4.4.8. The Converter Station, based on Option B(i) and B(ii) would be theoretically visible from 38% of the study area, whilst it is anticipated that the Converter Station would not be visible in the remaining 62%, based on the bare earth scenario of the OS terrain data - refer to Table 15.2 below.

**Table 15.2 - Extent of visibility of Option B(i) and B(ii) (8 km and 3 km)**

Extent of Visibility	8 km Study Area	3 km Study Area
Option B(i)	38.22%	36.14%
Option B(ii)	37.90%	35.16%

- 15.4.4.9. Above figures show a slight variance based on availability of Lidar data for 3 km radius versus the OS Terrain 5 data.
- 15.4.4.10. The site assessment work undertaken to date has been carried out in clear and dry weather conditions during the summer and autumn months, in order to ensure visibility across the study area for medium and long- distance views. Winter viewpoint photography was only conducted on clear, sunny days, and not early morning/late afternoon to avoid poor light conditions.
- 15.4.4.11. Further ZTVs, Figures 15.13 to 15.14 of the ES Volume 2 (document reference 6.2.15.13 and 6.2.15.14), were prepared drawing on the embedded mitigation (a combination of reprofiling and planting) referred to in the Design Principles and covered in the indicative landscape mitigation plans, covering the 8 km radius detailed study area and illustrating mitigation screening at 20 years growth.
- ### 3 km Study Area ZTVs (Baseline)
- 15.4.4.12. The ZTVs in Figures 15.11 to 15.12 were created using 1 m Digital Surface Modelling LiDAR digital terrain data and based on the Converter Station, Option B(i) and B(ii). This includes the data for above ground features associated with the Converter Station plus existing woodland blocks and buildings, and the screening they provide.
- 15.4.4.13. The Converter Station, based on Option B(i) and Option B(ii) would be theoretically visible from either 36 or 35% of the study area depending on the Option, whilst it being anticipated that the Converter Station would not be visible in the remaining 66 to 65%, based on the LiDAR data.

15.4.4.14. As a further exercise ZTVs, Figures 15.15 to 15.16 (document reference 6.2.15.15 and 6.2.15.16) were prepared drawing on the embedded mitigation (a combination of reprofiling and planting) referred to in the Design Principles and covered in the indicative landscape mitigation plans. The ZTVs covered the 3 km study area and illustrate the effects of mitigation screening at 20 years growth - refer to Table 15.3 below. Mitigation planting was mapped as 10 m (for woodland, year 10) and 15 m (for woodland, year 20), 4 m for scrub and 2 m for hedgerows<sup>2</sup>.

**Table.15.3 - Extent of visibility with embedded mitigation (reprofiling and planting) for both Option B(i) and B(ii) covering an 8 km and 3 km study area**

Extent of Visibility	8km Study Area	3km Study Area
Option B(i)	35.86%	34.18%
Option B(ii)	35.69%	32.80%

### Viewpoint Selection

#### **Converter Station:**

15.4.4.15. Viewpoints were selected by analysis of the ZTVs and agreed through consultation with the landscape representatives of the LPAs and SDNPA (Figure 15.17 (Viewpoint Location Plan for the Converter Station) of the ES Volume 2 (document reference 6.2.15.17)). Following the methodology established in GLVIA3, the viewpoints were chosen based on the following criteria:

- Viewpoints should be representative of the likely impacts;
- Viewpoints should show a range of different types of views;
- Viewpoints should be representative of a range of different receptor groups;
- Viewpoints should be representative of a range of distances and directions; and
- Viewpoints should be representative of the varying image of the Proposed Development in the landscape.

15.4.4.16. The viewpoints were selected to illustrate the landscape/site context and views from local PRoW including regionally promoted routes and visitor attractions, the SDNP, nearby residential properties/groups of residential properties, views from the local road network, and to represent the local landscape character. Three of the viewpoints are identified within the SDNP View Characterisation and Analysis Report (2015) and were selected to illustrate the view from elevated locations within the SDNP see viewpoints 2, 16 and 17 (Figures 15.19, 15, 33 and 15.34).

15.4.4.17. A summary of the illustrated viewpoints agreed through consultation is provided in Table 15.4 below. All viewpoints are located in the public realm. Site photography was undertaken during periods of fine weather and clear visibility see Figure 15.17 for the Viewpoint Location Plan for Converter Station, and Figures 15.18 to 15.34 for the baseline landscape photographs of the location of the Converter Station for both Option B(i) and B(ii).

- 15.4.4.18. Full reasons for viewpoint selection are provided in Appendix 15.6 (Visual Amenity) of the ES Volume 3 (document reference 6.3.15.6).
- 15.4.4.19. Seventeen viewpoints were agreed to inform the assessment of the Converter Station Area. The LPAs/SDNPA requested summer and winter views accompanied by wirelines.
- 15.4.4.20. Viewpoint figures suffixed by:
- A illustrates 90 degree horizontal field of view winter verified view and wireline.
  - B illustrates a 27 degree horizontal field of view - summer verified view with wireline.
  - C illustrates a 27 degree horizontal field of view - winter verified view with wireline.

**Table 15.4 - Representative Viewpoints**

<b>Viewpoint</b>	<b>Viewpoint Name</b>
1	PRoW near Hinton Manor
2	PRoW leading to Windmill Hill
3	PRoW near Broadway Lane (Monarch's Way)
4*	PRoW off Broadway Lane
5	Catherington SSSI
6	PRoW near James's Copse
7	PRoW close to Anmore Dell
8	PRoW close to Cutlers Farm
9	Fort Widley, Portsdown Hill
10*	PRoW near Little Denmead Farm (east) north of Broadway Lane (south) (U200)
11	PRoW near Little Denmead Farm (west), White Horse Lane
12	PRoW off unnamed road (U218) (Monarch's Way)
13	PRoW off Old Mill lane, Denmead Mill (Monarch's Way)
14**	Wayfarer's Walk off Rushmere Lane
15	Broadhalfpenny Down



Viewpoint	Viewpoint Name
16	Old Winchester Hill
17	Butser Hill

\*Viewpoint repositioned for winter/summer view towards Converter Station.

\*\* Additional viewpoint taken to replace viewpoint from Denmead (refer to Appendix 15.6 (Visual Amenity) for further details).

- 15.4.4.21. Three Local Views from which indicative photomontages were prepared were also agreed through consultation with the landscape representatives of the LPAs and SDNPA (consultation discussions are detailed in Appendix 15.1 (Consultation Responses)) and are based on Option B(i) as shown in Table 15.5 below and illustrated in Figure 15.17 Viewpoint Location Plan for the Converter Station. All viewpoints are located in the public realm. The corresponding site photography was undertaken during periods of fine weather and clear visibility (see photomontage illustrations from these locations in Figures 15.35 to 15.37 of the ES Volume 2 (document reference 6.2.15.35 – 6.2.15.37)).

**Table 15.5 - Representative Local Viewpoints and Photomontages based on Option B(i)**

Viewpoint	Viewpoint Name
A	View from Broadway Lane to the south of the Converter Station
B	View from Old Mill Lane southwest of the Converter Station
C	View from Old Mill north of the Converter Station

- 15.4.4.22. The indicative photomontages are presented to illustrate planting as defined by the indicative landscape mitigation plan at implementation, and its subsequent growth over time. It is anticipated that as the planting matures, becoming more established by 20 years post completion, the Converter Station Area would become more screened, and 'settled', in the landscape. The indicative photomontages illustrate both the existing and proposed planting and screening they provide to local visual receptors. The indicative photomontages are based on Option B(i). It is important to note that the elevational treatment in the indicative photomontages is illustrative but aligns to the Design Principles and shows one way in which they could be applied to the detailed design.

- 15.4.4.23. Local viewpoints A to B are presented with a 27 degree horizontal field of view whilst local viewpoint C is presented with a 53.5 degree horizontal field of view. Viewpoints figures suffixed by:

- A illustrate baseline.

- B illustrate year 0.
- C illustrate year 10.
- D illustrate year 20.

**Landfall:**

15.4.4.24.

Discussions have taken place with PCC over the need for verified views and wirelines based on proposals for two ORS buildings to be sited in Section 10 Landfall. Five verified views were prepared, of which three are wirelines as outlined in Table 15.6 below and the remainder baseline photographs. All viewpoints are presented with a 40 degree horizontal degree of view, see Figures 15.51 (Viewpoint Location Plan) of the ES Volume 2 (document reference 6.2.15.51) and Figures 15 52 to 15.56 of the ES Volume 2 (document reference 6.2.15.52-6.2.15.56) for verified views and wirelines. Wirelines were based on the ORS Parameter Plan (document reference 2.11).

**Table 15.6 - Representative Viewpoints and Wirelines for the Landfall**

<b>Viewpoint</b>	<b>Viewpoint Name</b>
<b>18</b>	View from corner of Fort Cumberland Road looking across the Landfall in a south-easterly direction (wireline)*
<b>19</b>	View from play area looking across the Landfall in an easterly direction
<b>20</b>	View from caravan park looking across the Landfall in a northerly direction (wireline)**
<b>21</b>	View from Fort Cumberland SINC looking across to the landfall in a north-westerly direction (wireline)**
<b>22</b>	View from Fort Cumberland SINC close to Fort Cumberland Scheduled Ancient Monument looking across to the landfall in a westerly direction
	<p>*Note: Viewpoint 18 is presented on four sheets. Baseline figures are suffixed by “A” and “B” and wirelines by “C” and “D”.</p> <p>**Viewpoint figures suffixed by “A” illustrate the baseline and “B” the wireline</p>



### Significance

- 15.4.4.25. Following GLVIA3, the predicted landscape and visual effects (and whether they are significant) are determined through consideration of the 'sensitivity' of (a) the landscape element, assemblage of elements, key characteristics or character type or character area under consideration bearing in mind quality and value; or (b) visual receptor; and the 'magnitude of change' posed by the Proposed Development.
- 15.4.4.26. In this case the Proposed Development consists of construction of the Converter Station and associated infrastructure, its operation and subsequent decommissioning, the installation of the cable within the Onshore Cable Corridor and the construction and operation of the Landfall.
- 15.4.4.27. The sensitivity of the particular landscape or visual receptor is ranked high, medium, low or negligible and the magnitude of change is similarly ranked as large, medium, small or negligible, as indicated in Table 15.7 below with further details in Appendix 15.3 (Landscape and Visual Assessment Methodology).
- 15.4.4.28. The type of effect is also considered and may be direct or indirect, temporary or permanent, positive, neutral or negative. The landscape and visual assessment unavoidably involves a combination of both quantitative and qualitative assessment and is based on professional judgment.

**Table 15.7 - Matrix for Determining Significance of Effect**

		Sensitivity (value/importance)			
		High	Medium	Low	Negligible
Magnitude of Change	Large	Major	Moderate - major	Minor - Moderate	Negligible
	Medium	Moderate – Major	Moderate	Minor	Negligible
	Small	Minor - Moderate	Minor	Negligible - Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

15.4.4.29. Significant landscape and visual effects, in the assessor’s opinion, resulting from the Proposed Development are those effects identified as ‘major’, ‘moderate - major’, or ‘moderate’, with any exceptions being clearly explained. There may, for example, be exceptions in the case of lower magnitudes of change affecting receptors of higher landscape and or visual sensitivity and leading to a minor-moderate effect that in some circumstances are considered to be significant. A full description of the methodology used in this assessment is set out in Appendix 15.3 (Landscape and Visual Assessment Methodology).

**15.4.5. CUMULATIVE ASSESSMENT**

15.4.5.1. The assessment of cumulative effects is essentially the same as for the assessment of landscape and visual effects in that the level of landscape and visual effect is determined by assessing the combination of sensitivity of the landscape or visual receptor (ranging from high to negligible) and the magnitude of change (ranging from high to zero).

15.4.5.2. Types of cumulative effect are defined as follows:

- Cumulative Landscape Effects: Where more than one type of development may have an effect on a landscape designation or particular area of landscape character.
- Cumulative Visual Effects: Where the cumulative or incremental visibility of similar types of development combined generate a cumulative visual effect.

15.4.5.3. Further details of the methodology are detailed in Appendix 15.3, 15.9 (LVIA Cumulative Assessment Matrix (Stage 1 & 2)) and 15.10 (LVIA Cumulative Assessment Matrix (Stage 3 & 4)) of the ES Volume 3 (document reference 6.3.15.9 and 6.3.5.10).

## 15.4.6. PARAMETER ENVELOPE APPROACH

- 15.4.6.1. The assessment of the Converter Station Area in Section 1 of the Proposed Development has principally been based on a maximum parameter design envelope. The parameter envelope is defined by the Converter Station and Telecommunications Buildings Parameter Plans Sheet 1 to 3 which form part of the Application. The Parameter Plans allow for some flexibility in the siting and massing of the Converter Station which accords with the DCO environmental parameters, as described in Chapter 3 (Description of the Proposed Development).
- 15.4.6.2. Two potential location options for the Converter Station are provided for, as identified by the Parameter Plans. These are referred on the Parameter Plans and in this Chapter as:
- Option B(i); and
  - Option B(ii).
- 15.4.6.3. The proposed locations for the Converter Station lie to the west of Lovedean Substation, Option B(ii) would be situated approximately 40 m to the east and 11 m to the north of Option B(i). Option B(ii) would allow the retention of an existing hedgerow, containing hedgerow trees and groups of trees, though the use of the land for the siting of the Converter Station in this location is subject to ongoing discussions with National Grid. These features provide an important visual screening function and also mitigate against impacts on ecology and arboriculture.
- 15.4.6.4. The assessment has also been informed by the Design Principles to be applied at Section 1 and referred to in Section 3.2 of Chapter 3 Description of the Proposed Development and the Design and Access Statement.
- 15.4.6.5. To inform the assessment, ZTV and wirelines of the parameter envelope were prepared for both Option B(i) and B(ii). Indicative photomontages of Local Viewpoints were also prepared, based on Option B(i) which is considered to represent the worst-case scenario in terms of landscape character and the indicative landscape mitigation plans.
- 15.4.6.6. The assessment of the Landfall in Section 10 of the Proposed Development has also been based on a parameter envelope as defined by the Optical Regeneration Parameter Plan Sheet 1 which forms part of the Application. As above, the Parameter Plan enables some flexibility in the siting of up to two ORS buildings at the Landfall.
- 15.4.6.7. Proposals for landscaping would be developed and approved in accordance with the indicative landscape mitigation plans (see Figures 15.48, 15.49 and 15.50) and referred to in the Design Principles. Landscape mitigation measures (covering both hard and soft landscaping works) would be secured through requirements included for within the draft DCO (document reference 3.1).
- 15.4.6.8. The Outline Landscape and Biodiversity Strategy which supports the indicative

landscape mitigation plans details the long-term management of planting at the Converter Station and Landfall during the operation of the Proposed Development. Details of the final proposed landscaping and measures for the management of the landscape and ecological features for the relevant phases of the Proposed Development would be submitted for approval and complied with following approval in accordance with the requirements to be contained within the DCO.

#### **15.4.7. ASSUMPTIONS AND LIMITATIONS**

15.4.7.1. The following assumptions and limitations are as summarised below:

15.4.7.2. General:

- The assessment of views was taken from publicly accessible locations and a professional judgement was made for residential receptors. A residential visual amenity study was not undertaken.
- The LVIA includes a comprehensive visual assessment describing and assessing the effects from all the potentially affected visual receptors within the Study Area for the Converter Station.
- The assessment of the Converter Station is informed through a series of agreed representative photographs and wirelines from agreed representative viewpoints to give a clear picture of anticipated effects, with visualisations/photomontages from agreed selected key viewpoints. Similarly, for the Landfall agreed representative photographs and accompanying wirelines demonstrate the anticipated effects – no photomontages are required.
- The micro-siting of embedded landscape mitigation measures would be subject to the results of archaeological trial trenching.
- All options for the Onshore Cable Corridor forming part of the Application have been assessed in this chapter.
- All planting lost would be replaced with like for like species where practicable and in agreement with the relevant discharging authority.
- All PRoW and footpaths affected by the Proposed Development would be reinstated to the same condition and quality as previously.

- It should be noted that new guidance ‘TGN 06/19 Visual Representation of Development Proposals’ was published on 17 September 2019. The Landscape Institute advises that the new guidance should apply to new commissions undertaken from 17 September 2019, but a reasonable grace period would apply and reasonable judgements made over the implications of the changeover. The Guidance Note replaces LI Advice Note 01/11 and Technical Guidance Note 02/17. In the case of this assessment no changes were made to the visualisations prepared.

#### 15.4.7.3. Converter Station Area (Section 1):

- As referred to in the indicative Converter Station Area Layout Plans Option B(i) (document reference 2.7) at least 15 m clearance would be provided to protect adjacent groups of trees and hedgerows from the Converter Station and associated infrastructure within the Converter Station Area including Ancient Woodland.
- New cables can be planted over with hedgerows and scrub on the basis that engineering specify a concrete duct block underground to protect the cables from roots and the drying out of the duct surround.
- New tree planting would be offset by 5 m on either side of the Onshore Cable Route.
- No planting can take place over existing Scottish Southern Energy Networks (‘SSEN’) oil filled cables – an allowance has been made of 1 m on either side of centre line of cable for hedgerow planting and 5 m on either side for tree planting.
- Telecommunication Buildings would be sited in Section 1 as referred to on Parameter Plan Sheets 2 and 3 and in accordance with the Design Principles.
- It is assumed that during decommissioning stage, a new construction compound would be established to remove the buildings, structures and associated infrastructure for recycling and disposal. Works would include reprofiling of existing landform where practicable and “recent” mitigation planting replaced where disturbed.

#### 15.4.7.4. Onshore Cable Corridor (Section 2-9):

- It is assumed all land would be reinstated following the installation of the Onshore Cable Route.
- New cables can be planted over with hedgerows on the basis that engineering specify a concrete duct block underground to protect the cables from roots and the drying out of the duct surround.
- New tree planting would be offset by 5 m on either side of the Onshore Cable Route.

- The HVDC Onshore Cable would be laid as set out in Chapter 3 (Description of the Proposed Development). Impacts on important habitats and vegetation particularly trees subject to Tree Preservation Orders ('TPOs'), hedgerow trees, hedgerows and grassland would be minimised through Onshore Cable Micrositing.
- During construction of the Onshore Cable Route reasonable access would be for pedestrians going to or from premises abutting a street.
- Where construction works obstruct a footway an absolute minimum unobstructed width of 1.0 m would be provided alongside the construction corridor and where this is not possible a safe alternative route. This would include provision of suitable crossing facilities where required, including the temporary replacement of existing pedestrian crossings that may need to be closed to facilitate construction see the Traffic Management Strategy (within Appendix 22.1 (Transport Assessment) of the ES Volume 3 (document reference 6.3.22.1)).
- In some locations, a footway closure may be required without a suitable alternative route being available nearby or on the opposite side of the carriageway. In these instances, a pedestrian route would be provided within the carriageway.
- Some temporary footway closures may be required to facilitate delivery and collection of materials. In the majority of cases this would be mitigated through alternative footway links being available or other measures stipulated in the Traffic Management Strategy.

#### 15.4.7.5. Landfall (Section 10)

- Up to two ORS buildings would be sited within the Landfall refer to Parameter Plan Sheet 1.

#### 15.4.7.6. More specific assumptions relating to Section 2 to 10 of the Proposed Development (where relevant) are covered in Section 15.8 (Assessment).

## 15.5. BASELINE ENVIRONMENT

### 15.5.1. LANDSCAPE CHARACTER OVERVIEW

15.5.1.1. This section summarises the national and local landscape character, the local characteristics of the host landscape and its immediate surroundings and where relevant designated landscapes, heritage, biodiversity and recreational assets. Refer to Appendix 15.4 (Landscape Character) of the ES Volume 3 (document reference 6.3.15.4) for a summary of key landscape characteristics, landscape value, susceptibility to change and landscape sensitivity for each national, district, borough and city landscape character area/type.

15.5.1.2. As outlined previously the LVIA considers an agreed 8 km study area for national, county and district level assessments, and then concentrates on a more detailed

study area of 3 km to assess local landscape character and consider the relationship of the Converter Station to the SDNP.

### **National Landscape Character**

- 15.5.1.3. The national level assessments, referred to as National Character Area Profiles ('NCAPs') are defined on the National Character Areas ('NCAs') Map of England (Natural England, 2014). The map indicates that the Converter Station Area (Section 1), associated Onshore Cable Corridor and Landfall (Sections 2 to 10) lie within the following NCAPs (Figures 15.38, 15.41, 15.42 and 15.43).
- Section 1 and 2: NCA 125 South Downs;
  - Section 3: NCA 125 South Downs and NCA 128 South Hampshire Lowlands;
  - Section 4 and 5: NCA 128 South Hampshire Lowlands;
  - Section 6: NCA 128 South Hampshire Lowlands and NCA 126 South Coast Plain; and
  - Section 7, 8, 9 and 10: NCA 126 South Coast Plain.
- 15.5.1.4. A summary of the characteristics of each NCAP is outlined below:
- NCA 125 South Downs describes the landscape as one of contrasts, the downland creating a sense of openness whilst enclosure and remoteness is evident within woodlands and close to urban areas.
  - NCA 126 South Coast Plain is described as a flat, coastal landscape with an intricately indented shoreline lying between the coastline and dip slope of the South Downs and South Hampshire Lowlands with distinctive local landscape and intertidal habitats of international importance.
  - NCA 128 South Hampshire Lowlands is a low lying plain between the South Downs and Southampton Water with its highest point Portsdown Hill; an outlying chalk ridge. Whilst the area is predominately urban, it does have a wealth of biodiversity.
- 15.5.1.5. Character areas designated at a national scale have a role to play in providing general context. However, NCA's are too extensive for there to be any potential for them to be significantly altered by any one development and their sheer size and diversity can limit the extent to which the character description is directly relevant to the Proposed Development and its associated study area.
- 15.5.1.6. This has led to the conclusion that they are not likely to be significantly affected by the Proposed Development, and hence do not require further assessment as part of the LVIA of this Proposed Development. Therefore, NCA 125 South Downs, 126 South Coast Plain and 128 South Hampshire Lowlands were scoped out of further consideration. However, guidance within the NCAs on landscape opportunities and trends were referred to and reviewed as part of the development of the mitigation



proposals for the Proposed Development, see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) of the ES Volume 3 (document reference 6.3.15.7). A more detailed review of Local Landscape Character Areas ('LCA's) and Landscape Character Types ('LCT's) at a County, District, Borough, City and National Park level is covered in the detailed landscape and visual baseline.

## 15.5.2. VISUAL BASELINE OVERVIEW

- 15.5.2.1. The visual baseline establishes the area in which the Proposed Development may be visible, the different groups of people who may experience views of the Proposed Development, the places they would be affected and the nature of the views and visual amenity at those points. Visual receptors are individuals and/or defined groups of people who have the potential to be affected by a proposal. Receptors including users of buildings, recreational spaces, footpaths and transport routes have different sensitivities to their visual environment. Generally, this is dependent upon their interests in the visual environment, their viewing opportunity and duration, and the content of the views. Whilst it is people who are the actual receptors of visual effects, it is the places they may occupy, and from which the Proposed Development may be seen, that are listed below.
- 15.5.2.2. As referred to in Section 15.1.2 the LVIA focused on an agreed baseline study area of 8 km for more long-distance views, a 3 km for local views and a 1.2 km radius for local residents who may overlook the Converter Station Area. The sensitivity of visual receptors alongside the location, description and orientation of local residents is detailed in Appendix 15.6 (Visual Amenity).

## 15.5.3. LANDSCAPE AND VISUAL BASELINE

- 15.5.3.1. A site description, the baseline landscape character, and baseline visual amenity of each section of the Proposed Development is discussed below.

### **Section 1 – Lovedean (Converter Station Area)**

#### **Site Description**

- 15.5.3.2. The Converter Station Area is situated next to the existing Lovedean Substation, located in a rural fringe area, east of Winchester, approximately 13.5 km north of Portsmouth city centre. Located to the west of Lovedean Substation it would span across a number of small fields divided by hedgerows.
- 15.5.3.3. The Converter Station Area itself is a mixture of arable and grazing farmland and falls from approximately 97 m to 67 m AOD. A new Access Road would connect the Converter Station with Broadway Lane to the east and run to the south of the existing Substation.
- 15.5.3.4. Surrounding the Converter Station Area are mixed agricultural fields with established hedgerow boundaries and hedgerow trees. Some smaller fields to the west are used by off-road vehicles and horse grazing. Individual farm properties are situated to the north, west and south, connected by narrow lanes. The existing Lovedean Substation, associated pylons and overhead lines are dominant elements in the



landscape of the Converter Station Area and immediate surrounding area.

- 15.5.3.5. Whilst the Converter Station Area is not sited within the SDNP it crosses the boundary of two LPA areas, EHDC and WCC (Figure 15.1).
- 15.5.3.6. In some locations the SDNP boundary lies just to the edge of the Converter Station Area (Figure 15.1 illustrates the relationship of the Converter Station Area to the SDNP).

### Current Landscape Baseline

#### Local Landscape Character

- 15.5.3.7. The landscape baseline has (in accordance with LPA and SDNPA consultation) covered all landscapes within the 8 km study area at a county, district and city level. Also included are character areas in the SDNP (Figure 15.38, 15.39 and 15.40).
- 15.5.3.8. Table 15.8 below lists the LCAs/LCTs. More detail on key characteristics, management proposals and their sensitivity is given in Appendix 15.4 (Landscape Character).
- 15.5.3.9. The indirect effect of the Converter Station on neighbouring landscape character areas would lessen with distance. For reasons of distance and relative inter-visibility, including the screening effects of topography, intervening built form and vegetation, many of the neighbouring LCAs/LCTs would not be affected by the Converter Station. These are therefore scoped out of the assessment but are included in the Table 15.8 (noted in italic text). LCA's/LCTs which have been scoped out also includes areas which have proportionately small pockets of visibility. Such areas include the following, both of which are considered in the context of visual amenity and long-distance views:
  - SDNP D Downland Mosaic/WCC 16 Upper Meon Valley (Viewpoint 16 Old Winchester Hill); and
  - WCC 8i Portsdown Hill Open Down/HBC D12 Portsdown Hill (Viewpoint 9 Fort Widley).

**Table 15.8 - South Downs National Park, County and District/City Level LCAs/LCTs (within 8 km)**

<b>SDNP, County and District/City Level Landscape Character Areas/Types</b>	
<b>Scoped in</b>	<b>Scoped Out (in italics)</b>
<b>SDNP</b>	
D: Downland Mosaics (2a Hambledon to Clanfield Downland Mosaic (Enclosed))	<i>B: Wooded Estate Downland</i>

<b>SDNP, County and District/City Level Landscape Character Areas/Types</b>	
<b>Scoped in</b>	<b>Scoped Out (in italics)</b>
	<i>E: Chalk Valley Systems</i>
	<i>H: Major Scarps</i>
	<i>P: Wooded Claylands</i>
<b>County</b>	
<b>Hampshire County Council</b>	
2F: Forest of Bere East	<i>2E: Forest of Bere West</i>
7H: Southeast Hampshire Down (which includes the Converter Station Area)	<i>3E: Meon Valley</i>
8i: Portsdown Hill Open Down	<i>7G: Owlesbury and Corhampton Downs</i>
	<i>9G: Havant and Emsworth Coastal Plains</i>
	<i>13B: East Hants Hangers and Greensand Terraces</i>
<b>West Sussex Council</b>	
	<i>SD1: Western Downs</i>
	<i>SC6: Ashlings Upper Coastal Plain</i>
<b>City/District</b>	
<b>Winchester City Council</b>	
16: Upper Meon Valley (Old Winchester Hill)	<i>15: South Winchester Downs</i>
17: Hambledon Downs (which includes the Converter Station)	<i>20: Lower Meon Valley</i>
18: Forest of Bere Lowlands	
19: Portsdown Hill	
<b>East Hampshire District Council</b>	
3a: Downland Mosaic: Clanfield Open and Enclosed (Butser Hill and Windmill Hill)	<i>1a: Wooded Estate Downland: Queen Elizabeth Forest</i>

<b>SDNP, County and District/City Level Landscape Character Areas/Types</b>	
<b>Scoped in</b>	<b>Scoped Out (in italics)</b>
3fi: Downland Mosaic: Horndean, Clanfield Edge	<i>4a: Chalk Valley Systems: Meon Valley</i>
10a: Wooded Claylands: Havant Thicket and Southleigh Forest	<i>5b: Major Scarps – Meon Valley Scarp</i>
	<i>6b: Greensands Terrace: Ramsden to Buriton</i>
<b>Havant Borough Council</b>	
B Lowland Settled Wooded Farmland 3: Woodcroft Farm	<i>A Pasture and Woodland</i> <i>9: Waterlooville Golf Course</i> <i>10: Blendworth Common and woodlands</i>
D Settled Chalk Ridge 12: Portsdown Hill	<i>B Lowland Settled Wooded Farmland</i> <i>7ii: Purbrook Heath</i> <i>7i: Purbrook Heath</i> <i>11: A3 (M) Eastern corridor</i> <i>20: Staunton Country Park</i> <i>21: Southleigh Forest</i>
	<i>C Urban Lowland</i> <i>1: Waterlooville and historic route</i> <i>2: Waterlooville western suburbs</i> <i>4: Waterlooville Business Park</i> <i>5: Purbrook and Waterlooville - eastern suburbs</i> <i>6: Purbrook</i>

<b>SDNP, County and District/City Level Landscape Character Areas/Types</b>	
<b>Scoped in</b>	<b>Scoped Out (in italics)</b>
	<i>8: A3 (M) corridor residential area</i>
	<i>E Urban Upper Harbour Plain</i>
	<i>13: Historic Bedhampton</i>
	<i>14: Havant historic core</i>
	<i>15: Bedhampton and Havant - northwestern suburbs</i>
	<i>16: Leigh Park</i>
	<i>17: West Leigh</i>
	<i>18: West Leigh Industrial Estate</i>
	<i>H Open Lower Harbour Plain</i>
	<i>13: Historic Bedhampton</i>
	<i>41: South Moor and Broadmarsh coastal park</i>
<b>Portsmouth City Council</b>	
	<i>7: Cosham</i>
	<i>9: Drayton and Farlington</i>
	<i>19: Paulsgrove</i>

### Host Landscape

- 15.5.3.10. The Converter Station Area sits across two local authority areas. The Converter Station and Telecommunication Buildings are situated within the Hambledon Downs Landscape Character Area, and specifically the Landscape Character Type 17 W2 Chalk and Clay Farmlands, Winchester Landscape Character Assessment, 2004 ('WCCLCA'). The Access Road associated with the Converter Station lies within LCA 3F Downland Mosaic, East Hampshire Landscape Character Assessment ('EHLCA') (East Hampshire District Council, 2006). Whilst the Converter Station Area lies across two different administrative areas, the key landscape characteristics of the area are similar.
- 15.5.3.11. The baseline characteristics of the LCAs and LCTs at a district/city council level and which fall within the 3 km study area are described in Table 15.9 below and illustrated in Figure 15.40. Further details are included in Appendix 15.4 (Landscape Character).

**Table 15.9 - Landscape Character of the Surrounding Area and the Site (within 3 km)**

Local Character Area/Type	Description
<b>Havant Borough Council Local Landscape Character Areas</b>	
B3 Woodcroft Farm (LCT B Lowland Settled Wooded Landscape)	Predominately rural area characterised by extensive woodland and parkland with a mix of arable and pasture of varying size.
C1 Urban/residential - Waterlooville and historic route (LCT C Urban Lowland)	Urban area developed along a historic the routeway of the A3.
C2 Urban - Waterlooville western suburbs (LCT C Urban Lowland)	
C4 Waterlooville Business Park (LCT C Urban Lowland)	
C8 A3 (M) Corridor Residential (LCT B Lowland Settled Wooded Landscape)	
<b>Winchester City Council Local Landscape Character Areas and Types</b>	
<i>LCA 17 Hambledon Downs:</i>	
LCT W2 Chalk and Clay Farmlands (Section 1)	Undulating rolling landform, predominately arable with copses shelter belts and woodland and medium to large irregular fields with historic parks – concentrated around Hambledon.
LCT W4 Scarp	
LCT W5 Open Arable	
LCT W5 Open Arable (enclosed)	
LCT W6 Parkland	
<i>LCA 18 Forest of Bere:</i>	
LCT W1 Mixed Farmland (open)	Undulating landscape with varied geology characterised by farmland (largely arable) with a high proportion of assarted woodland with a removed and enclosed feel and scattered settlements.
LCT W1 Mixed Farmland (enclosed)	
LCT W3 Pasture and Woodlands – Heath Associated	
<b>East Hampshire District Council</b>	
3a Clanfield Downland Mosaic (LCT Downland Mosaic)	Rolling large scale landform with panoramic views, ancient woodland, dispersed settlement pattern and strong rural character.

Local Character Area/Type	Description
3f Horndean Clanfield Edge (LCT Downland Mosaic) (Section 1)	Gently sloping landform with some fields in arable around the urban edge and land set aside for horsiculture, little woodland with medieval assarted fields small to medium irregular enclosures and edged by linear development.
10a Havant Thicket and Southleigh Forest (LCT 10 Wooded Claylands)	Densely wooded landscape which occupies the clay vale between the dip slope of chalk downland and Portsdown chalk ridge.
<b>South Downs National Park</b>	
D2a Hambledon to Clanfield Downland Mosaic (Enclosed)	Prominent chalk ridgeline and secondary escarpment with areas of chalk grassland, assarts and woodland with panoramic views.

### Historic Landscape Character

- 15.5.3.12. As requested by the LPAs and SDNPA, the LVIA has reviewed the historical maps and Historic Landscape Character Types ('HLCT') in the Hampshire Historic Landscape Characterisation (Scott Wilson, Oxford Archaeology (South), 2013).
- 15.5.3.13. The Historic Landscape Characterisation (HLC) sought to supplement and enhance HCC's existing landscape character assessment work and forms part of Heritage England's programme to produce historic landscape character assessments. Of the 85 HLCTs the following lie within a 3 km study area of the Converter Station (see Plate 15.1):
- HLCT 1.1: Small irregular assarts<sup>3</sup> intermixed with woodland;
  - HLCT 1.6: Medium to large regular fields with wavy boundaries likely to be late medieval to 17th/18th century enclosure;
  - HLCT 1.9: Small regular fields with straight boundaries (parliamentary type enclosure);
  - HCLT 1.10: Medium regular fields with straight boundaries (parliamentary fields);
  - HCLT 1.15: Ex Downland fields predominately bounded by tracks, roads and other rights of way;

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<sup>3</sup> An assart is an area of woodland cleared for use in agriculture or other purposes.

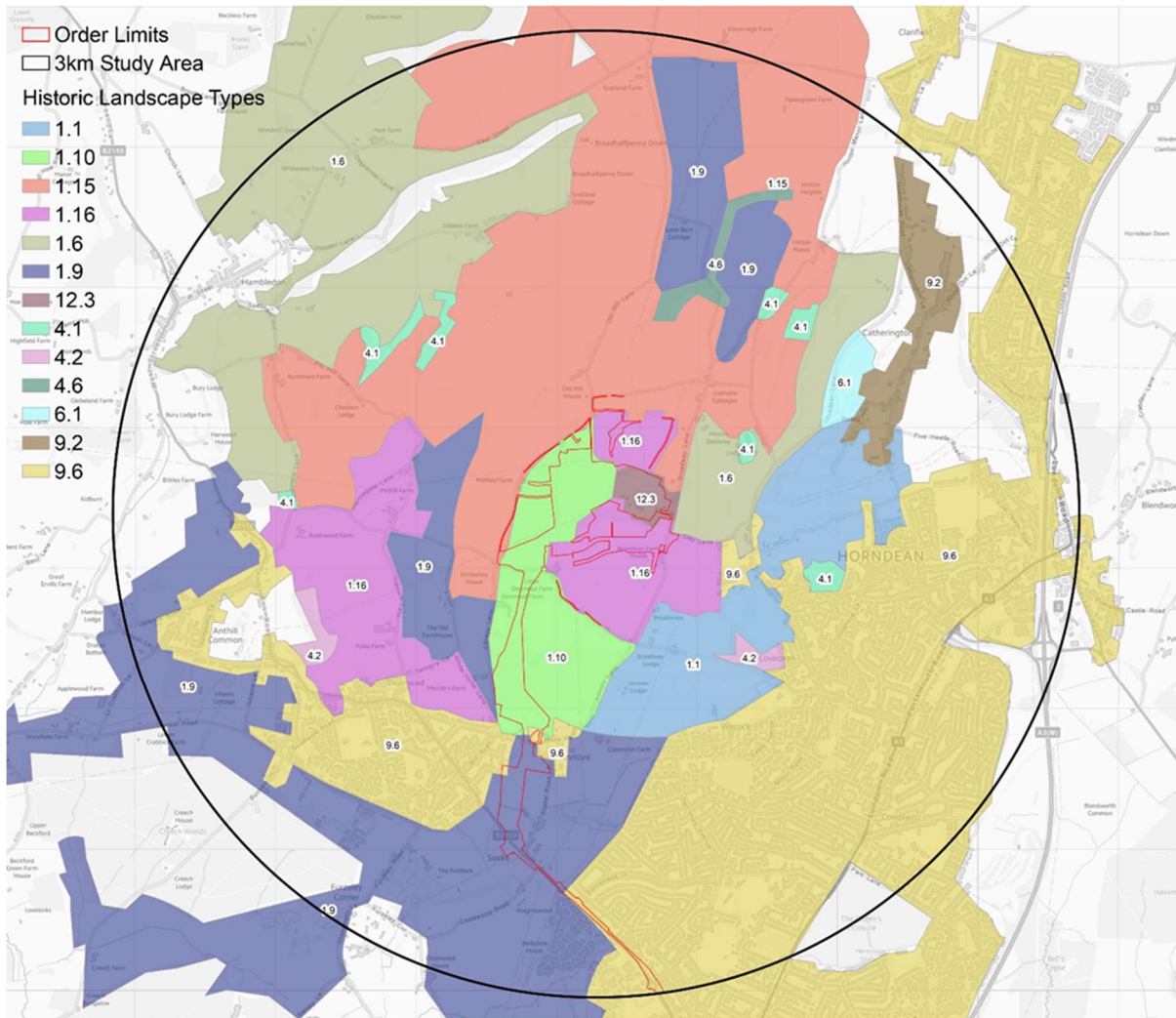
- HLCT 1.16: Small rectilinear fields with wavy boundaries;
- HLCT 4.1: Assarted pre 1801 woodland;
- HLCT 4.2: Replanted assarted pre 1810 woodland;
- HLCT 4.6: Pre 181- hangers (scarp and steep valley side woodland);
- HLCT 9.2: Post 1810 settlement (general);
- HLCT 9.6: Post 1810 settlement (general); and
- HLCT 12.3 Industrial complexes and factories.

15.5.3.14. Within Section 1 there are two HLCTs; HLCT 1.10 covers the Converter Station, whilst HLCT 1.16 covers the Access Road. The more detailed characteristics of which are defined below:

- HLCT 1.10: This type is likely to have been created during the Enclosure Acts in the late C18th and 19th and generally rectangular with straight surveyed boundaries. It tends to be restricted to areas of the country where the old open fields systems were prevalent and then enclosed by Acts of Parliament in the late Century such as the chalk uplands; and
- HLCT 1.16: This type reflects fields that relate to late medieval to C17th/18th century informal enclosure typified by their fairly regular shape and wavy boundaries.

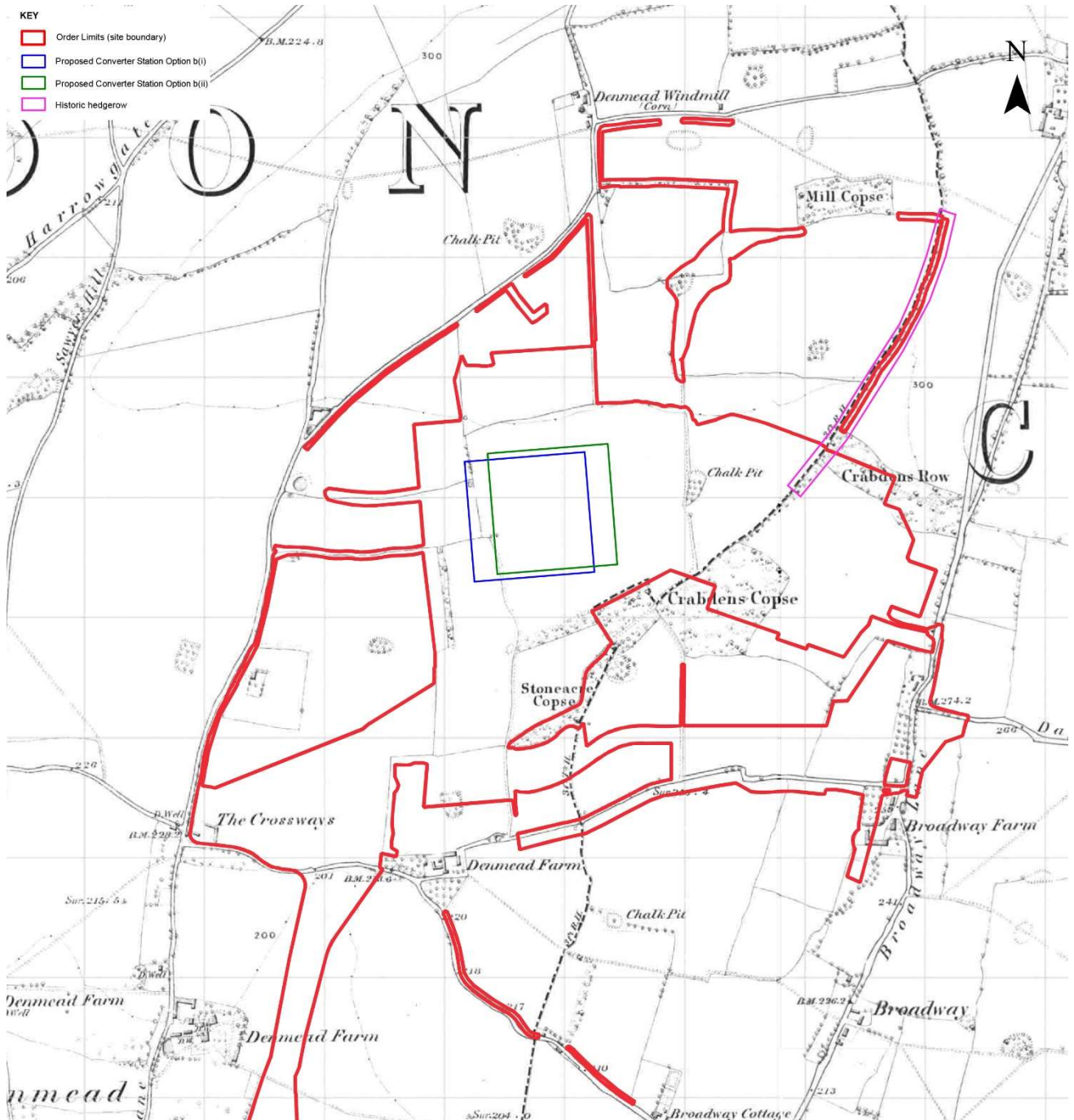
15.5.3.15. The HLC refers to the area being within the South Hampshire Lowland and Heath LCA stating that that a high proportion of the area is recent urban development (29%) with assarts (18%) and assarted woodland (10%).





**Plate 15.1 - Historic Landscape Character Types**

- 15.5.3.16. The information presented in the HLC has informed the development of embedded mitigation discussed in Section 15.1.6 and the reinstatement of a field boundary shown on the Ordnance Survey 1st edition 6" map of 1867 to 1875 and detailed in Plate 15.2 below. It should be noted that from a technical review of hedgerows outlined in Chapter 21 (Heritage and Archaeology), there is one possible historic hedgerow on historic parishes plans which lies to the north east (indicated in blue) on Plate 15.2.



**Plate 15.2 - Ordnance Survey 1<sup>st</sup> edition of the Converter Station Area**

### Local Landscape Features

- 15.5.3.17. Following desk based studies and site visits, a local landscape review was undertaken as part of this LVIA. The review agreed with WCC, EHDC and HDC local landscape character assessments. On this basis the LVIA does not propose to alter the LCAs/LCTs or their boundaries other than focusing in detail on specific local landscape features where relevant to the Converter Station Area as summarised below:

- 15.5.3.18. **Geology and topography:** The underlying geology of the area is karstic limestone (referred to as Tarrant Chalk Member) and lies close to or at the surface. The bedrock is overlaid by clay loam soils to a variable depth.
- 15.5.3.19. The topography ranges from an undulating, rolling landform immediately around the Converter Station to gently sloping further south before rising up to Portsdown Hill (Figure 15.44 of the ES Volume 2 (document reference 6.2.15.44)). The rolling landform around the Converter Station Area forms part of the south facing slopes of a series of ridges and valleys running in a northeast southwest direction defining the edge of the SDNP and Dip Slope. This series of ridges includes Broadhalfpenny Downs, Windmill Hill and Butser Hill. Further to the south and east gradients ease and landform, whilst still rolling, is less perceptible.
- 15.5.3.20. **Drainage:** Due to the porosity of the underlying chalk there are no above ground water features evident within the immediate vicinity of the Converter Station Area.
- 15.5.3.21. **Landuse and pattern:** Landcover is a mix of arable, pasture and woodland and based on the Agricultural Land Classification ('ALC') a mix of grade 3a, 3b and 4 (refer to Chapter 17 (Soils and Agricultural Land Use) of the ES Volume 1 (document reference 6.1.17)). The majority of fields are bounded by native single or mixed species hedgerow with hedgerow trees. Some hedgerows have been grubbed out increasing the sense of openness in certain locations. Hedgerows are mixed in terms of condition and management.
- 15.5.3.22. Fields are irregular in size and range from small to medium in the context of the surrounding landscape. Smaller fields lie to the south, west and east of the Converter Station Area set aside for horsiculture and resulting in the introduction of post and wire or electric fences.
- 15.5.3.23. Linear belts of woodland (formerly unmanaged hedgerows), ancient woodland (Crabdens Row, Crabdens Copse and Stoneacre Copse), small deciduous copses and occasional oak trees most unmanaged are notable features, the former often edging old chalk pits.
- 15.5.3.24. Appendix 16.3 (Arboriculture Report) of the ES Volume 3 (document reference 6.3.16.3) which forms part of Chapter 16 (Onshore Ecology) notes 27 high value features (woodland, groups of trees, trees and hedges) within Section 1. Aside from ancient woodland and associated groups (W630, W667, W669, W690, W714 and W887) there is a woodland group further west and forming part of the western boundary to the Converter Station Area which exhibits similar characteristics to the designated ancient woodland (G689). A significant old ash tree (T532) with veteran features is located within G689 to the west of the Converter Station. Along this western boundary large mature trees are identified in groups and linear groups including G639 and G705 plus a hazel coppice hedgerow (H769), all of which are considered as high value (Category A features) based on the Arboriculture Report Appendix 16.3) and in terms of landscape; emphasising the sense of enclosure and providing an important visual screening function.



- 15.5.3.25. There are also 22 medium value features (woodland, groups of trees, trees and hedges) including a line of hawthorn (H819) to the south and a number of trees and hedgerows which form either part of the western boundary or cut across the proposed Converter Station (H843, H794, T552, T553, T559, G576) again adding to the sense of enclosure and visual screening.
- 15.5.3.26. Several of the hedgerows are species rich and would fall under the Hedgerow Regulations 1997. Please refer to Chapter 16 (Onshore Ecology) for further details.
- 15.5.3.27. **Settlements:** The Converter Station Area and its immediate surroundings are characterised by small number of dispersed properties clustered in small groups off Old Mill Lane, Broadway Lane (north and south) and Anmore Lane. Properties are often concentrated around farmsteads such as Pitthill, Little Denmead and Denmead Farms. To the southwest lies Denmead, to the south Anmore and Soake, and further east are a chain of settlements running roughly north-south from Clanfield in the northeast to Catherington, Horndean, Cowplain and Waterlooville in the southeast. Hambledon lies to the northwest. Settlements are linear in form with small retail centres. Brick, flint and thatch are key materials evident in the local vernacular.
- 15.5.3.28. **Roads and Infrastructure:** The road network immediately around the Converter Station Area is one of narrow winding lanes with occasional passing places resulting in the erosion of banksides. The lanes are well vegetated with mature hedgerows and trees on either side providing a strong sense of enclosure and restricting visibility.
- 15.5.3.29. **Aesthetic/Perceptual/Experiential Character:** Areas of strong contrast exist within the immediate vicinity of the Converter Station Area.
- 15.5.3.30. Higher ground to the north, northwest and northeast of the Converter Station Area evokes a strong sense of openness with wide panoramic views either to the south across the Portsdown Hill and the early 19<sup>th</sup> Century forts, or north to the rolling edge of the SDNP.
- 15.5.3.31. Slightly further south (where the Converter Station sits) and immediately west and east along Old Mill Lane and Broadway Lane perceptions alter. Vegetation becomes dense and mature creating an ever-increasing sense of enclosure with occasional glimpsed middle and distant views. Within the Converter Station Area this sense of enclosure is created by ancient woodland, mature/over mature hedgerow belts intermixed with either open areas of gently rolling pastureland, or on flatter land, arable fields. Beyond, the sense of enclosure continues to be generated by the mix of land uses and well vegetated narrow winding lanes linking surrounding settlements.
- 15.5.3.32. The area has a settled feeling and is slightly remote with no or limited inter visibility with surrounding settlements.
- 15.5.3.33. Tranquillity levels associated with the Converter Station Area and its immediate

surroundings are mixed. Positive factors<sup>4</sup> include the relatively unmanaged woodland/hedgerows, native deciduous trees, sense of openness and panoramic views on higher ground, and peace and quiet in specific locations. This contrasts with the unsettled nature of some of the surrounding properties and land uses including those set aside for horiculture and recreation, presence of overhead lines clustering around Lovedean Substation and an associated low “hum” as well as the presence of a solar farm south of Day Lane.

15.5.3.34. Pylons and overhead lines lead into Lovedean Substation from the north and west. Two forms of overhead lines and towers run close to the Converter Station. These are:

- L2 towers (VB) which are at 36 m; and
- L6 towers (VF, YE and YC) which are at 45 m.

15.5.3.35. Plate 15.3 below shows the location and associated heights of the pylon towers. The Converter Station sits between two pylons and lines, YC and YE. Both are 45 m in height and run in a roughly west east direction. Two further overhead lines and pylons run north-south with one at 36 m in height and the other at 45 m. The pylon towers are considerably higher than Lovedean Substation’s gantries which are estimated to be 13.5 m in height.

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<sup>4</sup> Based on South Downs National Park Tranquillity Study, 2017, South Downs National Park Authority



**Plate 15.3 - Location of Overhead Lines in relation to Lovedean Substation  
Designated Landscape**

**South Downs National Park**

- 15.5.3.36. The Converter Station Area lies close to the boundary of the SDNP (see Figure 15.1). The boundary of the SDNP runs along the edge of Old Mill Lane to the west of the Converter Station Area, north along an unnamed road (U218) and east along part of Broadway Lane and Day Lane.
- 15.5.3.37. The SDNP covers its own administrative area. Special Qualities outline the reasons for its national landscape designation informed by a number of studies including an Integrated Landscape Character Assessment ('SDNPILCA') and Tranquillity Study (Tranquillity Study, (South Downs National Park Authority, 2017)).
- 15.5.3.38. Policies reflecting the special qualities are covered in both the SDNP Local Plan 2014-2033 Adopted 2 July 2019 and SDNP Partnership Management Plan (Shaping the future of your South Downs National Park, (South Downs National Park Partnership Management Plan, 2014-2019, 2013)). The SDNP is also designated an International Dark Skies Reserve.

15.5.3.39. The SDNPA recommended during consultation that the LVIA considers the Converter Station Area's proximity to the SDNP boundary and clearly explores how the site contributes to the setting of the SDNP based on landscape character and visual amenity. This analysis is presented in Appendix 15.5 (South Downs National Park), including discussion on tranquillity and dark skies and has been based on the 3 km study area.

#### Cultural and Heritage Assets

15.5.3.40. Historic designations can be an indication of the quality of the landscape, and identify sites where potential visual receptors may be highly sensitive, such as visitors to designated sites experiencing them in the context of their setting. There are numerous cultural and heritage assets within the Study Area, including Conservation Areas, Listed Buildings, Registered Parks and Gardens and Ancient Woodland.

15.5.3.41. Heritage assets and their settings are considered in Chapter 21 (Heritage and Archaeology). Those of relevance to the LVIA are summarised below.

#### Conservation Areas and Listed Buildings

15.5.3.42. The Hambledon Conservation Area lies within the SDNP approximately 2 km to the northwest of the Substation while Catherington Conservation Area lies approximately 2.5 km to the northeast. Key important or significant views are identified for both Conservation Areas. However, on review of the ZTV, the Converter Station Area does not affect any key views identified in the Hambledon Character Appraisal and Management Strategy, (Winchester City Council, 2009) or the Catherington Conservation Area Character and Appraisal, (East Hampshire District Council, 2006).

15.5.3.43. A number of Listed Buildings, predominately Grade II, lie within Lovedean, Denmead, Hambledon and along the narrow lanes mainly to the east of the Converter Station Area, with the closest being at Denmead Farm (two Grade II Listed Buildings), off Edneys Lane to the south west and Ludmore Cottages to the north east (one Grade II Listed Building). Figure 21.1a of ES Volume 2 (document reference 6.2.21.1) identifies their locations.

#### Registered Parks and Gardens

15.5.3.44. Leigh Park Grade II\* Registered Park and Garden (List Entry Number 1000112) is situated approximately 6 km southeast of the Converter Station Area in Staunton Country Park. The setting of this heritage asset is assessed in Chapter 21 (Heritage and Archaeology). The LVIA considers that there would be no impact of the Converter Station on visitors to the above heritage assets and therefore they were scoped out of the assessment. This is due to the nature of the intervening topography, built form and vegetation.

#### Ancient Woodland

15.5.3.45. The Converter Station Area is surrounded by pockets of woodland including Ancient Woodland (Figure 15.5).



15.5.3.46. There are no proposals which include the removal of Ancient Woodland and, as part of the siting of the Converter Station, offsets were provided to protect the woodland and ensure no construction activity apart from planting within this offset. On this basis, it is not considered further in this assessment.

### Recreational Assets

#### Trails, Public Rights of Way and Cycling Routes

15.5.3.47. The South Downs Way is a National Trail which runs for approximately 161 km through the SDNP from Winchester to Eastbourne. In relation to the study area, the route runs to the north of the Converter Station Area linking Old Winchester Hill and Butser Hill, and cutting through the remainder of Queen Elizabeth County Park.

15.5.3.48. The Monarch's Way is a 1,006 km long distance path, following the route taken by King Charles II during his escape after his defeat by Cromwell in the Battle of Worcester in 1651. In the context of the site, the route runs to the north and northeast of the Converter Station Area linking Hambledon and Horndean with approximately 3 km falling within the study area.

15.5.3.49. The Wayfarer's Walk is a regionally promoted route, 114 km in length and runs from Inkpen to Emsworth Harbour. The route runs north-south between Hambledon and Denmead in the context of the Converter Station Area and the Onshore Cable Corridor.

15.5.3.50. There is also a local circular route referred to as the Denmead Millennium Trail which covers 12 km and runs around the edge of the village to the southeast of the Converter Station Area.

15.5.3.51. Throughout the study area there is an extensive network of PRow. A number lie close to the Converter Station including bridlepaths along Harrowgate Lane, Pitt Hill Lane, Horsepost Lane and Sawyer's Hill. Those within 8 km of the Converter Station are illustrated in Figure 15.45. PRow within 3 km study area (see Figure 15.46) include:

- Denmead Parish Council PRow's No.s 5, 7, 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 41, 42, 502;
- Horndean Parish Council PRow's No.s 3, 4, 5, 6, 9, 10, 11, 12, 14, 15, 28, 29, 30, 31, 32, 35;
- Havant Parish Council 1a, 1b; and
- Hambledon Parish Council 25b, 26, 27, 28, 29, 30a, 30b, 31.

15.5.3.52. In terms of cycling, the National Cycle Route 222 runs east of the Converter Station Area in a southwest northeast direction through Waterlooville and Cowplain towards Petersfield (see Figure 15.45 (document reference 6.2.15.45)).

15.5.3.53. There are also a series of on and off-road cycling routes promoted either at a county or local level (see Figure 15.46 and 15.47 (document reference 6.2.15.46 and

6.2.15.47)):

- Horndean Cycle route (County promoted route): A circular 22.5 km route which joins Denmead, Cowplain, Horndean, Catherington and Clanfield. The route runs along some of the bridleways to the west of the Converter Station Area including along Sawyer's Hill and Harrowgate Lane.
- Broadpenny Down (Locally promoted route): A circular route covering roughly 43 km which runs along Crossway Road, up Old Mill Lane to Broadpenny Down and onto West Meon before running to Denmead.
- River Alre (Locally promoted route): A circular route covering 75.5 km running along Old Mill Lane, cutting across to Hinton Moor Lane to the northeast of the site and looping up to Ovington before returning to Denmead.
- Horndean Technology College (Locally promoted route): A circular route covering 46 km starting on Hambledon Road to the north of Old Park Farm, the route heads north before turning right onto Soake Road and continuing north along Anmore Lane, Broadway Lane, onto Day lane and joins Lovedean Lane before leading onto Catherington, then Waterlooville Bypass and Horndean.

#### Open Access Land and Country Parks

15.5.3.54. Open access land lies to the west of Catherington and approximately 1.6 km northeast of the Converter Station Area. Other areas of open access land include Creech Woods to the southwest and smaller pockets of land to the northwest near Hambledon and east of Cowplain see Figure 15.5. Further to the northeast, southeast and southwest respectively lie Queen Elizabeth Country Park, Staunton Country Park and Forest of Bere; all of which are designated as open access land under the CROW Act.

15.5.3.55. Due to distance, intervening topography, vegetation and the built form that there will be negligible impact on both open access land and country parks and, on this basis, these were not considered further in the assessment.

#### Summary of landscape character baseline findings:

15.5.3.56. The following District/City and National Park level LCA/LCTs covering a 3 km radius, designations and features are considered further in this assessment:

##### SDNP:

- D: Downland Mosaic;

##### Winchester City:

- 17: Hambledon Downs;
- 18: Forest of Bere Lowlands;

##### East Hampshire District:

- 3a: Downland Mosaic: Clanfield Open and Enclosed;
- 3f: Horndean Clanfield Edge (LCT Downland Mosaic); and
- 10a: Wooded Claylands: Havant Thicket and Southleigh Forest.

#### Setting of the SDNP within 3 km of the Converter Station

15.5.3.57. Key landscape features assessed as part of the local landscape character include:

- Landform;
- Landuse;
- Vegetation – woodland, hedgerow trees and hedgerows;
- Drainage;
- Public Rights of Way;
- Tranquillity; and
- Infrastructure.

#### Current Visual Amenity Baseline

##### Visual Context associated with the Converter Station

- 15.5.3.58. Short-distance views of the Converter Station Area are limited to views from the edge of Old Mill Lane, Broadway Lane (east)/Anmore Road, Broadway Lane (south) (U200) and an unnamed road (U218) connecting the two, to the north. Views from publicly accessible locations are partial and filtered through existing vegetation in the foreground including a mix of mature woodland, hedgerows and hedgerow trees see Figure 15.17 and Appendix 15.6 (Visual Amenity). Views from immediate residential properties surrounding the Converter Station range from direct and open to oblique and filtered see Figure 15.47 and Appendix 15.6 (Visual Amenity).
- 15.5.3.59. In middle and long-distance views, mature vegetation and the undulating topography screens the area within which the Converter Station sits.
- 15.5.3.60. Notable in short and middle-distance views especially in winter is the existing Lovedean Substation. This is well screened by a belt of deciduous woodland which wraps around the Substation to the north, south and east. Views from local roads in the short to middle distance are filtered by layers of intervening hedgerow, hedgerow trees and shelterbelt vegetation, and also built form consisting of isolated farms and cottages. In most views, and particularly from higher ground to the north, is the increasing concentration of pylons and associated overhead lines converging on the Substation and running across the Converter Station Area to the south and west.

15.5.3.61. Beyond, the landscape is undulating and a patchwork of farmland divided by hedgerows and hedgerow trees, and woodland with a concentration of settlements evident to the east and south lying on the northern slopes of Portsdown Hill. In long distance panoramic views from high ground, views across the Converter Station Area either south to Portsdown Hill and The Solent, or north to rising ridges and Dip Slope of the SDNP.

#### South Downs National Park Viewshed Characterisation

15.5.3.62. The Converter Station would be visible from the SDNP. The baseline ZTVs outlined earlier illustrate the potential visibility of the Converter Station, and the undulating topography of the southern boundary of the SDNP (within the study area, as illustrated in Figures 15.9 to 15.12 of the ES Volume 2 (document reference 6.2.15.9-6.2.15.12)). This results in a fragmented pattern of visibility to the north, northwest and northeast. Greater visibility within the SDNP is afforded at the higher elevations, beyond woodland, where there are clear, broad and open views towards Portsmouth and the south coast.

15.5.3.63. There are nine viewpoints agreed in consultation with the SDNPA and LPAs for assessment which are located within the SDNP (see Table 15.4 and Figure 15.17 for their locations as well as Figures 15.18 to 15.34)).

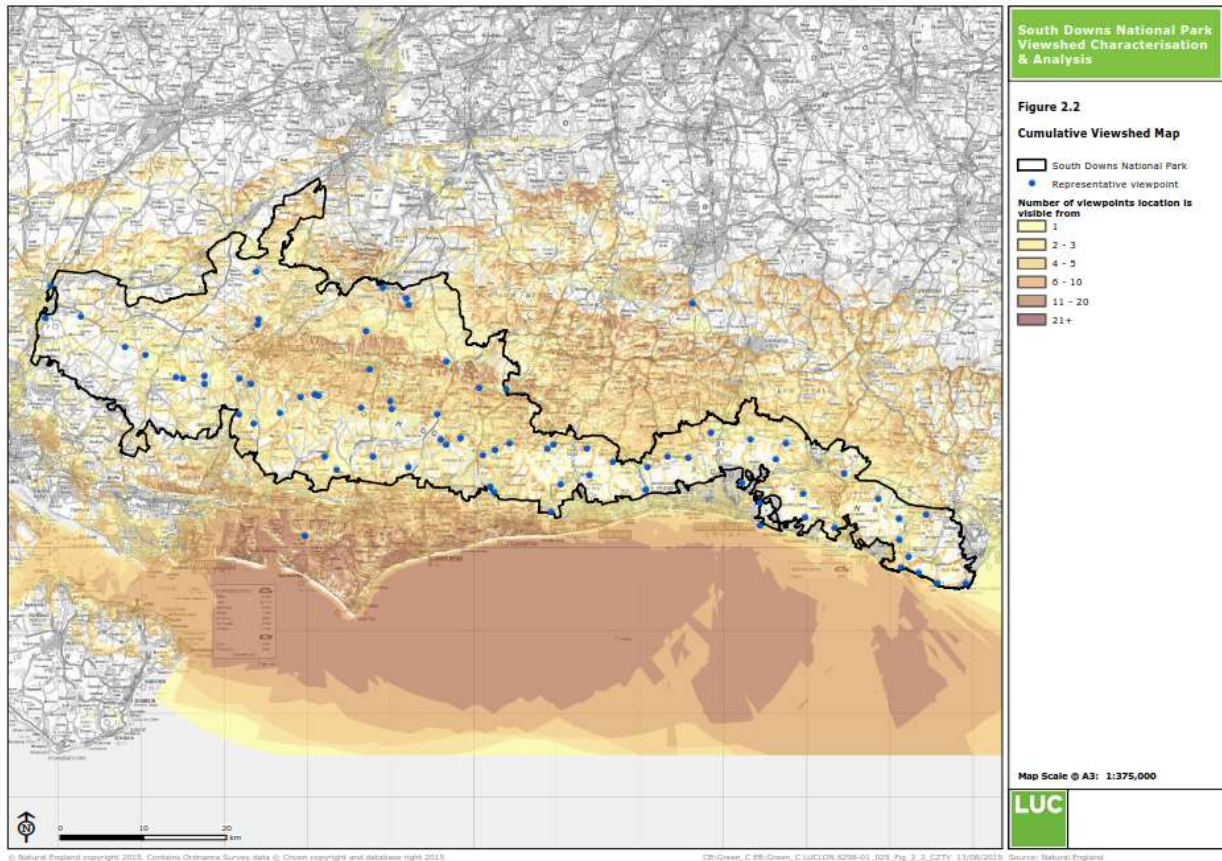
15.5.3.64. The SDNPA's View Characterisation and Analysis report (LUC on behalf of the South Downs National Park Authority, 2015) identifies specific representative views which 'represent the various types of view found across the park' detailed in Plate 15.4 below. Two specific viewpoints identified in the above report were discussed during consultation with the LPAs and SDNPA and are included within the 8 km Study Area. These are:

- VP 2 Windmill Hill (a good vantage point from which to experience views of the surrounding downs) (LUC, 2015) approximately 4.5 km to the northeast of the Converter Station; and
- VP 16 Old Winchester Hill approximately 7.5 km to the northwest of the Converter Station. This location is on an elevated Iron Age Hillfort, and is a natural observation point. It is a flat-topped spur which offers views in all directions. The South Downs Way and Monarch's Way pass through the hillfort and views are noted in literature about these trails (LUC, 2015).

15.5.3.65. A further viewpoint was put forward following the PEIR, from Butser Hill:

- VP 17 Butser Hill is approximately 7.5 km to the northeast of the Converter Station. Located on the flat-topped summit of a chalk hill south of Petersfield, this viewpoint is a natural observation point from where there are panoramic views over the Meon Valley and Rother Valley. The South Downs Way passes beside this hill and views from it are noted in literature about the South Downs Way. It is also noted in the South Downs Integrated Landscape Character Assessment ('SDILCA') as a key viewpoint within LCT D Downland Mosaic.





### Plate 15.4 - SDNP Viewshed Characterisation and Analysis

- 15.5.3.66. Based on the above work and informed by field surveys, the LVIA considers that the location of the Converter Station, when viewed from the SDNP would have a greater impact on close range views within the local landscape (3 km study area).
- 15.5.3.67. Further away, and within the SDNP, from the elevated scarp, the Converter Station would occupy only a small proportion of the ‘panoramic’ views afforded from these locations, towards Portsmouth and the south coast. Walkers along this scarp would appreciate not only views to the south and towards the coast, but the view to the northeast, north and northwest within the SDNP.

#### Visual Receptors

- 15.5.3.68. The following visual receptors are likely to experience a view of the Converter Station and associated infrastructure within the Converter Station Area. Visual receptors were divided into two categories based on the 3 and 8 km study area and consider residential receptors, receptors within settlements, recreational receptors and transport users. Appendix 15.6 (Visual Amenity) outlines specific representative viewpoints and the sensitivity of visual receptors.

#### Residential Receptors (Individual properties and farmsteads)

- 15.5.3.69. Residential receptors would experience the Converter Station from different locations, at different times of day, for longer periods than other visual receptors and

in different seasons.

**Within 3 km radius:**

15.5.3.70. From the desk-based assessment and site visits it is considered that those residential receptors who may experience a significant visual effect are likely to be from:

- Properties off Broadway Lane (east)/Day Lane to the east;
- Properties off Old Mill Lane/Edneys Lane/Denmead Lane/White Horse Lane/Rushmere Lane to the west;
- Properties off Broadway Lane (south) which link Old Mill Lane with Broadway Lane/Anmore Road east); and
- Individual farmsteads and cottages on higher ground to the northwest and north.

15.5.3.71. Properties on the fringes of Denmead, Anmore, Lovedean and Horndean were also assessed.

15.5.3.72. A particular focus was given to receptors concentrated within a 1.2 km radius of the Converter Station; see Figure 15.47 and Appendix 15.6 (Visual Amenity) which summarises the location, description and orientation of properties and is informed by the methodology for the assessment of the impacts on residential properties included within Appendix 15.3 (Landscape and Visual Assessment Methodology).

**Within 8 km radius**

15.5.3.73. Residents situated between 3 and 8 km may experience views of the Converter Station to varying degrees; sometimes filtered through intervening vegetation or partially screened by the built form. The nature of such effects is considered as part of the LVIA.

**Receptors within settlements**

15.5.3.74. Visual effects likely to be experienced from settlements within the 8 km study area includes consideration of residential areas, the public realm, and public open spaces within the settlement boundaries that would be frequented by people.

15.5.3.75. Settlements included within the assessment are as follows:

- Horndean;
- Lovedean;
- Denmead;
- Anmore;
- Anthill Common;
- Catherington; and
- Cowplain.

15.5.3.76. The settlements of Hambledon and Clanfield that lie within the 8 km study area are not within the ZTV and were scoped out of the LVIA on the basis that these settlements would not experience potential views of the Proposed Development.

#### Recreational and visitor receptors

15.5.3.77. Whilst the potential visual impacts on tourists, or those engaging in recreation activities, may be brief in nature by passing through the area on horse, foot or bike, their sensitivity to landscape and visual change is high because their purpose/activity is to enjoy the landscape and surroundings.

15.5.3.78. The visual assessment considers views from recreational receptors within 8 km of the Converter Station; see Figure 15.45. Recreational receptors within the study area for the Converter Station and who may experience a significant visual effect include:

- Users of the South Downs Way;
- Users of Monarch's Way;
- Users of Wayfarers Walk;
- Users of open access land at Catherington Down;
- Users of local PRowWs including bridlepaths along Pitt Hill Lane, Horsepost Lane, Harrowgate Lane and Sawyer's Hill;
- Users of Denmead Parish Council PRowWs No's 13, 16, 17, 20, 21, 22, 23;
- Users of Horndean Parish Council PRowWs No's 3, 4, 5, 6, 15, 28, 29, 30;
- Users of Denmead Millennium Trail;
- Visitors to the SDNP; and
- Users of local cycle routes - Horndean cycle route, Broadhalfpenny Down, River Alre and Horndean Technology College including location roads within the immediate vicinity of the Converter Station Area.

15.5.3.79. It is considered that significant effects are likely to be concentrated within the 3 km study area of the Converter Station. Effects are likely to reduce further afield as the scale of the view diminishes and is seen in context with immediate surroundings.



### Transport (Users of transport routes)

15.5.3.80. It is important to take account of how the Converter Station Area would be experienced from surrounding road network see Figure 15.45. The visual assessment considers the potential visual effects likely to be experienced by people travelling through the landscape on main roads. Views will vary depending on proximity to the road, the mode of transport, the angle of view, and intervening landscape features.

Within 3 km radius

15.5.3.81. From a desk based assessment and site visits it is considered that receptors who may experience a visual effect are likely to use local roads and lanes which lie within the 3 km study area see Figure 15.46 and 15.47). Specific routes considered as part of this assessment include:

- Unnamed road to the north connecting Old Mill Lane and Broadway Lane (U218);
- Broadway Lane to the east;
- Day Lane/Lovedean Lane to the east;
- Old Mill Lane (U185)/Edneys Lane (U185)/Denmead Lane/White Horse Lane (u200)/Kidmore Lane/Tanners Lane/Rushmere Lane to the west;
- Broadway Lane (south) which link Old Mill Lane with Broadway Lane/Anmore Road east) (U200); and
- Anmore Lane (C40).

Within 8 km radius

15.5.3.82. Routes which pass within 8 km of the Converter Station and lie within the ZTV are assessed as follows:

- B Roads: B2150, B2177, B2148 and B2149.

15.5.3.83. The A3(M) and A3 routes within the 3 km study area are not covered by the ZTV and would not experience potential views of the Converter Station. In addition, it is anticipated given the local topography and built development, the M27, A27, A32, would not experience views of the Converter Station. Therefore, only the above B roads were considered in the context of the Converter Station Area.

## **Section 2 – Anmore**

### **Site Description**

15.5.3.84. The Onshore Cable Corridor for Section 2 runs from the Broadway Lane (south) to Anmore Lane with flexibility to run the route either through Hillcrest Children's Services and/or land to the east or west of the Services. The landscape consists open rural fringe with scattered individual properties on the edge of Denmead and Anmore Dell. Gently undulating farmland, a mix of medium to large fields of arable and pasture, is bounded by either post and wire or native hedgerows with occasional

copses surrounding old pits. Surrounding lanes are well vegetated, and pylons running north-south to Lovedean Substation are a prominent feature.

#### Current Landscape Baseline

15.5.3.85. In terms of landscape character, the Onshore Cable Corridor study area would fall within NCA 125 South Downs and the following local LCAs, the details of which are summarised in Appendix 15.4 (Landscape Character).

15.5.3.86. County Character Areas:

- HCC LCA 7h Southeast Hampshire Downs; and
- HCC LCA 2f Forest of Bere East.

15.5.3.87. District/Borough/City Landscape Character Areas:

- EHDC District LCA 3f Horndean Clanfield Edge;
- WCC 17 LCA W1 Mixed Farmland;
- WCC 18 LCA W2 Chalk and Clay Farmlands;
- WCC 17 LCA W3 Pasture and Woodland – Heath Associated;
- WCC 18 LCA W2 Chalk and Clay Farmlands;
- WCC LCA R Residential.

15.5.3.88. Other landscape designations/cultural/heritage and recreational assets within the area include:

- One single mature oak tree subject to a TPO (2246T1) north of Anmore Road at King’s Cottage.

15.5.3.89. There are 5 Listed Buildings, within 200 m of the Onshore Cable Corridor, refer to Chapter 21 (Heritage and Archaeology) for further details. There are no other designations relevant to the LVIA noted within 120 m of Section 2 of Onshore Cable Corridor.

#### Current Visual Baseline

15.5.3.90. Key visual receptors likely to experience either direct or oblique views of the construction works associated with the Onshore Cable include:

##### Residential receptors

- Properties off Broadway Lane (south)(U200);
- Denmead Farm;
- Shafters Farm;
- Properties off Edney’s Lane, Denmead (U185);
- Properties off Mill Close, Denmead;
- Properties off Anmore Road (north and south – U200), Anmore; and
- Properties off Clifton Crescent, Anmore.

#### Local transport users

- Broadway Lane (south)(U200);
- Edneys Lane (U185); and
- Anmore Road (u200).
- Clifton Crescent.

#### Local recreational users

- Users of local roads (cyclists and pedestrians) outlined above;
- Users of PRow (Denmead 13) between Edney’s Lane and Anmore Lane;
- Users of PRow (Denmead 17) between Edney’s lane and White Horse Lane; and
- Users of Bridleway (Denmead 41) at Anmore Dell.

### **Section 3 – Denmead/Kings Pond Meadow**

#### **Site Description**

- 15.5.3.91. Section 3 of the Onshore Cable Corridor would run from Anmore Road south through Kings Pond Meadows before turning left along Hambledon Road. Part of the route would be installed by HDD and flexibility is retained for the compound location.
- 15.5.3.92. The Onshore Cable Corridor would cross the designated Kings Pond Site of Importance to Nature Conservation (SINC). The landscape is flat, semi improved fields of lowland meadow bounded by unmanaged native hedgerows with mature hedgerow trees, largely oak, creating a strong sense of enclosure and rurality. Small ditches filter into Kings Pond to the south of Anmore Road. The land forms an important green gap between Denmead to the west and Horndean to the east (referred to as the Denmead Gap). Soake Road to the east is enclosed edged by mature trees until it reaches Byngs Business Park at Hambledon.
- 15.5.3.93. There would be direct views onto cable works from adjacent residential properties. For Kings Pond Meadows, there is a strong sense of enclosure and connectivity between this area of land and farmland further north of Anmore Road, and Hambledon Road further south.

15.5.3.94. The Onshore Cable Corridor may impact on trees subject to TPOs (G1) forming part of Denmead Gap Forest Road and south of Hambledon Road. Hedgerows and mature hedgerow trees running across the Onshore Cable Corridor within Kings Pond Meadows would also be affected.

**Current Landscape Baseline**

15.5.3.95. In terms of landscape character, the Onshore Cable Corridor study area would cut across the following national, county and local LCAs the details of which are summarised in Appendix 15.4 (Landscape Character).

15.5.3.96. NCAs:

- NCA 125 South Downs; and
- NCA 128 South Hampshire Lowlands.

15.5.3.97. County Character Area:

- HCC LCA 2f Forest of Bere East.

15.5.3.98. District/Borough/City Landscape Character Areas:

- WCC LCA 18 - W1 Mixed Farmland;
- WCC LCA 18 - W3 Pasture and Woodland – Heath Associated and
- WCC LCA R Residential.

15.5.3.99. Other landscape designations/cultural/heritage recreational assets within the area include:

- Denmead Gap – Local Gap between Denmead and Waterlooville designated by Winchester City Council;
- Six linear groups of trees subject to TPO's (1350G1-G6) to the south of Hambledon Road referred to as part of the Denmead Gap Forest Road;
- Three oak trees subject to TPO's (1239 T1-3) east of Soake Road and southern edge of Anmore;
- Three oak trees subject to TPO's (1171 T1-3) north of Hambledon Road within Breffnewy Gardens, Denmead;
- Eastern edge of ancient woodland forming part of Piper's Hill Wood and southeast of Hambledon Road; and
- Goodman's Field to the south of Hambledon Road.

15.5.3.100. There are no other designations noted within 120 m of Section 3 of the Onshore Cable Corridor.

**Current Visual Baseline**

15.5.3.101. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable include:

### Residential receptors

- Properties off Anmore Road;
- Properties off Soake Road;
- Properties off Hambledon Road;
- Properties to east of Denmead including Clifton Crescent; and
- Soake Farm.

### Local transport users

- Soake Road;
- Hambledon Road; and
- Anmore Road.

### Local recreational users

- Users of local roads (cyclists and pedestrians) outlined above as well as users of Goodman's Field.

## **Section 4 – Hambledon Road to Farlington Avenue**

### **Site Description**

- 15.5.3.102. Section 4 of the Onshore Cable Corridor would run in a southerly direction along Hambledon Road for approximately 2 km. It would then continue south through Waterlooville before heading west for approximately 850 m on London Road through Purbrook, then south for approximately 2.3 km on London Road through Widley before turning east on to Portsdown Hill Road. After approximately 500 m the route turns right on to Farlington Avenue and heads southeast for approximately 400 m.
- 15.5.3.103. The character of the northernmost extent of the route is predominantly rural in nature, with roadside trees, hedgerows and countryside views. This changes to the south of Darnel Road, becoming distinctly more urban in nature, with shops, businesses and residential properties.
- 15.5.3.104. Recent development to the west of Hambledon Road has shifted the urban fringe to the west. This pattern continues along the route, with pockets of residential development at Stratfield Park, Berewood, Oak Vale and Forest End redefining the urban fringe to the west of Hambledon Road, Maurepas Way and London Road further south. New development, a mix of townhouses and flats (two storeys plus), sit alongside older properties, a mix of semi-detached, detached and terrace ranging from Victorian/Edwardian and later, largely one to two storeys.
- 15.5.3.105. Roadside vegetation is predominately mature hedgerows edging Berewood Town Park, the allotments, Brambles Farm Industrial Estate, Wellington Retail Park and properties off Hambledon/Aston Road and serves an important screening function.

15.5.3.106. When the route reaches Portsdown Hill Road, the character changes once again; the road runs east-west along a chalk ridge and commands panoramic southerly views over Portsmouth and The Solent. Portsdown Hill Country Park forms the southern boundary here, with established woodland and expanses of grassland on the steep chalk slopes. This continues eastwards towards the Scheduled Monument at Fort Purbrook before becoming distinctly urban once again upon reaching Troon Crescent and heading south into Farlington into Section 5.

#### Current Landscape Baseline

15.5.3.107. In terms of landscape character, the Onshore Cable Corridor study area would cut across the following national, county and local LCAs and Urban Character Areas ('UCA's), the details of which are summarised in Appendix 15.4 (Landscape Character).

15.5.3.108. NCAs:

- NCA 126 South Coast Plain;
- NCA 125 South Downs; and
- NCA 128 South Hampshire Lowlands.

15.5.3.109. County Character Areas:

- HCC LCA 2f Forest of Bere East; and
- HCC LCA 8i Portsdown Hills Open Downs.

15.5.3.110. District/Borough/City Landscape Character Areas:

- WCC LCA18 - W1 Mixed Farmland.
- HVDC C Urban Lowland:
  - LCA 1 Waterlooville and historic route.
  - LCA 2 Waterlooville western suburbs.
  - LCA 4 Waterlooville Business Park.
  - LCA 5 Purbrook and Waterlooville- Eastern Suburbs.
  - LCA 6 Purbrook.
- HVDC B Lowland Settled Wooded Farmland
  - LCA 7i Plant Farm southeastern fields.
  - LCA 7ii Purbrook Heath.
- PCC UCA 7 Cosham.
- PCC UCA 9 Drayton and Farlington.

15.5.3.111. Other landscape designations/cultural/heritage and recreational assets within the area include:

- Ancient Woodland at Marrelsmoor Coppice;
- St John's Conservation Area – Purbrook Heath;
- Group trees subject to TPO (1932G1) at Old Park Farm, Hambledon Road, Denmead;
- Individual oak tree subject to TPO (1932T1) at Old Park Farm, Hambledon Road, Denmead;
- Group of trees subject to TPO (1855) east of Longhorn Way;
- Individual tree subject to TPO (1560) to the west of Elettra Avenue and Hambledon Road roundabout;
- Individual tree subject to TPO (1754) to the east of Elettra Avenue and Hambledon Road roundabout;
- Individual tree subject to TPO (1619) to the east of Relay Road;
- Individual tree subject to TPO'(1806) within the grounds of Cherry Tree Apartments, Hambledon Road;
- 3no trees subject to TPO (1945) to the west of Maurepas Way;
- Individual tree subject to TPO (1744) in grounds of Waterlooville Community Association off Hambledon Road;
- Individual tree subject to TPO (1467) in the grounds of Christie Intruder Alarms, off London Road;
- 5no trees subject to TPO (1628) off Farm Lane Close;
- Group of trees subject to TPO (1462) off Mill Road;
- Individual tree subject to TPO (961) off Brightside;
- 7no trees subject to TPO (1002) to the south of London Road;
- 3no trees subject to TPO (875) off Mountbatten Drive;
- Individual tree subject to TPO (2007) off London Road;
- 3no trees subject to TPO (1899) to the east of London Road;
- Woodland W1 (TPO 1749) at Fielders Park;
- Individual tree subject to TPO (1195) to the south of Poppyfields;
- 2no trees subject to TPO (1293) to the south of Poppyfields;
- Individual tree subject to TPO (1169) off Purbrook Gardens;
- A1 Tree Protection Area (0105) adjacent to the entrance to Listed Building 'Purbrook House' to the west of London Road;
- Group of trees subject to TPO (1610) to the east of London Road;



- Individual tree subject to TPO (1422) off Crofton Close;
- Numerous TPO's (1472,1842,1303) within larger block of woodland off Marrels Wood Gardens to the south of St John's Conservation Area;
- Individual tree subject to TPO (1689) in the grounds of house to the east of London Road, Widley;
- 6no trees subject to TPO (1274) in grounds of Listed Building 'The Old Rectory' to the east of London Road, Widley;
- Individual tree subject to TPO off Park Avenue;
- 10 no trees subject to TPO adjacent to Hampshire Rose Public House off Park Avenue;
- Group of trees subject to TPO at the eastern end of Portsdown Hill Country Park, off Farlington Avenue
- Portsdown Hill Country Park;
- Two unnamed parks off Hambledon Road;
- Purbrook Heath;
- Playground and Skate Park located down Milk Lane;
- Fielder's Park; and
- The Bog.

15.5.3.112. There are 7 Listed Buildings, within 200 m of the Onshore Cable Corridor, see Chapter 21 (Heritage and Archaeology) for further details. There are no other designations relevant to the LVIA noted within 120 m of Section of the Onshore Cable Corridor.

#### Current Visual Baseline

15.5.3.113. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable include:

#### Residential receptors

- Properties off Hambledon Road and minor adjoining roads;
- Properties off Maurepas Way and adjoining minor roads;
- Properties off London Road and adjoining minor roads;
- Properties off Portsdown Hill Road and minor adjoining roads; and
- Properties off Farlington Avenue and adjoining minor roads.

#### Local transport users

- Hambledon Road;

- Maurepas Way;
- London Road;
- Portsdown Hill Road; and
- Farlington Avenue.

15.5.3.114. **Local recreational receptors**

- Users of local roads (cyclists and pedestrians) outlined above;
- PRoW10/11– off Maurepas Way (HCC);
- PRoW15/17/41 – off London Road (HCC);
- PRoW 18/19/20/21– off London Road (HCC);
- PRoW 6 and 24 (PCC);
- Wayfarers Walk Long Distance Route – Portsdown Hill Road (HCC);
- Purbrook Heath – Open Space (WCC);
- College Road Fields – Amenity Green Space (HVDC 6);
- Fielders Park – Amenity Green Space (HVDC 75);
- The Bog – Amenity Green Spaces (HVDC 73, 269, 271);
- Molehill/Lantanard Allotments (HVDC 112);
- Purbrook West and East Allotments (HVDC 115/116);
- Portsdown Hill Country Park– Open Space and SSSI (PCC);
- Recreational users to Waterlooville leisure centre; and
- Recreational users of other unnamed parks and playgrounds.

15.5.3.115. **Local commercial/retail/education/church users:**

- Users and workers of retail parks, industrial parks and commercial development off Hambledon and London Road; and
- Visitors to church and teachers and students at local nursery.

**Section 5 – Farlington**

**Site Description**

- 15.5.3.116. Section 5 of the Onshore Cable Corridor would run southeast on Farlington Avenue before turning left onto Havant Road and proceeding east, before turning right onto Eastern Road and heading south. To minimise disruption, flexibility is retained with the potential to run a route east along Eveleigh Road. It would then run past Solent Infant School, turning right and cutting through land associated with Portsmouth Water (which is enclosed), before turning right and heading west on Havant Road and then finally turning south onto Eastern Road.

15.5.3.117. The character is mainly urban residential in nature however, this is softened by the presence of mature street trees (copper beech, lime, ash, cherry and sycamore) and properties with established gardens. The northerly extent predominantly comprises relatively narrow streets with residential properties on large plots orientated to maximise the southerly views. Along Farlington Avenue two storey semi-detached/detached properties are edged by extensive areas of amenity grassland and either sit above or below road level. The density of the urban grain increases further to the south as the slope levels out. Solent Junior and Infant Schools are located here. To the northeast/east there is a large Victorian covered reservoir and waterworks with open grassland covering the earthworks, a small park (Waterworks Fields Play Area) and associated play area adjoins this, trees and shrubs line part of the edge of the park and school. The character changes to the south of Havant Road as the road becomes dual carriageway at Eastern Road.

15.5.3.118. Fort Purbrook is a notable feature and most of the properties facing south will have panoramic views across Portsmouth, Langstone Harbour and The Solent.

#### **Current Landscape Baseline**

15.5.3.119. In terms of landscape character, the Onshore Cable Corridor study area would cut across NCA 126 South Coast Plain and the following local (County and District) LCA0/UCAs the details of which are summarised in Appendix 15.4 (Landscape Character).

15.5.3.120. County Character Area:

- HCC LCA 8i Portsdown Hills Open Downs.

15.5.3.121. City local landscape character:

- PCC UCA 9 Drayton and Farlington.

15.5.3.122. Other landscape designations/cultural/heritage/recreational assets within the area include:

- Waterworks Fields Play Area – Public Open Space with play area; and
- Group of TPO'd trees in green space to the east of Solent Infant School.

15.5.3.123. There are no Listed Buildings within 200 m of the proposed Onshore Cable Corridor There are no other designations relevant to the LVIA noted within 120 m of Section 5 of the Onshore Cable Corridor.

#### **Current Visual Baseline**

15.5.3.124. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable include the following:

##### **Residential receptors**

- Properties off Farlington Avenue and adjoining minor roads (Solent, Sea View and Moortown);

- Properties off Blake Road;
- Properties off Grant Road;
- Properties off Eveleigh Road;
- Properties off Havant Road; and
- Properties off Eastern Road (including Waterworks Road, Copsey Close, Copsey Grove and Nutbourne Road).

#### Local transport users

- Farlington Avenue;
- Blake Road;
- Eveleigh Road and Grant Road;
- Havant Road; and
- Eastern Road.

#### Local recreational receptors

- Users of local roads (cyclists and pedestrians) outlined above;
- PRoW 24 between Drayton Lane and Portsdown Hill Road (PCC);
- PRoW6 between Down End Road and Farlington Avenue is an underpass;
- PRoW7 between Copsey Close and Havant Road;
- PRoW 30 between Nutbourne Road and Copsey Close;
- PRoW 31 between Copsey Grove and Eastern Road; and
- Waterworks Field Play Area.

#### Local educational facilities

- Solent Infant and Junior School.

### **Section 6 – Zetland Field and Sainsbury’s Car Park**

#### **Site Description**

15.5.3.125.

Section 6 of the Onshore Cable Corridor would run south along Eastern Road to Zetland Field before either continuing to run within the carriageway of Eastern Road or east through Zetland Field to Fitzherbert Road before continuing south via the western side of Sainsbury’s car park. At the end of Sainsbury’s car park the route would then run south under Farlington Junction Railway Line using Trenchless Techniques from a compound within the car park.

15.5.3.126. The character remains largely urban here, predominantly residential properties to the north. A combination of established belts of trees either side of the dual carriageway, coupled with the Open Green Space and associated play area at Zetland Field softens the nature of the area. Further south the landscape becomes more utilitarian with infrastructure planting edging the railway line and retail park/associated car park – due the mass of buildings and extensive car parking the landscape is more in open character.

#### Current Landscape Baseline

15.5.3.127. In terms of landscape character, the Onshore Cable Corridor study area would cut across NCA 126 South Coast Plain and the following county and local LCA/UCAs, the details of which are summarised in Appendix 15.4.

15.5.3.128. County Character Areas:

- 9g Havant and Emsworth Coastal Plain; and
- Uncharacterised Urban.

15.5.3.129. City local landscape character:

- PCC UCA 9 Drayton and Farlington;

15.5.3.130. Other landscape designations/cultural/heritage recreational assets within the area include:

- Zetland Field – Open Green Space with play area between Fitzherbert Road and Eastern Road; and
- Group of TPO'd trees surrounding Howden Timber/Richmonds Hyundai Garage between Fitzherbert Road, Waterworks Road and Zetland Road.

#### Current Visual Baseline

15.5.3.131. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable include:

##### Residential receptors

- Properties off Eastern Road including Copsey Grove, Lealand Road, Grove Road and Nutbourne Road).

##### Local transport users

- Users of Eastern Road;
- Users off Eastern Road including Fitzherbert Road (east);
- Users of Grove Road (west); and
- Users of Portsmouth to London main line.

##### Local recreational receptors

- Users of local roads (cyclists and pedestrians) outlined above;

- Users of Sustrans National Cycle Route 222 which runs along Eastern Road and east along Fitzherbert Road;
- Users of Sustrans National Cycle Route 22 which runs along Grove Road, before joining Eastern Road;
- Users of Zetland Field;
- PRoW 33 (Zetland Path) off Fitzherbert Road; and
- PRoW 31 between Copsey Grove and Eastern Road.

#### Local commercial/retail users

- Users and workers of retail park and commercial development off Eastern Road and Fitzherbert Road.

### **Section 7 – Farlington Junction to Airport Service Road**

#### **Site Description**

- 15.5.3.132. Section 7 of the Onshore Cable Corridor would run from Farlington Junction Railway Line leading from Portsmouth to London Waterloo. From the railway line Trenchless Techniques would be used to to the northern end of Farlington Playing Fields. The route would then cut across Farlington Playing Fields to the east of the Hilton Hotel complex and car park before crossing under the A27, Langstone Harbour and the north-western corner of Kendall’s Wharf via HDD.
- 15.5.3.133. The route would then either run on the western edge of Baffins Milton Rovers Football Ground (Kendall Stadium) and associated sports grounds; or from the car park at Kendall’s Wharf via Langstone Andrew Simpson Watersports Centre, before joining Eastern Road just north of Airport Services Road with Bitton Business Park to the west.
- 15.5.3.134. Mature trees, ornamental planting and hedgerows edge the majority of Eastern Road along this route providing partial visual screening for adjacent industrial, retail and leisure facilities which are extensive in their mass with associated infrastructure planting. Areas of local designated open space flank the edge of the A27.
- 15.5.3.135. The area however has a strong sense of openness due to the low level of buildings and views across Langstone Harbour and wide grassy verges. Traffic noise and constant presence of cars is a detracting feature.

#### **Current Landscape Baseline**

- 15.5.3.136. In terms of landscape character, the Onshore Cable Corridor study area would cut across NCA 126 South Coast Plain and the following county and city LCA/UCAs the details of which are summarised in Appendix 15.4.

#### County Character Areas:

- HCC LCA – Uncharacterised Urban

#### City local landscape character:

- PCC UCA 1 Anchorage Park.
- PCC UCA 9 Drayton and Farlington.

15.5.3.137. The Study Area also includes a more detailed local landscape character assessment relating to Portsea Island (Landscape Character Assessment - Portsea Island Coastal Defence Flood Risk Areas, Portsmouth City Council, 2012). This includes Area 2 – North Coast and local landscape character area K4 and Area 3 – East Coast and local landscape character areas L4/5 see Appendix 15.4.

15.5.3.138. Other landscape designations/cultural/heritage and recreational assets within the area include:

- Hillsea Lines Conservation Area including rampart and moat (most designated as a Scheduled Ancient Monument);
- Open space south of the A27 linking to Farlington Marshes Nature Reserve;
- Baffins Milton Rovers Football Ground (The Kendall Stadium) and associated Sports Ground;
- University of Portsmouth Sports Grounds and Playing Fields;
- Recreation ground north of supermarket and Anchorage Road – Anchorage Park;
- Group TPO south of Anchorage Road and west of Robinson Way (outside of 120 m study area); and
- Farlington Playing Fields – Open Green Space with sports fields and pavilion (north of the A27).

15.5.3.139. The Eastern Road and Kendall's Wharf Coastal Defence (Eastern Road and Kendall's Wharf Coastal Defence Scheme – protecting the future of our community (Portsmouth City Council, November 2018)), represents the fourth phase of construction of new coastal flood defence as part of the North Portsea Island Coastal Defence Scheme. Works include the construction of a sea wall with road raising at the entrance to Kendall's Wharf (300 m for Kendall's Wharf and 2.1 km Eastern Road) and landscaping works following completion. Currently a detailed design review is being undertaken, which once completed will lead to the procurement of a contractor. Works have already been completed at Anchorage Park, Milton Common and Great Salterns Quay.

#### Current Visual Baseline

15.5.3.140. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable include:

#### Residential receptors



- Properties west of Eastern Road; and
- Users of hotel.

#### Local transport receptors

- Users of Portsmouth to London Waterloo railway line;
- Users of the A27;
- Users of Eastern Road/A2030; and
- Users at the junction of Eastern Road with Airport Services Road/Burrfields and Anchorage Road.

#### Local recreational receptors

- Users of Sustrans National Cycle Route 22 which runs north-south along Eastern Road and east along the A27;
- Users of Sustrans National Cycle Route 222 which runs north-south along Eastern Road;
- Users of the Solent Way;
- Users of local roads (cyclists and pedestrians);
- Users of the Baffins Milton Rovers Football Ground (Kendall Stadium) and Andrew Simpson Watersports Centre;
- Water sports users in Langstone Harbour; and
- Users of Farlington playing fields east of hotel complex and north of the A27.

#### Local users of retail and industrial units:

- Users of various retail/industrial facilities predominately west of Eastern Road.

### **Section 8 – Eastern Road (adjacent to Great Salterns Golf Course) to Moorings Way**

#### **Site Description**

15.5.3.141.

Section 8 of the Onshore Cable Corridor would run along Eastern Road/A2030 past Great Saltern Golf Course/Golf Driving Range and Harbourside Park (Caravan and Camp Park), skirting south past University of Portsmouth to the west before reaching Milton Common. Whilst it is considered that there is a viable option through Milton Commons using a combination of HDD and Trenching, flexibility is retained for two alternatives due to the nature of ground conditions. The route through Milton Common would run close to the eastern edge of Milton Common onto Moorings Way and west of a series of small lakes. The two alternatives would:

- Eastern Road: The route would turn down Eastern Road and onto Eastern Avenue, past properties to the north of Eastern Road forming part of the Baffins and Eastern Avenue. Properties edging Eastern Road are 1950's three storey flats; or
- Minor Roads and Moorings Way: The route would run around the western edge of Milton Common overlooked by Shore Avenue, before continuing south and joining with Moorings Way. It would run along the edge of properties forming part of the Baffins and properties to the west which are a combination of two/two plus storey ranging in ages from Edwardian, pre-war to 1970s.

15.5.3.142. Milton Common, a historic landfill site, is predominately open land with occasional clusters of amenity/improved, semi improved and marshy grassland, scrub with occasional trees (polar, willow and alder) criss-crossed by a network of footpaths. The land which is designated as a SINC, is gently undulating, with recreational areas. Raised banks rise to the east to contain a series of small lakes and screen views across to Langstone Harbour.

15.5.3.143. Whilst views are contained to the east, the area is open with wide panoramic views to the north, west and south across Milton Common. Further south a residential tower block forming part of University of Portsmouth and Southsea Marina is a prominent feature. Eastern Road is also a dominant feature and alongside the movement of vehicles can be a detractor in the tranquillity of the open space.

#### Current Landscape Baseline

15.5.3.144. In terms of landscape character, the Onshore Cable Corridor study area would run through NCA 126 South Coast Plain and the following county and local LCA/UCAs, the details of which are summarised in Appendix 15.4 (Landscape Character).

#### County Character Area:

- HCC LCA – Uncharacterised Urban.

#### City local landscape character:

- PCC UCA 1 Anchorage Park;
- PCC UCA 2 Baffins; and
- PCC UCA 17 Milton East.

15.5.3.145. The Study Area also includes a more detailed local landscape character assessment relating to Portsea Island (Landscape Character Assessment - Portsea Island Coastal Defence Flood Risk Areas (Portsmouth City Council, 2012)). This includes Area 3 – East Coast and local landscape character areas L4/5 refer to Appendix 15.4 (Landscape Character).

15.5.3.146. Other landscape designations/cultural/heritage assets and recreational assets within the area include:

- Milton Common;
- The route lies close to one Listed Building (Great Salterns House and Attached Walls, east of Eastern Road);
- Group TPOs covering the following areas – Group TPO for a residential area east of Eastern Road between Milton Common and Moorings Way and along part of Eastern Road and an area to the east of Eastern Road close to Burrfields Roads and south of Baffins Milton Rovers Football Ground (Kendall Stadium) forming part of the Harbourside Park; and
- - Great Saltern Golf Course and Driving Range.

15.5.3.147. It should be noted that Langstone Harbour, to the east is designated as Ramsar, SSSI, SPA and SAC.

15.5.3.148. Section 8 will also be affected by the Eastern Road and Kendall's Wharf Coastal Defence works.

#### Current Visual Baseline

15.5.3.149. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable include:

##### Residential receptors

- Properties edging Baffins/Milton and Eastern Road;
- Properties off minor roads including Eastern Avenue and Shore Avenue;
- University of Portsmouth Langstone Campus to the south;
- Harbourside Park Camping and Caravan Park; and
- Hotel to the west and Great Saltern Mansion to the east of Eastern Road.

##### Local transport receptors

- Users of Eastern Road/A2030;
- Users of Burrfields Road and Tangier Road (close to junction with Eastern Road A2030); and
- Users of minor roads off Eastern Road (including Shore and Eastern Avenue).

##### Local recreational receptors

- Users of Sustrans National Cycle Route 222 which runs to the east of Eastern Road, along Moorings Way and along the coastal path to the east of Milton Common;
- Users of Great Saltern golf club and driving range;
- Users of recreational activities at Portsmouth College, Baffins Milton Rovers Football Ground and Andrew Simpson Watersports Centre;
- Users of Milton Common (popular for dog walkers);
- Users of the Solent Way; and
- User of local roads (cyclists and pedestrians).

#### Local users of religious, educational/retail facilities

- Users of various facilities predominately west and east of Eastern Road south of Burrfields Road (including petrol station, Great Salterns Mansion and Hotel) and pub at junction of Eastern Road and Moorings Way; and
- Users of Langstone Church and Centre (nursery workers and children).

### **Section 9 – Moorings Way to Bransbury Road**

#### **Site Description**

15.5.3.150. Section 9 of the Onshore Cable Corridor retains flexibility to run east along Moorings Way either along Furze Lane or along the eastern boundary of the University of Portsmouth Langstone Campus. It would then join Longshore Way/Locksway Road before cutting through Milton Locks Nature Reserve and skirting under the eastern corner of Milton and Eastney Allotments via HDD, through Kingsley Road Informal Greenspace, running either along Yeo Court or Kingsley Road before crossing Bransbury Park in a north-south direction (skirting around an avenue of trees and skate park to the west) and onto Bransbury Road.

15.5.3.151. The route would be overlooked by Eastney and Milton Allotments (including Kingsley Road Informal Greenspace), Milton Locks Local Nature Reserve and SINC, common land and parkland. It would be also overlooked by University of Portsmouth Halls of Residence referred to as Langstone Campus and Langstone Sports Site and Playing Fields off Furze Lane, To the east there are open panoramic views across to Langstone Bay, Harbour and Southsea Marina. Eastney Beam Engine House Museum is a noticeable landmark to the southeast of Bransbury Park.

#### **Current Landscape Baseline**

15.5.3.152. In terms of landscape character, the Onshore Cable Corridor study area would cut across NCA 126 South Coast Plain and, dependent on which option is selected, the following UCAs (the details of which are summarised in Appendix 15.4 (Landscape Character)):

- PCC UCA 10 Eastney; and
- PCC UCA 17 Milton East.

15.5.3.153. The Study Area also includes a more detailed local landscape character assessment relating to Portsea Island (Landscape Character Assessment - Portsea Island Coastal Defence Flood Risk Areas, (Portsmouth City Council, 2012)). This includes Area 3 – East Coast and local landscape character areas L6 /7 refer to Appendix 15.4 (Landscape Character).

15.5.3.154. Other landscape designations/cultural and heritage assets/recreational within the area include:

- Milton Lock Conservation Area;
- Milton Common;
- Milton and Eastney Allotments plus Kingsley Road Informal Greenspace;
- Bransbury Park;
- Northern edge of Eastney Sewage Pumping Station now Eastney Beam Engine House Museum is designated as a Scheduled Monument;
- Group TPO's west of Furze Lane and south of Locksway Road; and
- The current line of trees along Furze Lane has a similar formation to those depicted by Edward King (1863-1951), in the painting named Poplar Trees in the Grounds of St James' Hospital (No.1 and No.2).

15.5.3.155. There is one Listed Building, Grade II listed former Milton Sea Lock and Basin (within Milton Locks Conservation Area), within 200 m of the Onshore Cable Corridor, refer to Chapter 21 (Heritage and Archaeology) for further details. There are no other designations noted within 120 m of Section 9 of the Onshore Cable Corridor.

#### Current Visual Baseline

15.5.3.156. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable include:

#### Residential receptors

- Properties along Fort Cumberland Road/Bransbury Road and adjacent streets;
- Properties off Longshore Way/Locksway Road; and
- University of Portsmouth - Langstone Campus.

#### Local transport receptors

- Users of Bransbury Road;
- Users of the A2030 - Moorings Way;
- Users of Furze Lane;
- Users of Longshore Way/Locksway Road;
- Users of Kingsley Road and Yeo Court; and
- Users of minor roads throughout Section 9.

#### Local recreational receptors

- Users of all roads detailed above including cyclists and pedestrians;
- Cyclists along Sustrans National Cycle Route No.222 which runs through Bransbury Park, north along Ironbridge Road, east along Locksway Road and through Furze Lane;
- Users of the Langstone Sports Site and Playing Fields;
- Users of the Solent Way which runs along the eastern edge of Milton Common, along Longshope Way/Locksway Road, along Ironbridge Road and through Bransbury Park;
- Users of PRow 99 which runs from Milton Road and links to Locksway Road.
- Visitors to Eastney Beam Engine House Museum;
- Visitors to southern edge of Milton Common;
- Users of Solent Way which runs to the west along Fort Cumberland Road, Bransbury Road and north through Bransbury Park;
- Users of Bransbury Park;
- Users of Milton and Eastney Allotments (and Kingsley Road Informal Greenspace); and
- Visitors to Milton Lock Local Nature Reserve.

#### Users/workers at education (college) and public house facilities

- Users of Portsmouth University and pub at Milton Locks.

### **Section 10 – Eastney (Landfall)**

#### **Site Description**

15.5.3.157.

This section of route would run along Henderson/Fort Cumberland Road to the Landfall which is an existing car park south of Fort Cumberland Road used to access a short path to Eastney Beach; a designated SINC and Fort Cumberland open space next to the car park which is also a SINC. Southsea Holiday Home, Lodge and Leisure Park ('Southsea Leisure Park') with static caravans bounds the Landfall to the south and west and there is a small children's play area to the west of the

carpark's entrance (Fort Cumberland Road play area). The remainder of the route from the Landfall to a point offshore would be HDD under Southsea Leisure Park and Eastney Beach.

- 15.5.3.158. There are a number of residential properties to the north, northeast and west of the Landfall. These are a mixture of houses and three storey flats ranging in ages from late 50's to more recent developments in early C2,000's. A small retail area at the junction with Fort Cumberland/Ferry and Henderson Road serves the local community.
  - 15.5.3.159. Fort Cumberland Road which leads to Eastney Marina is the only local road which borders to the Landfall to the north. There is a short access track to the Fraser Range former defence research building which is gated to the south (part of the Fort Cumberland complex).
  - 15.5.3.160. Sustrans National Cycle Route No.2 which is also known as the Shipwrights Way follows Fort Cumberland Road, and passes within 300 m of the Landfall.
  - 15.5.3.161. Uses along much of the southern half of the area have strong historical links with the military. This has made a significant contribution to area's character. Fort Cumberland and a former defence research facility are located to the east off Ferry Road, which leads to a small marina, boat storage yards, and a lifeboat station. Fort Cumberland is a Scheduled Monument with Grade II Listed Buildings within its curtilage.
  - 15.5.3.162. The area immediately around the Landfall conveys a dated feel, the buildings, facilities and surrounding are functional in use with expansive areas of parking and amenity grassland – there is little planting to improve visual amenity apart from a gappy mature line of conifers edging the leisure park. There are open views over public open space/common land and it is likely from upper storeys of residential properties and flats there would be views across Langstone Harbour, The Solent as well as Fort Cumberland (which is not visible from the ground). Upper elevations of Frazer Range are noticeable from the car park.
- Current Landscape Baseline**
- 15.5.3.163. In terms of landscape character, the Onshore Cable Corridor study area falls within NCA 126 South Coast Plain and PCC UCA 10 Eastney described below:



- *“The area is predominantly flat, low lying and bounded along much of its length by the sea. Whilst the relationship with the coastline generally contributes positively to the character of the area, it does leave large parts exposed and at risk of tidal flooding. Footpaths and beaches provide access to the coastline along the majority of its length affording views out across Langstone Harbour to Hayling Island and across The Solent to the Isle of Wight. This attracts visitors to the area all year round but it is noticeably busier during summer months”* (Portsmouth Urban Characterisation, PCC, 2011); and
- *“The shingle beaches at Eastney and areas of scrub and grassland around Fort Cumberland provide important habitats for birds, butterflies and insects. Both areas are designated as Local Wildlife Sites. The grassland to the west of Fort Cumberland bounds the existing car park, and proposed Landfall site, to the east”* (Portsmouth Urban Characterisation, PCC, 2011).

15.5.3.164. The Study Area also includes a more detailed local landscape character assessment relating to Portsea Island (Landscape Character Assessment - Portsea Island Coastal Defence Flood Risk Areas, (Portsmouth City Council, 2012)). This includes Area 1 – Seafront and local landscape character areas A5/A6 and D1/2/3 see Appendix 15.4.

15.5.3.165. There are two Conservation Areas, within 300 m of the Landfall and the Onshore Cable Corridor including St. Andrew’s Church and Eastney Barracks. Due to the intervening built form it is not considered that these will be affected by the Proposed Development.

15.5.3.166. Whilst there are no TPO trees or groups of trees with a TPO within 300 m of the Landfall there are groups and individual trees which are subject to TPO’s along Henderson Road (TPO 230/2004 and 230/2005).

15.5.3.167. The Fort Cumberland Scheduled Monument (a Georgian fortification) which is not visible from Fort Cumberland car park lies 225 m to the east of the ORS buildings at the Landfall. To the northwest of Fort Cumberland Road and north of Halliday Crescent there are Grade II Listed Buildings as well as Eastney Sewage Pumping Station Scheduled Monument. In addition, the World War II Anti-Tank defences at Eastney Beach which is a Listed Building is located within the 300 m study area, southwest of the ORS buildings and the caravan park.

### Current Visual Baseline

15.5.3.168. Key visual receptors likely to experience either a direct or oblique view of the construction works associated with the Onshore Cable and the presence of permanent ORS buildings include:

#### Residential receptors

- Residential properties along Fort Cumberland Road; and
- Residents of Southsea Leisure Park (through an existing boundary of gappy conifers referred to in the Arboriculture Report as G863).

#### Local transport users

- Fort Cumberland Road and Fort Cumberland car park;
- Henderson Road;
- Users of minor roads off Henderson Road, Fort Cumberland Road; and
- Users at the junction of Henderson Road/Fort Cumberland Road with Melville Road and the Esplanade.

#### Local recreational receptors

- Cyclists using Sustrans National Cycle Route No.2 which runs east-west along the Esplanade, Melville Road and Fort Cumberland Road, passing within 300 m of the Landfall Site;
- Cyclists using Sustrans National Cycle Route 222 running northwest and through Bransbury Park;
- Users of the Shipwrights Way which runs along Melville Road, across to the north of the Landfall site and east along Fort Cumberland Road;
- Users of Southsea Leisure Park;
- Visitors to Fort Cumberland;
- Users of Solent Way which runs to the west along Fort Cumberland Road, Bransbury Road and north through Bransbury Park;
- Recreational users using local footpaths and access routes including Fort Cumberland SINC between the Landfall and beach, and visitors to the beach utilising PRoW 101 and 102. These two paths provide access between Halliday Crescent and Henderson Avenue at the southern and northern end of Halliday Crescent; and
- The proposed Landfall would not be visible for those recreational receptors on the beach.

### 15.5.4. FUTURE BASELINE

#### Converter Station

- 15.5.4.1. It is envisaged that there could be a number of changes around the immediate vicinity of the Converter Station Area which would mean that the future baseline is substantively different to the present-day baseline described above.
- 15.5.4.2. Such changes are associated with an extension to the Lovedean Substation as well as an application for a 30 m high mast to the south of the Substation and two battery

storage facilities, the details of which are summarised under the heading of 'Future Energy Developments' below.

15.5.4.3. Other landscape change trends and drivers referred to in NCA 125 South Downs document include the following:

- “The open landscape has been vulnerable to urban edge pressures extending from the heavily built-up coastal fringe onto the Downs, as well as from prominent communication masts on exposed skylines and from pylons and transport corridors in the principal chalk valleys.”
- “Broadleaved and ancient woodland may see changes in composition of vegetation types and ground flora. Drought-sensitive species such as beech are particularly vulnerable and may be lost over time. This habitat may also be impacted by increased incidence of disease, disruption in synchronicity between species interactions, changes in range of current native species, new and increasing pest species, increased forest fires and loss of mature trees to wind blow.”
- “Development pressure around the towns and larger commuter villages in and around the Downs will remain a challenge, but offers some opportunities for well-designed developments that contribute to landscape and settlement character and utilise sustainable technologies such as renewable energy supply and increased energy/water efficiency. This could provide green Infrastructure gains as an integral component of development.” (Natural England, 2013)

#### Future Energy Developments

15.5.4.4. A Battery Storage Facility for 49.9 MW (referred to as 'Pivot Power and Development No 68' in Appendix 29.2 (Collated Onshore Long and Short List of Developments) of the ES Volume 3 (document reference 6.3.29.2)) is proposed by Pivot Power to the north of the Converter Station as shown in Figure 29.1 (document reference 6.2.29.1). An application submitted, and subsequently withdrawn and no further application has been submitted to date. It would occupy the north-eastern part of an existing field with access provided to the north from an existing field gate off Old Mill Lane. The scheme comprises a number of energy storage containers measuring approximately 14.7 m in length and up to 2.6 m in height. The scheme includes a palisade security and a 4 m high acoustic fenced compound with CCTV security, switch gear containers, inverters, transformers and a spares container. This scheme would be partially screened to the east and west by proposed woodland and as indicated by the indicative landscape mitigation plan.

15.5.4.5. A further Battery Storage Facility (Land South of Lovedean and Development No 67 in Appendix 29.2 (Collated Onshore Long and Short List of Developments)) was proposed to the southeast of the Converter Station and south of Lovedean Substation. The planning permission for this development was quashed following a Judicial Review. Developers are now continuing to promote the site and the proposals have recently been subject to EIA screening, with the screening opinion

confirming the development was not EIA development. No planning application has been submitted to date. The description of the development included in the EIA screening opinion was for the installation of two energy storage systems and associated infrastructure with a total capacity of 49.95 MW and a further access point off Broadway Lane.

- 15.5.4.6. The existing National Grid Lovedean Substation has planning permission to extend further west. In addition, a planning application has been submitted by National Grid for the installation of a 30 m high telecommunication mast and antenna to the south of the existing Substation (Development No 70).
- 15.5.4.7. Whilst the implications of the National Grid Lovedean Substation extension are considered in the future baseline, effects on landscape character and visual amenity as a consequence of Development No 67, 68 and 70 are considered in the assessment of cumulative effects (Section 15.8).

### **Onshore Cable Corridor**

- 15.5.4.8. Works associated with the Coastal Defence have been ongoing with the next phase focusing on the Eastern Road and Kendall's Wharf Coastal Defence (Eastern Road and Kendall's Wharf Coastal Defence Scheme – protecting the future of our community (Portsmouth City Council, November 2018)). This represents the fourth phase of construction of new coastal flood defence as part of the North Portsea Island Coastal Defence Scheme. It seeks to improve the quality of the public realm along the eastern edge of Eastern Road. Whilst it is expected that works would be completed before the Onshore Cable is installed this is considered in the assessment of cumulative effects along with other developments.
- 15.5.4.9. Landscape trends and changes identified in the NCA profiles (South Hampshire Lowlands 128 and South Coast Plain 126) and associated with the Onshore Cable Corridor have not been considered on the basis that land would be reinstated and appropriate mitigation measures introduced along the route to replace any planting lost during construction.

## Landfall

- 15.5.4.10. Proposals have been put forward for Fraser Range by National Regional Property Group. The site, formerly used as a Royal Naval gunnery range and research centre covers 11.4 acres. The proposals are for a high quality residential development of one to four bed units with 40 homes in three existing converted buildings and 81 as new buildings. The proposals seek to introduce significant landscape areas across the site and a footpath along the front of the development to the east of Portsea Island and north to Langstone Harbour. An application was submitted on 1 May 2019 (see 19/00420/FUL) and whilst this does not have planning permission at the time of the assessment, is considered as part of the assessment of cumulative effects.

## **15.6. PREDICTED IMPACTS**

- 15.6.1.1. The predicted impacts arising from the construction, operational life and decommissioning of the Proposed Development are set out in section 15.3.6, above.

## **15.7. PROPOSED MITIGATION**

### **15.7.1. CONSTRUCTION STAGE:**

#### **GENERAL EMBEDDED MITIGATION MEASURES**

- 15.7.1.1. Construction stage environmental impacts of the Converter Station Area, Onshore Cable Corridor and Landfall would be managed through standard control measures secured through a Construction Environmental Management Plan ('CEMP'). An Onshore Outline CEMP is provided as part of the Application (document reference 6.9) and is referred to in Schedule 2 Requirement 15 of the DCO.
- 15.7.1.2. Whilst other ES chapters do not assume the Onshore Outline CEMP as 'embedded mitigation', in line with GLVIA3, the LVIA assumes standard construction practice measures are in place in all Sections (1-10) to control impacts on landscape character and visual amenity including:
- Appropriate location, organisation and phasing of construction activities.
  - Maintenance of a tidy and contained site compound to reduce visual clutter.
  - Design and layout of site construction areas to reduce adverse impacts arising from temporary security fencing and lighting.
  - Measures to control working hours in specific locations to avoid disturbance to residential receptors both in terms of light and noise.
  - Agreed site access points to limit impacts on existing vegetation both above and below ground.
  - Retention and protection of existing vegetation with temporary fencing to demarcate the construction footprint refer to BS 5837:2012 Trees in relation to design, demolition and construction –Recommendations, (BSI Standards Publication, 2012 British Standards Limited).

- Onshore Micro Siting in addition to trenching as referred to in the baseline section of this LVIA would be used to avoid specific features.
- Careful siting of temporary topsoil storage areas considering using use as a physical buffer between the construction works and more sensitive receptors where practicable.
- Careful management and storage of topsoil and subsoil in accordance with Construction Code of Practice for the Sustainable Use of Soil on Construction Sites, ( (Department for Environment, Food and Rural Affairs, 2009)).
- Where construction works obstruct a footway an absolute minimum unobstructed width of 1 m would be provided alongside the construction corridor and where this is not possible a safe alternative route. This would include provision of suitable crossing facilities where required, including the temporary replacement of existing pedestrian crossings that may need to be closed to facilitate construction see Appendix 22.1 (Transport Assessment) of the ES Volume 3 (document reference 6.3.22.1).
- Temporary screening for sensitive visual receptors through implementation of solid construction hoards whilst using natural existing screens (topsoil and existing vegetation) where practicable. Hoardings would be attractive, used to screen low level “clutter” and reduce noise.
- Hoardings would be well lit in poorly lit walkways and any gates should be positioned to minimise noise transmitted to nearby sensitive receptors.
- Large plant/equipment would be located away from most sensitive visual receptors where there are viable alternatives.
- Removal of temporary structures and stockpiles when no longer required.
- Prompt reinstatement of temporary construction areas (including trenches, Laydown Area, Works Compound and construction (including haul road) corridor on completion of the Onshore Cable installation as soon as possible after sections of work are complete. Reinstatement would involve the careful handling of soils and a return to the existing habitat type.
- Implementation of mitigation planting alongside the construction programme where works would not affect planting and during winter (November – February as per Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board)).
- Mitigation planting to replace hedgerows and trees lost following completion of the construction works.

### **CONSTRUCTION STAGE: SPECIFIC EMBEDDED MITIGATION MEASURES (CONVERTER STATION)**



- 15.7.1.3. Embedded mitigation and enhancement measures specific to the Converter Station have focused on:
- The design of the Converter Station and associated infrastructure;
  - Landform and drainage; and
  - Retention of existing planting and new mitigation planting.

**Converter Station and Infrastructure Design**

- 15.7.1.4. As outlined in Section 15.4.5 two options for the siting of the Converter Station each subject to maximum spatial parameters were defined for the Converter Station Area allowing flexibility for siting, orientation and massing within this envelope. The Parameter Plans and Design Principles have been informed by discussions with the LPAs and SDNPA.
- 15.7.1.5. The detailed design of the Converter Station will required to be in accordance with the Design Principles and the Outline Landscape and Biodiversity Strategy (including indicative landscape mitigation plans) and would need to be approved by the relevant discharging authority in consultation with the SDNPA. Adherence to these will ensure that the design of the Converter Station would satisfy the principles of “good design” as required by NPS EN-1 and meet its functional and operational requirements whilst responding to its setting.
- 15.7.1.6. As referred to in Chapter 3 (Description of the Proposed Development) Section 3.1.6, aspects of the detailed design work for the Proposed Development will occur post DCO consent and following the appointment of the contractors to ensure there is sufficient flexibility to scope for value engineering through innovative design and/or construction techniques as referred to in PINS Advice Note Nine “Using the Rochdale Envelope” (Planning Inspectorate, 2018).
- 15.7.1.7. Parameter Plans Sheets 1 to 3 and the requirements of the DCO detail the perimeter of the Converter Station Options B(i) and B(ii), the heights of the internal and external structures associated with the Converter Station and two Telecommunication Buildings and the extent of the compound zone for both the Station and Buildings as well as the Access Road. Also see Indicative Converter Station Area Layout Plans Sheet 1 to 3 (document reference 2.7) and Indicative Converter Station Sections Sheet 1 to 2 (document reference 2.8).
- 15.7.1.8. Within the perimeter of the Converter Station, covering a footprint of 200 m x 200 m (appropriately 4 ha), would sit buildings up to 26 m high including the Converter Hall, Control Building, Valve Coolers, Spares Building (referred to on the Parameter Plans and Table as Parameter Zone 4). Buildings and equipment including transformers, termination equipment, reactors, generator and HVDC and HVAC cable termination equipment up to 15 m would sit within Parameter Zone 3 surrounded by a hardstanding compound.
- 15.7.1.9. The Telecommunication Buildings would lie to the south of the Converter Station and



each building would have a maximum footprint of 8 m long x 4 m wide x 3 m high (Parameter Plan Zone 2). These, like the Converter Station, would be surrounded by a secure compound.

- 15.7.1.10. As referred to on Sheet 2 and 3 of the Parameter Plans, the Converter Station buildings and equipment would sit on a finished floor level 300 mm higher than the finished platform level of 84.8 m (AOD). The finished floor level is assumed to be 85.1 m AOD in compliance with the flood risk assessment.
- 15.7.1.11. The Design and Access Statement explains the principles and concepts that have influenced the form and appearance of the onshore electrical transmission works as currently envisaged and provides a tool to communicate how the requirements for good design and access provision have been considered. It also includes Design Principles, which will be followed by the Project to progress the final design, post consent. Design Principles cover general, building design, landscape, sustainability and Optical Regeneration Station principles.
- 15.7.1.12. As referred to on the Parameter Plans Sheets 2 to 3 lighting columns up to 15 m high are proposed to illuminate the outdoor areas of the Converter Station during emergency situations, such as an intruder or unplanned maintenance work. The lights are not intended to be used during normal operation. There are also lightning masts located on site 4 m taller than the tallest building (up to 30 m high).
- 15.7.1.13. A specific building design principle covers noise and a 3 m noise barrier referred to as additional mitigation in Chapter 24 (document reference 6.1.24) is proposed to reduce noise levels by 2.5-3db at Hinton Daubnay. The barrier would wrap around the southern converter cooling fan banks of the southern converter building.
- 15.7.1.14. The Landscape and Visual Amenity assessment has scoped out the visual impact of this structure on the basis that it will “appear” to form part of larger adjacent structures associated with the Converter Station and given their height, levels and other proposed structures in the foreground will hardly be perceptible.

### Landform and Drainage

- 15.7.1.15. As outlined in Parameter Plans Sheets 2 to 3 the finished platform level of the Converter Station has been fixed at 84.8 m. The approximate maximum cut would be in the order of 4.5 m and the approximate maximum fill would be 4.5 m. This applies to both Option B(i) and B(ii).
- 15.7.1.16. Gradients are constrained by offsets outlined above and the depth of cut cannot be increased due to the nature of the geology and potential impact on the underlying aquifer.
- 15.7.1.17. As detailed in Chapter 3 (Description of the Proposed Development) two attenuation ponds are proposed to the north and south of an existing hedgerow to accommodate runoff from the Converter Station and Access Road (see Figures 15.48 and 15.49).
- 15.7.1.18. Proposals would be refined through a detailed coordinated drainage design post

DCO consent, exploring SuDs and the potential for marginal planting within the ponds.

### Retention of existing planting and new planting

- 15.7.1.19. A set of landscape design principles were agreed with the LPAs and SDNPA. These Principles, used to inform the maximum development envelope and the indicative landscape mitigation plans, were refined and are included within Design Principles detailed in the Design and Access Statement.
- 15.7.1.20. Informed by the landscape design principles and in close consultation internally with the design team (and externally with the LPAs and SDNPA), indicative landscape mitigation plans were prepared for the Converter Station Area (see Figures 15.48 and 15.49). The plans seek to reduce potential landscape and visual effects and create positive new habitats as well as improving connectivity and creating links to existing ancient woodland.
- 15.7.1.21. The indicative landscape mitigation plans also seeks to enhance (where practicable) the landscape fabric drawing on references from NCA Profile – 125 South Downs including the following:
- “Conserving and expanding the historic network of species-rich grassland and heathland, meadows, woodland and hedgerows to make biodiversity stepping stones and corridors, enhance historic landscape value and facilitate their key function to reduce surface water flows and soil erosion.”* (Natural England, 2013)
- 15.7.1.22. Local landscape character assessments were also reviewed and these were considered alongside existing constraints/proposed offsets which set the maximum development envelope for the Converter Station and landscape proposals as outlined below:

### Existing constraints for Converter Station, infrastructure and planting

- Ancient woodland and hedgerows – 15 m offset for the Converter Station/infrastructure.
- [REDACTED]
- Overhead lines – 30 m exclusion from 400 KV overhead lines (taken from the outermost conductor) for all trees.
- SSE oil filled cables – 1 m on either side of centre line of cable for hedgerow planting and 5 m on either side for tree planting.

### New planting constraints for Converter Station Area

- Hedgerows set back 5 m from security fence line – growth up to 2 m.
- Hedgerow set back 5 m off the edge of the security fence (growth maintained at a max of 2 m).

- Scrub set back 10 m from the security fence (growth maintained at a max height of 3-4 m).
- Trees up to 15 m: 15 m x 1.5 m + 3 m = 25.5 m away from security fence.
- Trees up to 25 m: 25 m x 1.5 m + 3 m = 40.5 m away from security fence.

#### **New planting constraints for Onshore Cable Route falling within the Converter Station Area**

- New cables can be planted over with hedgerow/scrub on the basis that engineering specify a concrete duct block underground to protect the cables.
- It is not permitted to plant over SSE oil filled cables. SSE will not accept concrete surround to be built around their cables.

#### **Proposed planting constraints for the Landfall**

- Hedgerow with trees will be set back 5 m from the Onshore Cable Route; and
- Trees will be set back 8 m from the ORS buildings.

15.7.1.23. Proposed planting offsets for the Converter Station Area were in response to health and safety guidelines stipulated in Electricity Safety, Quality and Continuity Regulations, 2002 as amended by the Health and Safety Executive and refined in discussions with engineers. The Regulations seek to ensure that electrical earthing remains clear of any risk of root damage, that trees do not fall onto the security fencing compromising safety and breaching unauthorised access, and access is maintained to ease the removal of all fallen or felled trees.

#### **Mitigation Planting**

15.7.1.24. **New Planting:** New mitigation planting would take place over the duration of the construction works which would run over an anticipated three-year period. Where practicable works would take place alongside the construction of the Converter Station and Access Road to increase the visual screening function as referred to in the landscape design principles.

15.7.1.25. The mitigation planting for the Converter Station Area considers a mix of planting ranging from woodland and tree belts connecting with Crabden Copse, an ancient semi natural woodland adjacent to the Converter Station, native hedgerows with hedgerow trees, to small copses in specific locations replicating local landscape features.

15.7.1.26. The proposed vegetation serves a number of purposes:

- Reinstates historic field boundaries in some locations;
- Provides partial visual screening through a layering of vegetation (existing and proposed);
- Integrates the Converter Station Area into its surroundings;
- Improves connectivity in terms of biodiversity;
- Ties in with the adjacent ancient woodland (as far as reasonable practicable given the location of the overhead lines, Access Road and associated easements);
- Reinforces and enhances local landscape features; and
- Offsets vegetation lost as a consequence of the Converter Station Area.

15.7.1.27. Proposed species were drawn from arboricultural, ecology and landscape field surveys, as well as trees, understorey and ground flora identified in Crabden Copse. Some species were omitted based on internal and external discussions with LPAs/SDNPA.

15.7.1.28. A mix of plant stock of local provenance would be used with larger trees (standards) in specific locations to increase visual screening in the short term and provide a varied initial age structure. Native ‘pioneer’ (rapidly establishing) species would be included to increase the height of vegetation in the short to medium term, whilst providing cover for the establishment of slower growing species. The planting layout would be designed to ensure that one species does not dominate the planting mix.

15.7.1.29. Where practicable (and subject to agreements with National Grid) areas of existing mitigation planting on National Grid land that falls within the Converter Station Area and which would be lost as a consequence of health and safety constraints associated with the Converter Station, would be used to reinforce new mitigation planting.

15.7.1.30. Species were selected based on their heights and grouped into four categories: hedgerows (with and without hedgerow trees); scrub (with and without trees); trees up to 15 m; and trees up to 25 m. See Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board).

- 15.7.1.31. Woodland belts and copses would serve an important visual screening function, improve connectivity and increase biodiversity as well as reflecting the local landscape character. All woodlands would be a mix of coniferous and deciduous trees, understorey and ground flora to aid screening. Areas of scrub would extend beyond woodland areas aiding low level screening with tree locations based on the offsets outlined above. Areas unaffected by offsets associated with the Converter Station and Telecommunication Buildings would be allowed to naturally regenerate, where practicable.
- 15.7.1.32. Native mixed species hedgerows would be planted over the new Onshore Cable Corridor replacing hedgerows lost during construction. Hedgerows would connect with existing hedgerows for instance along PRoW south of the Access Road and along the southern edge of the proposed Access Road. The mitigation plans include the reinstatement of a former field boundary to the north of the Converter Station as detailed in paragraph 15.5.3.18.
- 15.7.1.33. A mix of marshy grassland and marginal planting would be selected for the attenuation ponds and swales to avoid ongoing maintenance or reduce storage capacity. Root protection barriers would be introduced in the detailed scheme design to prevent root damage to the swale running alongside the Access Road.
- 15.7.1.34. Calcareous wildflower grassland would be introduced elsewhere. Where practicable seed from arisings gathered in Section 3 Denmead/Kings Pond Meadows would be integrated into the grassland mix specified in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) and as referred to in the landscape design principles above.
- 15.7.1.35. Table 13 in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) details the anticipated height of the proposed species at 10 years, 20 years, and height at maturity.
- 15.7.1.36. The following ground flora species have also been identified for the areas of woodland planting. These were drawn from the ecology survey notes of the neighbouring woodland areas.
- Wood anemone            *Anemone nemorosa*
  - Ramsons                *Allium ursinum*
  - Broad buckler-fern    *Dryopteris dilatata*,
  - Male fern                *Dryopteris filix-mas*
  - Soft shield-fern        *Polystichum setiferum*
  - Redcurrant             *Ribes rubrum*
  - Wood sedge             *Carex sylvatica*
  - Woodruff                *Galium odoratum*

- Dog's-mercury            Mercurialis perennis
- Common hemp-nettle *Galeopsis tetrahit*
- Foxglove                Digitalis purpurea
- Cleavers                Galium aparine.
- Wood spurge            Euphorbia amygdaloides
- Bluebell                Hyacinthoides non-scripta

15.7.1.37. **Existing Hedgerows/Hedgerow Trees within the Order Limits:** Measures seek to ensure that the existing hedgerows and associated hedgerow trees surrounding the Converter Station Area are maintained. This vegetation serves an important visual screening function and the landscape framework within which the Converter Station sits. Measures include the following:

- Restrictions on the removal of hedgerows and associated hedgerow trees and maintenance at existing heights;
- Introduction of new hedgerow trees and hedgerow planting to gap up where practicable;
- Gapping up of existing hedgerows with new hedgerow planting; and
- New hedgerow planting to replace hedgerows grubbed out.

15.7.1.38. All hedgerows to be subject to such measures fall within the Order Limits and are to be secured through the DCO.

**Management and Monitoring of Embedded Mitigation**

15.7.1.39. Works to ensure the effective management and monitoring of the landscape mitigation planting set out in the preceding paragraphs and implemented over the life span of the Converter Station are summarised in the Outline Landscape and Biodiversity Strategy. This document forms part of the DCO requirements. Subject to DCO consent a detailed landscape design considering both hard and soft landscaping works would be prepared for approval by the relevant discharging authority along with a detailed landscape and outline biodiversity strategy.

**Decommissioning Stage: Embedded Mitigation (Converter Station)**

15.7.1.40. General embedded mitigation measures implemented during construction would also apply during decommissioning. Additional mitigation or enhancement measures include the following:



- Reprofiting of existing landform;
- Removal of drainage;
- Retention of both pre-existing and areas of mitigation planting; and
- Reinstatement of both pre-existing and areas of mitigation planting lost to accommodate temporary decommissioning and Laydown Area /Works Compound.

### Specific Embedded Mitigation

15.7.1.41. Specific embedded mitigation measures for Sections 2-10 (Onshore Cable Corridor and Landfall) are outlined in relevant sections below.

## 15.8. ASSESSMENT

### 15.8.1. INTRODUCTION

- 15.8.1.1. There is no mitigation proposed beyond that which is embedded, therefore the effects identified by the assessment are the residual effects. For the sake of legibility reference to residual effects is not repeated in this section.
- 15.8.1.2. This section summarises the significant landscape character and visual amenity effects, with reference where appropriate to specific (embedded) mitigation measures and assumptions. The full assessment of landscape and visual amenity effects is given in Appendix 15.8 (Assessment of Landscape and Visual Effects).

### 15.8.2. STAGES OF DEVELOPMENT

- 15.8.2.1. The assessment of effects is divided into the following sections:
- 15.8.2.2. **Construction:** covering the short-term and temporary effects arising from construction activities including the presence of temporary site compounds, car parks and laydown areas as referred to in section 15.3.6.1 specific construction impacts. The long-term permanent effects that occur progressively during the construction period but which persist through the operational period, such as the removal of trees and hedges are considered under the operational period effects.
- 15.8.2.3. **Operational Period:** covering the long-term permanent effects that occur during the operational period, specifically the existence of the Converter Station, ORS buildings and associated infrastructure and the removal of trees and hedges. As noted at 15.3.6.4 (above), to take into account the development of mitigation planting, the effects are considered at year 0, year 10 (planting would have reached a maximum height of 8 m) and year 20 (tallest parts of the planting would have reached a height of 13 m). Also, as noted in Table 1 (above), operational period effects of the underground cable are scoped out, given the very limited above ground features proposed.
- 15.8.2.4. **Decommissioning:** covering the landscape and visual effects of demolishing and removing the Converter Station and the ORS buildings at the Landfall.

- 15.8.2.5. In all cases below, the assessment is based on a worst-case scenario for the Converter Station considering whichever of Options B(i) and B(ii) have the greater effect at a specific receptor area or location in the case of visual receptors. It should also be noted that as both options would have the same effect on landscape character, except very locally where Option B(ii) would avoid the removal of the existing hedgerow an important landscape feature. This is not repeated in the summary of assessment of effects.
- 15.8.2.6. The assessment also takes a worst-case scenario approach to the Onshore Cable Corridor and Landfall where there would be a range of views experienced by receptors, the “worst case” being those receptors likely to have direct open views of the Proposed Development.
- 15.8.2.7. Where ‘the Converter Station’ is referred to, in phrases such as ‘views of the Converter Station’ or ‘distance from the Converter Station’ that refers, respectively, to whichever of Options B(i) and B(ii) would be more visible or is the nearest.
- 15.8.2.8. The assessment was undertaken based on a current and future baseline.

### Sensitivity

- 15.8.2.9. Details of how sensitivity of different receptors is derived is given in detail in Appendix 15.3 (Landscape and Visual Assessment Methodology), summarised here for convenience.
- 15.8.2.10. Landscape sensitivity is the combination of judgements relating to the susceptibility to a type of change or development proposed and the value attached to the landscape.
- 15.8.2.11. Susceptibility and value can be combined in different ways although it is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity. If there is a reduction or increase in sensitivity the reasons for a variation in landscape value need to be justified. As noted in GLVIA3 (paragraph 5.45) there can be complex relationships between the value attributed to a landscape and its susceptibility to change, which can be particularly important when considering a change to/or in close proximity of a designated landscape.
- 15.8.2.12. Landscape character receptors include the setting of the SDNP, national and local landscape character areas or types and local landscape features ranging from landform and land use to tranquillity. The level of sensitivity for landscape character areas or types is detailed in Appendix 15.4 (Landscape Character) and for the setting of the SDNP in Appendix 15.5 (South Downs National Park). For remaining local landscape features, which contribute to landscape character. their sensitivity is outlined in the following section.
- 15.8.2.13. Visual sensitivity is a function of both the susceptibility of the receptor to the change proposed and the value attached to particular views. As GVLIA3 states in paragraph 6.31 *“[I]t is important to remember at the outset that visual receptors are*

*all people. Each visual receptor, meaning the particular person or group of people likely to be affected at a specific viewpoint, should be assessed in terms of both their susceptibility to change in views and visual amenity and also the value attached to particular views".* Susceptibility is mainly a function of the occupation or activity of the people who experience the view and the degree to which visual amenity is important to them. The value of views may be recognised in planning designations, highlighted in literature, tourist information or maps, or shown on the ground by interpretive material or the provision of parking.

- 15.8.2.14. All residential receptors are considered to be of high sensitivity because for most people the view from their home is very important. However, the magnitude of change they would experience varies depending on their location, orientation and proximity to the Proposed Development, as well as the extent of intervening built form, vegetation and topography.
- 15.8.2.15. Recreational receptors may be of high to low sensitivity depending on the nature of the route or location, the nature of the landscape and the people's reasons for being there. For the purposes of this assessment, recreational receptors have been grouped as follows:
- **Scenic routes and recognised viewpoints:** Users are considered to be of high sensitivity as these are particularly valued locations.
  - **PRoWs:** Users are considered to be of medium sensitivity.
  - **Cycling Routes:** Users are considered to be of medium sensitivity.
  - **Transport receptors:** Are considered to be of medium to low sensitivity depending on the nature of the route.

### STUDY AREA

- 15.8.2.16. Direct landscape character effects diminish with distance whilst indirect effects such as those associated within inter visibility are dependent on the level of visual screening considering topography and intervening vegetation/built form.
- 15.8.2.17. Visual effects reduce with distance as the scale of the change within the overall view diminishes and the Proposed Development is seen in context with immediate and wider surroundings.
- 15.8.2.18. As set out in sections 15.1.2 and 15.3.1 (above) for the Converter Station an 8 km radius study area was agreed for the consideration of national/county and district level landscape character assessments and long-distance views. A 3 km radius was agreed for detailed consideration of local district and city landscape character and visual amenity. A 1.2 km radius study area was also defined to determine visual amenity effects on local residential receptors.
- 15.8.2.19. For the Converter Station, the visual assessment was based on the study areas defined above using Option B(i). Figures 15.45, Figure 15.46 and 15.47 present ZTV's showing the visual extent for both Options B(i) and B(ii) in addition to the

location of/or routes for key visual receptors. Visual receptors were divided into the following categories:

- Receptors between 3 and 8 km of the Converter Station;
- Receptors between 1.2 and 3 km of the Converter Station; and
- Receptors within a 1.2 km radius of the Converter Station.

15.8.2.20. For the Onshore Cable Corridor, a 120 m study area was defined from the Onshore Cable Corridor and a 300 m study area for the Landfall. As referred to in Appendix 15.1 (Consultation Responses) the study area for the Landfall excluded by agreement seascape characterisation and coastline including Eastney Beach.

### 15.8.3. SECTION 1 LOVEDEAN (CONVERTER STATION AREA): CONSTRUCTION STAGE

#### Landscape Character - Summary of Construction Stage Effects

15.8.3.1. The following receptors would experience significant landscape effects during construction.

#### **Landscape Character Areas/Types and SDNP/Setting**

15.8.3.2. There would be significant effects associated with construction activities on the following (the nature of the effects outlined in further detail below):

- WCC 17 Hambledon Downs (LCT 17 W2), impacting on the edge of the SDNP D Downland Mosaic (D2) and its setting; and
- EHDC LCT 3 Downland Mosaic (LCA 3fi) covering the eastern side of the Converter Station including the Access, Road, entranceway, Laydown Area and Works Compound.

15.8.3.3. Effects (all of which are temporary and short-term) would be localised, the influence of the Converter Station and associated infrastructure diminishing as the relevant LCA or LCT exerts an influence and based on the relative size of such areas/types compared to the Converter Station Area. Effects would be as follows:

- SDNP D (D2 Hambledon and Clanfield Downland Mosaic): Indirect minor-moderate adverse (significant) based on proximity.
- WCC Hambledon Downs 17 (LCTW2): Direct, moderate adverse (significant) effect, the Converter Station Area falling within this LCT.
- EHDC LCT 3 Downland Mosaic (LCA 3fi): Direct, moderate adverse (significant) effect, the Converter Station falling within this LCA.

15.8.3.4. There would be indirect, moderate adverse (significant) effects on the setting of SDNP within 3 km of the Converter Station based on inter visibility and moderate changes within a localised area.

#### **Specific local landscape features**

- 15.8.3.5. The Proposed Development would give rise to noticeable changes in the landform and land-use of the Converter Station Area, and it would lead to noticeable loss of vegetation including woodland and hedgerows. Locally this would result in the following effects:
- Landform: Direct, moderate adverse permanent long-term (significant) effect.
  - Land-use: Direct, moderate adverse temporary short-term (significant) effect.
  - Planting (existing planting):
    - Direct, moderate-major adverse permanent long-term (significant) effect for Option B(i), or
    - Direct, moderate adverse permanent medium-term (significant) effect for Option B(ii).
- 15.8.3.6. In terms of infrastructure, the widening of the access entranceway off Broadway Lane, the creation of a permanent Access Road across fields between Day Lane and the loss of vegetation including hedgerow removal to accommodate visibility splays would change the character of the minor roads to the east, just south and east of the junction of Broadway Lane and Day Lane. This change, from a sense of enclosure to one of openness, would give rise to a moderate adverse permanent long-term (significant) effect.
- 15.8.3.7. Noise and activity arising from construction activity traffic would affect tranquillity locally. There would be an indirect moderate to minor temporary short-term localised (significant) effect on tranquillity.
- 15.8.3.8. The effects on local landscape features set out above form part of the effects on local landscape character, specifically to WCC Hambledon Downs 17 (LCTW2) and EHDC LCT 3 Downland Mosaic (LCA 3f), summarised in paragraphs 15.8.3.3 and described in full in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board).

### **Visual Amenity - Summary of Construction Stage Effects**

- 15.8.3.9. The following receptors would experience significant visual effects (all of which would be “direct, temporary, short-term and localised”) during construction.

#### **Residential**

- 15.8.3.10. There would be significant visual effects on the following residential receptors within 1.2 km of the Converter Station see Figure 15.47:

- North west of the Converter Station (Nos. 1, 2, 3, 4, 5 and 6): Major adverse (significant) effects.
- Northeast of the converter Station (Nos. 19, 20, 21 and 22): Minor-moderate adverse (significant) effects based on proximity.
- East of the Converter Station (Nos. 17, 18, 27 and 28): Moderate-major adverse (significant) effects.
- South east of the Converter Station (Nos. 14, 15, 16, 23, 24, 25 and 26): Moderate-major (significant) effects.
- South of the Converter Station (Nos. 10, 11, 12 and 13): Major adverse (significant) effects.
- South west of the Converter Station (Nos. 7, 8, 9 and 29): Moderate-major adverse (significant) effects.

### Recreation

15.8.3.11. Recreational users and visitors within 3 km:

- Monarch's Way (DC21/HC06): Moderate-major adverse (significant) effects.
- PRoW HC25a/b/HC41): Minor to moderate adverse (significant) effects.
- PRoW DC16/HC04: Moderate adverse (significant) effect.
- PRoW DC19/HC28: Minor to moderate (significant) effect.
- Cyclists along Day Lane/Broadway Lane using the Horndean Technology College route: Moderate adverse (significant) effect.

### Transport

15.8.3.12. There would be no significant effects for transport users during construction apart from:

- East of the Converter Station (Broadway and Day Lane): Moderate adverse (significant) effects.
- South of the Converter Station (Broadway Lane south): Moderate adverse (significant) effects.

## 15.8.4. SECTION 1 LOVEDEAN (CONVERTER STATION AREA): OPERATIONAL STAGE

### Landscape Character - Summary of Operational Stage Effects

#### Landscape Character Areas/Types and SDNP/Setting

##### Year 0 effects

15.8.4.1. In year 0 after construction activities have been completed and the Converter Station has started to operate, effects (all of which would be permanent and long-term) would be localised, the influence of the Converter Station diminishing as the relevant LCA



or LCT exerts an influence and based on the relative size of such areas/types compared to the Converter Station Area. Effects would be as follows:

- SDNP D (D2 Hambledon and Clanfield Downland Mosaic): Indirect moderate-major adverse (significant) effect based on proximity.
- WCC Hambledon Downs 17 (LCTW2): Direct moderate-major adverse (significant) effect, the Converter Station Area falling within this LCT.
- EHDC LCT 3 Downland Mosaic (LCA 3fi): Direct moderate adverse (significant) effect, the Converter Station Area falling within this LCT.

15.8.4.2. There would be an indirect moderate-major to moderate adverse (significant) effect on the setting of the SDNP within 3 km of the Converter Station based on inter visibility and changes within a localised area.

15.8.4.3. Whilst planting would have been implemented, vegetation has yet to mature.

#### Year 10 effects

15.8.4.4. Based on 10 years, planting (a mix of scrub and trees) would have reached a height of 8 m as indicated in Table 13 in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board). Effects would be permanent, long-term and localised:

- SDNP D (D2 Hambledon and Clanfield Downland Mosaic): The sensitivity of SDNP D2 would be high whilst the magnitude of change would be medium to small. This is on the basis that whilst hedgerows “recently” planted or gapped up would have matured, new woodland planting edging the Converter Station Area would take longer to mature and reduce inter visibility particularly on the edge of the SDNP. The LVIA considers that the effect would reduce to indirect moderate-major/minor-moderate adverse (significant) based on proximity.
- WCC Hambledon Downs 17 (LCTW2): The sensitivity of WCC LCT 17 W2 is medium and the magnitude of change medium based on planting starting to mature generating a direct moderate adverse (significant) effect.
- EHDC LCT 3 Downland Mosaic (LCA 3fi): The sensitivity of the LCT would remain as medium (LCA 3Fi) whilst the magnitude of change would alter to small. This is on the assumption that the Access Road’s surface would blend in with surrounding calcareous grassland, the hedgerow would have matured and some of the hedgerow trees would start to become noticeable features. On this basis the LVIA considers that the effect would reduce to direct minor adverse (not significant).

15.8.4.5. The sensitivity of the SDNP setting within a 3 km radius of the Converter Station is medium and the magnitude of change is medium based on planting starting to mature there would be an indirect moderate adverse (significant) effect.

#### Year 20 effects

15.8.4.6. By year 20 effects (all of which would be permanent, long-term and localised) would be as follows:

- SDNP D (D2 Hambledon and Clanfield Downland Mosaic): The sensitivity of SDNP D2 would be high whilst the magnitude of change would be small. This is on the basis that both hedgerows and woodland planting edging the Converter Station Area reaching maturity and inter visibility particularly on the edge of the SDNP reduced. The LVIA considers that the effect be indirect minor-moderate (significant) effect.
- WCC Hambledon Downs 17 (LCTW2): The sensitivity of WCC LCT 17 W2 is medium and the magnitude of change small based planting reaching maturity generating a direct minor adverse (not significant) effect.
- EHDC LCT 3 Downland Mosaic (LCA 3fi): The sensitivity of the LCT would remain as medium (LCA 3Fi) whilst the magnitude of change would remain as small. On this basis the LVIA considers that the effect would remain as direct minor adverse (not significant) effect.

15.8.4.7. The sensitivity of the SDNP setting within a 3 km radius of the Converter Station is medium and the magnitude of change is small as planting reaches maturity generating an indirect minor adverse (not significant) effect.

### Specific Landscape Features

#### Year 0 effects

15.8.4.8. In year 0 after construction activities, and on commencement of the proposed development, there would continue to be noticeable changes in the landform of the Converter Station and the loss of vegetation would still be apparent following the implementation of mitigation measures. Locally this would result in the following effects, all of which are permanent and localised:

- Landform: Direct moderate adverse long-term (significant) effect.
- Planting (existing and mitigation planting):
  - Option B(i) Direct moderate-major adverse long-term (significant) effect.
  - Option B(ii) Direct moderate adverse medium-term (significant) effect.

15.8.4.9. In terms of infrastructure, the Access Road both west and east of Broadway Lane would remain a noticeable feature giving rise to a moderate adverse permanent medium-term (significant) effect.

15.8.4.10. The effects on local landscape features set out above form part of the effects on local landscape character, specifically to WCC Hambledon Downs 17 (LCTW2) and EHDC LCT 3 Downland Mosaic (LCA 3fi).

#### Year 10 effects

- 15.8.4.11. Landform: By year 10, planting would have softened the profile of the platform, therefore, whilst the sensitivity would remain as medium, the magnitude of effect would reduce to small resulting in a direct minor-moderate adverse direct permanent long-term localised (not significant) effect
- 15.8.4.12. Planting (existing and mitigation planting): By year 10, planting (a combination of trees and scrub) would have reached a height of 8 m (maximum depending on species) as indicated in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board). Hedgerows which have been planted or gapped up would have matured and be maintained to either a height of 2 m or an existing height of between 2 to 4 m. Planting would provide a partial screening function from certain directions, improve connectivity and enhance landscape character.
- 15.8.4.13. The LVIA considers that the sensitivity of vegetation is medium and the magnitude of change following mitigation would be small resulting in a direct minor beneficial permanent long-term (not significant) effect.
- 15.8.4.14. Infrastructure: By year 10 the surfacing and planting would have softened the Access Road both west and east of Broadway Lane and the entranceway. Whilst the sensitivity would remain as medium, the magnitude of effect would reduce to small resulting in a direct minor adverse permanent long-term localised (not significant) effect.
- 15.8.4.15. The effects on local landscape features set out above form part of the effects on local landscape character, specifically to WCC Hambledon Downs 17 (LCTW2) and EHDC LCT 3 Downland Mosaic (LCA 3fi).
- Year 20 effects**
- 15.8.4.16. Landform: By year 20, planting would have continued to soften the profile of the platform, therefore whilst the sensitivity would remain as medium, the magnitude of effect would range from small to negligible resulting in a direct minor-moderate to negligible adverse permanent long-term localised (not significant) effect.
- 15.8.4.17. Planting (existing and mitigation planting): By year 20 planting (a combination of trees and scrub) would have reached a height of up to 13 m (maximum depending on species) as indicated in Table 13, Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board). Existing and mitigation planted hedgerows would continue to be maintained at the above heights. Planting would provide a partial to full screening function from certain directions, improve connectivity and enhance landscape character. Some planting would be allowed to regenerate increasing the extent of woodland whilst respecting the site's constraints in terms of overhead and underground cables.
- 15.8.4.18. The LVIA considers that the sensitivity of vegetation is medium and the magnitude of change following mitigation and after 20 years of planting growth would be medium to small resulting in a direct moderate to minor beneficial (significant) permanent long-term effect.

15.8.4.19. Infrastructure: By year 20 effects on infrastructure would remain unchanged as direct minor adverse permanent long-term localised (not significant) effect.

15.8.4.20. The effects on local landscape features set out above form part of the effects on local landscape character, specifically to WCC Hambledon Downs 17 (LCTW2) and EHDC LCT 3 Downland Mosaic (LCA 3fi), summarised in paragraphs 15.8.4.4 and described in full in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board).

### **Visual Amenity - Summary of Operational Stage Effects**

15.8.4.21. The following receptors would experience significant effects during the operational period. All effects are direct, permanent and long-term, although many effects would reduce in significance as mitigation planting matures.

#### **Residential**

##### **Receptors between 3 to 8 km, including settlements**

15.8.4.22. There would be no significant effects on residential receptors beyond 3 km from the Converter Station.

##### **Receptors between 1.2 to 3 km, including settlements**

15.8.4.23. All residential receptors between 1.2 and 3 km from the Converter Station Area would experience a change of between small and negligible magnitude, resulting in direct minor-moderate to negligible adverse (not significant) effects.

##### **Individual receptors within 1.2 km**

15.8.4.24. In year 0, following the completion of construction activities, the following effects (all of which would be direct, permanent and long-term) would be experienced by receptors within the 1.2 km study area:

- North of the Converter Station (Nos. 1, 2, 3, 4, 5 and 6): Nos. 1 and 2 would be subject to major adverse effects (significant), Nos. 3 and 5 would experience a minor-moderate adverse effect (here considered significant because of proximity). Nos. 4 and 6 would experience a moderate-major to minor-moderate adverse (significant) effect because of their proximity to the Converter Station Area.
- Northeast of the Converter Station (Nos. 19, 20, 21 and 22): No. 21 would be subject to a moderate-major significant effect particularly from upper storey windows. Nos. 19 and 20 would be subject to a minor-moderate adverse effect (not significant) and No. 22 a negligible effect.
- East of the Converter Station (Nos. 17, 18, 27 and 28): The worst affected properties at Nos. 17 and 18 would be subject to moderate-major adverse (significant) effects due to their proximity to the Converter Station Area. The

others would be subject to minor-moderate adverse (not significant) or negligible effect.

- Southeast of the Converter Station (Nos. 14, 15, 16, 23, 24, 25 and 26). Parts of Nos. 14, 15 and 23 would be subject to a moderate-major (significant) adverse effect. The others would be subject to minor-moderate adverse (not significant) to negligible effect.
- South of the Converter Station (Nos. 10, 11, 12 and 13): The worst affected receptor (No.12) would be subject to a major adverse significant effect. There would be a moderate-major adverse (significant) effect for No.10 and a minor-moderate adverse (significant) effect due to proximity for Nos.11 and 13.
- Southwest of the Converter Station (Nos. 7, 8, 9 and 29): No. 9 would be subject to a moderate-major to major (significant) adverse effect, whilst Nos. 7, 8 and 29 would be subject to a minor-moderate adverse effect (not significant).
- West of the Converter Station (Nos. 30, 31, 32 and 33): The worst affected receptor would be subject to a minor-moderate adverse (not significant) effect.

#### 15.8.4.25.

By year 10, mitigation planting (a mix of woodland and scrub) is anticipated to reach a height of up to 8 m, partially screening many views of the Converter Station buildings and, for most receptors reducing the effect. The following effects are anticipated:

- North west of the Converter Station (Nos. 1, 2, 3, 4, 5 and 6): No. 1 would remain subject to a significant effect (moderate-major adverse) whilst the others (apart from No. 2) would become non-significant (minor-moderate adverse for Nos. 4 and 6, negligible for Nos. 3 and 5). For No.2 new planting wrapping around the property would result in a change to the depth and composition of view contrasting with the filtered panoramic view across to Portsdown Hill which previously existed, albeit slight marred in the foreground by the existing Lovedean Substation and overhead lines. The magnitude of change would be medium and the resultant effect moderate-major neutral (significant due to the proximity of receptors to the Converter Station Area).
- North east of the Converter Station (Nos. 19, 20, 21 and 22): Mitigation planting for Lovedean Substation extension should contribute a visual screening function but as this is dependent on its maturity this assessment concludes that the effects would remain unchanged over time.
- East of the Converter Station (Nos. 17, 18, 27 and 28): Mitigation planting to the west and north of properties would filter direct views especially in summer months. Planting around No. 18 would alter the depth and composition of the view contrasting with the open views across fields to Stoneacre and Crabdens Copse. For No. 18 the resultant magnitude of change would be medium generating a moderate-major neutral (significant) effect. For No. 17 effects would fall to minor-

moderate adverse (remaining significant because of its proximity to the Converter Station Area). Others would remain not significant.

- South east of the Converter Station (Nos. 14, 15, 16, 23, 24, 25 and 26): Based on a worst-case scenario effects would have fallen to minor-moderate adverse (not significant due to these properties being slightly set back from the Converter Station Area).
- South of the Converter Station (Nos. 10, 11, 12 and 13): As a consequence of new planting situated to the north of properties there would be a direct change to the depth and composition of view for No. 12 resulting in a medium magnitude of change and a moderate-major neutral (remaining significant) effect. For Nos. 10, 11 and 13 effects would be minor-moderate (significant due to their proximity to the Converter Station).
- Southwest of the Converter Station (Nos. 7, 8, 9 and 29): The effects on Nos. 7, 8, 9 and 29 would remain unchanged after 10 years and continue to be moderate-major (significant) adverse for No. 9 and minor-moderate adverse (not significant) for Nos. 7, 8 and 29.
- West of the Converter Station (Nos. 30, 31, 32 and 33): The effect would remain unchanged and not significant.

#### 15.8.4.26.

By year 20 the tallest species in the mitigation planting are anticipated to reach a height of up to 13 m and further screening views of the buildings. The following effects are anticipated:

- North west of the Converter Station (Nos. 1, 2, 3, 4, 5 and 6): No 1 would be subject to a minor-moderate adverse effect (but still considered significant because of proximity). No. 2 would remain as a moderate-major neutral (significant) effect whilst the others would remain not significant.
- North east of the Converter Station (Nos. 19, 20, 21 and 22): As noted above, the effects would remain unchanged over time.
- East of the Converter Station (Nos. 17, 18, 27 and 28): Effects would continue to be a moderate-major neutral (significant) for No. 18, minor-moderate adverse (not significant as a consequence of planting maturing) for No. 17 and for other receptors effects would remain unchanged.
- South east of the Converter Station (No 14, 15, 16, 23, 24, 25 and 26): The worst-case effects, from parts of Nos. 14, 15 and 23 would remain unchanged and minor-moderate (not significant) adverse. The others would remain not significant.
- South of the Converter Station (No 10, 11, 12 and 13): The effect on No.12 would remain unchanged as moderate-major neutral (significant) whilst for Nos. 10, 11 and 13 the effect would be minor-moderate adverse (not significant as planting reaches maturity).



- South west of the Converter Station (Nos. 7, 8, 9 and 29): The effect on No. 9 would fall to minor-moderate adverse but still considered significant because of proximity. On Nos. 7, 8 and 29 effects would remain unchanged as minor-moderate adverse (not significant).
- West of the Converter Station (No 30, 31, 32 and 33): The effect would remain unchanged and not significant.

## Recreational

### Receptors between 3 and 8 km

- 15.8.4.27. There would be no significant effects on recreational receptors between 3 and 8 km from the Converter Station Area.

### Receptors within 3 km

- 15.8.4.28. Monarch's Way (DC21/HC06): At year 0 receptors would be subject to a moderate-major (significant) adverse effect. After 10 years the developing mitigation planting would reduce this to moderate (significant) adverse and by year 20 to minor-moderate adverse (not significant).
- 15.8.4.29. PRoW Hambledon 25a/b and Footpath HC41 (H25a/b/H41): At year 0 there would be moderate localised (significant) effects which would remain unchanged over time through overall receptors along the route would experience minor adverse (not significant) effects.
- 15.8.4.30. PRoW Denmead Footpath 13/Bridleway 41 (D13/D41): At year 0 there would be moderate localised (significant) effects which would remain unchanged over time though overall receptors along the route as a whole would experience minor adverse (not significant) effects. By year 20 mitigation planting would have nearly reached maturity and reduced the effect to minor to moderate (not significant) adverse.
- 15.8.4.31. PRoW DC16/HC04: In year 0 there would be a minor to moderate adverse effect, considered (significant) because of proximity. By year 10 mitigation planting would screen immediate views reducing the effect to minor adverse (not significant). After 20 years mitigation planting would have nearly reached mature height, reducing the effect to negligible.
- 15.8.4.32. PRoW HC28/DC19): In year 0 there would be a moderate adverse effect (significant). By year 10 mitigation planting would serve a limited screening function, reducing the effect to minor to moderate adverse but remaining (significant). After 20 years mitigation planting would have nearly reached mature height, reducing the effect to minor to negligible adverse (not significant).
- 15.8.4.33. PRoW Denmead Footpath 17 (DC17) and PRoW Denmead Footpath 20/Sawyer's Hill (DC20): Overall for both routes as a whole in year 0 there would be a minor adverse (not significant) effects but within specific locations there would be moderate significant localised effects. By year 10 such localised effects would remain unchanged but by year 20 diminish to minor (not significant) adverse to negligible.

- 15.8.4.34. Cyclists along Day Lane/Broadway Lane using the Horndean Technology College route: Moderate adverse (significant) effect. By year 10 such localised effects would reduce to minor adverse (not significant) and remain unchanged in year 20.

### Transport

#### Receptors between 3 to 8 km

- 15.8.4.35. There would be no significant effects on transport receptors between 3 and 8 km from the Converter Station Area.

#### Receptors within 3 km

- 15.8.4.36. There would be localised significant moderate effects for users of Broadway Lane (east) where the new Access Road and entranceway into the Converter Station Area is formed, and for users of Broadway Lane (south)/Crossways Road (U200) to the south of the Converter Station Area where there are views through gaps in the roadside hedges, crossing points for the cable route and where hedgerows have been grubbed out.

- 15.8.4.37. Over time mitigation planting, including new woodland and hedges at the entranceway and along Broadway Lane (south) would reduce the effects and by year 20 there would be no significant effects.

## 15.8.5. SECTION 1 LOVEDEAN (CONVERTER STATION AREA): DECOMMISSIONING STAGE

### Landscape Character - Summary of Decommissioning Stage Effects

#### Landscape Character Areas/Types and SDNP/Setting

- 15.8.5.1. There would be significant effects associated with decommissioning activities on WCC 17 Hambledon Downs (LCT 17 W2), impacting on the edge of the SDNP D Downland Mosaic (D2) and its setting. In addition, there would be significant effects on EHDC LCT 3 Downland Mosaic (LCA 3fi) covering the eastern side of the Converter Station including the Access Road, entranceway, Laydown Area and Works Compound. The nature of the effects described above is outlined below.

- 15.8.5.2. Effects (all of which would be “temporary, short-term and localised”) would be as follows:

- SDNP D (D2 Hambledon and Clanfield Downland Mosaic): Indirect minor-moderate adverse (significant) effect.
- WCC Hambledon Downs 17 (LCTW2): Direct, moderate adverse (significant) effect.
- EHDC LCT 3 Downland Mosaic (LCA 3f): Direct, moderate adverse (significant) effect.

- 15.8.5.3. There would be an indirect minor-moderate adverse (significant) effect on the setting of the SDNP within 3 km of the Converter Station based on inter visibility and changes

within a localised area.

### **Specific Local Landscape Features**

- 15.8.5.4. Decommissioning would give rise to the following changes in the landform, landuse and may lead to the loss of mitigation planting. Locally this would result in the following effects:
- Landform: Direct moderate neutral permanent long-term localised (significant) effect on the basis that mitigation planting around the Converter Station would inhibit the extent of reprofiling works which could be undertaken.
  - Landuse: Moderate to minor-moderate adverse direct short-term temporary significant effect.
  - Planting (existing and mitigation planting): Moderate adverse direct permanent medium-term localised (significant) effect.
- 15.8.5.5. In terms of infrastructure the Access Road would be utilised to transport demolition traffic, after which it would be removed and entranceway/exit points off Broadway/Day Lane would be planted up with hedgerow planting where practicable. There would be direct moderate adverse temporary short-term (significant) effect on infrastructure.
- 15.8.5.6. Noise and activity arising from decommissioning traffic would affect tranquillity locally. There would be an indirect moderate temporary short-term localised (significant) effect on tranquillity.
- 15.8.5.7. The effects on local landscape features set out above form part of the effects on local landscape character, specifically to WCC Hambledon Downs 17 (LCTW2) and EHDC LCT 3 Downland Mosaic (LCA 3f), summarised in paragraphs 15.8.5.2 and described in full in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board).

### **Visual Amenity - Summary of effects for decommissioning**

- 15.8.5.8. During decommissioning significant visual effects would be limited to the following receptors:
- Residential receptors**
- 15.8.5.9. For No. 21, residents would experience a minor-moderate (significant) adverse effect though temporary and short-term whilst for residents of Nos. 2, 12 and 18 effects would remain unchanged and continue to be (significant) neutral. Such effects would be major-moderate neutral for Nos 2 and 12 and minor-moderate neutral for No 18. Neutral effects have arisen due to a change in view as a consequence of the mitigation planting which may be considered either beneficial or adverse depending on the individual's appreciation of the view. For No.17 the magnitude of change would be small resulting in a minor-moderate adverse (significant) effect due to the proximity of properties to the Converter Station Area.

**Recreational receptors:**

15.8.5.10. Users of the Monarch's Way would experience minor-moderate (significant) adverse effects although temporary and short-term. Cyclists utilising the Horndean Technology College route would experience a moderate adverse (significant) localised effect.

**Transport**

15.8.5.11. Receptors within 3 km: There would be localised moderate (significant) effects for users of Broadway Lane (west) and Day Lane where the new Access Road and entranceway into the Converter Station Area is formed.

**15.8.6. ONSHORE CABLE CORRIDOR**

15.8.6.1. As outlined in Section 15.3.6 the assessment of the Onshore Cable Corridor focused on impacts and consequential effects during construction only. Following construction and reinstatement it is anticipated that there would be no effects during the operation of the Onshore Cable. All effects during construction on visual receptors are temporary and short term. For the sake of legibility this is not repeated in the following assessments. Where relevant assumptions relating to trees and hedgerows are made, these should be cross referenced with Appendix 16.3 (Arboriculture Report).

**15.8.7. SECTION 2 – ANMORE**

**Specific Embedded Mitigation**

15.8.7.1. General measures relating to the Onshore Cable Corridor outlined above in paragraph 15.7.1 would apply to Section 2 – Anmore in addition to those described below:

- Native hedgerows would be replaced with like for like species.

**Assumptions**

15.8.7.2. The following assumptions were made in relation to this Section:

- No mature trees would be affected by the cable routing. Trees are an important feature visually within this section.
- The impact on the deciduous copse to the field east of Saltbox Barn/Cottages would be avoided with a 15 m standoff.
- Sections of hedgerows and hedgerow trees where lost would be replaced where practicable, with hedgerow trees repositioned at least 5 m away from the Onshore Cable Route.
- The preferred cable route would avoid impacting on the oak tree subject to a TPO (T393) (TPO - 2246 T1) to north of Anmore Road and a mature Category A oak tree (T409).

### **Summary of significant effects**

#### **Landscape Character, Landscape features and Visual Amenity**

15.8.7.3. It is considered that there would be no significant effects on landscape character, landscape features and visual receptors.

### **15.8.8. SECTION 3 – DENMEAD/KINGS POND MEADOW**

#### **Specific Embedded Mitigation**

15.8.8.1. Measures relating to the Onshore Cable Corridor outlined above in paragraph 15.7.1 would apply to Section 3, in addition to those described below:

- Native hedgerows and hedgerow trees lost would be replaced with like for like species where practicable.

#### **Assumptions**

15.8.8.2. The following assumptions were made in relation to this Section:

- Through detailed design (a combination of Onshore Cable Micrositing, Trenching and HDD) measures would be taken to limit the impact on mature Category A/B trees (predominately oak trees) where practicable.
- Sections of hedgerows and hedgerow trees where lost would be replaced with where practicable, with hedgerow trees repositioned at least 5 m away from the Onshore Cable Route.
- Cable works would run close to the edge of (G661, T300, T302 and T306) (TPO - 1350 G1) and (T299 and H799) (TPO - 1350 G6) would be reviewed at detailed design to minimise impacts considering Onshore Micro Siting

### **Summary of significant effects**

#### **Landscape Character**

15.8.8.3. There would be a moderate adverse, direct temporary medium-term localised (significant) effect on WCC LCA18 W3 on the basis that there would be moderate changes in a localised area. Whilst the character area is small in extent, the majority

is designated as a local gap.

### **Landscape Features**

- 15.8.8.4. There would be direct and indirect, temporary short to medium term localised moderate (significant) effects due to impact on the local landscape gap, lowland meadows and mature trees including mature trees some of which are subject to TPOs and may be lost.

## **15.8.9. SECTION 4 HAMBLEDON ROAD TO FARLINGTON AVENUE**

### **Specific Embedded Mitigation**

- 15.8.9.1. General measures relating to the Onshore Cable Corridor outlined above in paragraph 15.7.1 would apply to Section 4, in addition to those described below:
- Mitigation trees to replace trees lost at the junction of Hambledon Road and Darnel Road where practicable.
  - Mitigation tree and shrubs to replace planting lost to the north of Hambledon Road and south of Milton Road where practicable.
  - Native hedgerows and hedgerow trees lost would be replaced with like for like species where practicable.

### **Assumptions**

- 15.8.9.2. The following assumptions were made in relation to this Section:
- Works should be avoided in the footway or verge where there are mature trees (Category A/B) and where practicable.
  - Through detailed design (a mix of Trenching and Onshore Cable Micrositing (a mix of trenchless and trenching ) measures would be taken to limit the impact on mature trees where practicable.
  - Works would take place within Portsdown Country Park car park on top of Portsdown Hill.
  - Mitigation trees to replace trees lost opposite the junction of Hambledon Road and Darnel Road, and to the north of Hambledon Road and south of Milton Road would be repositioned at least 5 m away from the Onshore Cable Route.
  - Cable works would run close to the edge of a number of trees subject to TPO's. Opportunities should be reviewed at detailed design to minimise impacts, considering Onshore Cable Micrositing where practicable.

### **Summary of significant effects**

### **Landscape Features**

- 15.8.9.3. There would be direct/indirect moderate adverse, temporary short to medium term localised (significant) effect on landscape features namely specific walking routes, PRow's, mature trees, trees subject to TPO's and locally designated open spaces.



## 15.8.10. SECTION 5 FARLINGTON

### Specific Embedded Mitigation

15.8.10.1. General measures relating to the Onshore Cable Corridor outlined above in paragraph 15.7.1 would apply to Section 5, in addition to those described below:

- The land owned by Portsmouth Water between Eveleigh and Havant Road would be reinstated with compatible grass mix and any street furniture damaged, replaced.
- Native hedgerows, hedgerow trees and ornamental trees lost would be replaced with like for like species where practicable.

### Assumptions

15.8.10.2. The following assumptions were made in relation to this Section:

- Detailed design measures including Onshore Cable Micrositing would be taken to limit the impact on mature ornamental street and garden trees where practicable. These include Category A to C trees which form an important visual feature in this section.
- Cable works would run close to the edge of a partially pollarded poplar and hedgerow (H888 and T925) (TPO – 201). Opportunities would be reviewed at detailed design to minimise impacts considering Onshore Cable Micrositing where practicable.
- Tree group G911 (category C trees) would be lost as a consequence of the cable route running through land forming part of Portsmouth Water's land to the south of Eveleigh Road.
- Sections of hedgerows where lost would be replaced with like for like species.
- Trees would be repositioned at least 5 m away from the Onshore Cable Route where practicable.

### Summary of significant effects

#### **Landscape Features**

15.8.10.3. There would be direct/indirect moderate adverse, temporary short to medium term localised (significant) effect on landscape features namely mature ornamental trees, trees subject to TPO's and tranquillity levels.

## 15.8.11. SECTION 6 ZETLAND FIELD AND SAINSBURY'S CAR PARK

### Specific Embedded Mitigation

15.8.11.1. General measures relating to the Onshore Cable Corridor outlined above in paragraphs 15.7.1 would apply to Section 6, in addition to those described below:

- Replacement tree and shrub planting to the south and north west of Zetland Field with like for like species where practicable.

### **Assumptions**

15.8.11.2. The following assumptions were made in relation to this Section:

- The Onshore Cable Corridor would result in the loss or partial loss of Category B tree groups or trees (G660, G910 and T73) and a Category C tree T74 within Zetland Field. Where practicable trees and shrubs would be replaced with like for like species, trees repositioned at least 5 m away from the Onshore Cable Route.
- Through detailed design measures would be taken where practicable (considering Onshore Cable Micrositing) to limit the impact on remaining mature ornamental street trees (a combination of London Plane, sycamore, ash, lime, willow, hornbeam and poplar) within Zetland Field. The trees are important in terms of visual amenity and screening as well as generating a strong sense of enclosure for immediate residents overlooking the Field. Visually there is a strong connection between the Field and Fort Purbrook on higher ground.
- Through detailed design measures would be taken where practicable (considering Onshore Cable Micrositing) to limit the impact on infrastructure planting including trees and shrub planting between the eastern edge of Eastern Road, the petrol filling station and retail car park.
- Due to the Trenchless Techniques proposed there would be limited impact on tree and scrub planting on land along the southern edge of the retail park and forming the northern edge of the railway line.

### **Summary of significant effects**

#### **Landscape Features**

15.8.11.3. There would be a direct moderate adverse temporary medium term localised (significant) effect on landscape features namely mature ornamental trees particularly within Zetland Field refer to Arboriculture Report.

## **15.8.12. SECTION 7 – FARLINGTON JUNCTION TO AIRPORT SERVICE ROAD**

### **Specific Embedded Mitigation**

15.8.12.1. General measures relating to the Onshore Cable Corridor outlined above in paragraph 15.7.1 would apply to Section 7 in addition to those described below:

- Replacement trees and shrubs on either side of access track from Eastern Road, past Shell Garage to Farlington Playing Fields if required.
- Replacement tree and shrub planting on either side of the access road to Kendall's Wharf and Andrew Simpson Watersports Centre as well as along the western edge of Kendall's Stadium.

- Reinstatement of open space with compatible grass mix and any street furniture damaged, replaced.
- All works which may affect the public realm coastal defences (considered in cumulative effects) would be reinstated to the same quality and finish as the future baseline.

### **Assumptions**

15.8.12.2. The following assumptions were made in relation to this Section:

- Due to Trenchless Techniques proposed there would be limited impact on tree and scrub planting along the southern edge of the railway line.
- The Onshore Cable Corridor would run through Farlington playing fields west of the hotel. It is assumed that the access track to the cricket pavilion and hotel car park is sufficient to withstand heavy vehicular loading and therefore not impact on adjacent Category B tree groups (G680, G783, G706, G671 and G582). The trees form strong landscape features and include individual trees within Farlington playing fields, mature avenue trees running to the pavilion, within the car park and around the northern and western edge of the hotel. If any trees are likely to be affected by construction work traffic, they should be pruned back, monitored and replaced where practicable with like for like species subject to agreement with PCC. Replacement trees should be repositioned at least 5 m away from the Onshore Cable Route.
- Trees and shrub planting (Category B G695, G711 and T70) running to the west of the Baffins Milton Rovers Football Ground (Kendall Stadium) would be lost by the cable routing. Planting around Baffins Milton Rovers Football Ground (Kendall Stadium) is a key landscape feature which serves an important contribution to visual amenity and screening. Limited opportunity would be available to introduce replacement tree planting beyond 5 m of the cable route on the western side of the Stadium. The Order Limits includes an access road to the east of the Baffins Milton Rovers Football Ground (Kendall Stadium) which runs to Andrew Simpson Watersports Centre passed Kendall's Wharf (a mineral aggregate wharf). Whilst the Onshore Cable Corridor would impact on Category C trees and shrubs (a mix of poplar, willow, lime, pine and sycamore - G663, W885, W886, G908 and G909) these trees and shrubs serve a limited visual amenity function.

### **Summary of significant effects**

#### **Landscape Features**

15.8.12.3. There would be a moderate adverse, direct temporary short to medium term localised significant effect on landscape features namely PRow, open space and associated trees.

## **15.8.13. SECTION 8 – EASTERN ROAD (ADJACENT TO GREAT SALTERNS GOLF**

## COURSE) TO MOORINGS WAY

### Specific Embedded Mitigation

15.8.13.1. General measures relating to the Onshore Cable Corridor outlined above in paragraphs 15.7.1 would apply to Section 8, in addition to those described below:

- Reinstatement of open space with compatible grass mix and any street furniture damaged, replaced.
- All works which may affect the public realm coastal defences (considered under cumulative impacts) would be reinstated to the same quality and finish as the future baseline.

### Assumptions

15.8.13.2. The following assumptions were made in relation to this Section:

- Where there are mature trees in the footway or verge and where practicable consideration should be given to whether works in those locations can be avoided.
- Through detailed design, measures including Onshore Cable Micrositing where practicable, would be taken to limit the impact on mature Category B trees.
- Through detailed design, measures including Onshore Cable Micrositing where practicable, would be taken to avoid impacting on trees within Milton Common. Some scrub may be lost as a consequence.
- Replacement of planting if lost would be planted at least 5 m away from the Onshore Cable Route.

### Summary of significant effects

#### Landscape character

15.8.13.3. There would be direct and indirect moderate adverse temporary short-term moderate adverse localised (significant) effect on PCC UCA17.

#### Landscape Features

15.8.13.4. Similarly, there would be direct/indirect moderate adverse temporary short to medium term localised (significant) effects associated with open space, vegetation and indirectly on the sense of openness.

## 15.8.14. SECTION 9 - MOORINGS WAY TO BRANSBURY ROAD

### Specific Embedded Mitigation

15.8.14.1. Measures relating to the Onshore Cable Corridor outlined above in paragraph 15.7.1 would apply to Section 9, in addition to those described below:

- Reinstatement of open space with compatible grass mix in addition to trees/shrubs and any street furniture damaged, replaced.

- An allowance of 15 m has been made to the west of the Furze Lane for mitigation planting if required.

### **Assumptions**

15.8.14.2. The following assumptions were made in relation to this Section:

- Where there are mature trees in the footway or verge and where practicable consideration should be given to whether works in those locations can be avoided.
- Poplars to the east and west of Furze Lane and south of University of Portsmouth Langstone Campus (along Locksway Road) may be impacted upon as a consequence of the Onshore Cable Corridor based on the Arboriculture Report (these are predominately Category B trees). The trees which are subject to TPO's (TPO 1 to 24) form an important visual screen, amenity and legibility function. Opportunities should be explored to replace the trees with other fastigate species on the eastern edge of sports grounds associated with the University in discussion with University and PCC. An allowance of 15 m has been made to the west of the lane for mitigation planting, if required.
- Some Category B trees and shrubs (G900) within and edging Milton Lock Nature Reserve would be lost as a consequence of the Onshore Cable Corridor. The planting forms a screening function between the Nature Reserve and the adjacent pub car park.
- Whilst the Onshore Cable Route would be HDD across Milton and Eastney Allotments, there would be the loss of Category C trees to the south (T916, T917 and G899). From a visual amenity perspective these serve a limited screening function and are not considered to be key landscape features.
- Through detailed design, measures including Onshore Cable Micrositing would be used to limit the impact on Category A, B and C avenue trees running north/south within Bransbury Park and ornamental street trees to the south and western boundary of the Park. Trees include ash, birch, copper beech and London Plane. These trees serve an important function in terms of visual amenity albeit some are suffering from ash die back. Opportunities should be explored through detailed design to focus construction works towards the northern edge of Bransbury Road rather than through the north/south avenue within the Park as well as explore opportunities to remove diseased trees and replace with other ornamental species in agreement with PCC.

### **Summary of significant effects**

#### **Landscape character**

15.8.14.3. There would be a direct moderate adverse temporary short-term moderate adverse localised (significant) effect on PCC UCA17.

#### **Landscape Features**

15.8.14.4. Similarly, there would be a direct/indirect moderate adverse temporary short to medium term localised (significant) effects associated with open space, vegetation including mature and trees subject to TPO's and tranquillity.

## 15.8.15. SECTION 10 - EASTNEY (LANDFALL)

### Construction Stage: Specific Embedded Mitigation

15.8.15.1. As outlined in Sections 1-9 the Construction Stage environmental impacts of the Onshore Cable Corridor would be managed through the implementation of the Onshore Outline CEMP. General embedded mitigation measures outlined previously for the Onshore Cable Corridor would apply to Section 10 both in terms of the Onshore Cable Corridor and the Landfall in addition to those described below:

- Introduction of temporary solid construction hoards around the landfall construction to minimise impacts on noise and therefore tranquillity as well as impacts on immediate sensitive visual receptors.
- The indicative landscape mitigation plan (Figure 15.50 and Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board)) illustrates the planting around the edge the ORS buildings to screen the compound and structures. These planting proposals include a native hedgerow and hedgerow tree planting which has been discussed with PCC. Planting would provide some screening function for receptors from the Southsea Leisure Park and residential properties overlooking the buildings from the north.
- Reinstatement of the existing gravel surface within Fort Cumberland car park and any street furniture (in the form of trip rails) replaced if removed or damaged.

### Assumptions

15.8.15.2. The following assumptions were made in relation to this Section:

- Works should be avoided in the footway or verge where there are mature trees (Category B) and where practicable.
- Through detailed design (a mix of Trenching and Onshore Cable Micrositing) measures would be taken to limit the impact on mature Category B trees along Henderson Road/Fort Cumberland Road where practicable. Trees include ash and cherry, and many are subject to TPOs. As referred to in the Arboriculture Report the northern (east boundary) side of Henderson Road and Fort Cumberland Road would be the preferred choice for arboriculture and landscape to avoid impact on existing trees in this section.
- Works would be avoided in the footway or verge where there are mature trees and where practicable.



- It is assumed that the Category C mature ash (T6) within to the northern edge of Fort Cumberland car park at Eastney would be retained as this is an important landscape feature.

### **Landscape Character - Summary of Significant Effects during Construction,**

#### **Landscape features**

- 15.8.15.3. During construction there would be direct and indirect, temporary short-term localised moderate (significant) effects on the NCR2 and footpath intersecting with Fort Cumberland Road as well as tranquillity and the sense of openness.

### **Visual summary - Summary of Significant Effects during Construction**

- 15.8.15.4. Residential and recreational receptors: Direct temporary short-term moderate-major adverse localised (significant) effect.
- 15.8.15.5. Transport users: Direct moderate temporary, short-term moderate adverse localised (significant) effect.

### **Operational Stage: Embedded Mitigation**

- 15.8.15.6. The ORS buildings would be unmanned and unlit unless in the case of an emergency.
- 15.8.15.7. As referred to in the Outline Landscape and Biodiversity Strategy maintenance and management of the hedgerow and hedgerow trees would be over the operational period of the Proposed Development. Mitigation measures in the context of this section are considered based on year 0, year 10 and year 20.

### **Landscape Character - Summary of Significant Effects during Operation**

#### **Landscape features**

- 15.8.15.8. Whilst there would be no significant effects on landscape character there would be an indirect permanent medium-term moderate adverse localised (significant) effects on landscape features (namely the sense of openness) following mitigation planting, completion of construction works and commencement of operations. The ORS buildings would be prominent in an otherwise open landscape.
- 15.8.15.9. By year 10 effects on the sense of openness would remain unchanged as moderate adverse and this would also be the same in year 20.

### **Visual summary - Summary of Significant Effects during Operation**

- 15.8.15.10. Due to the proximity there would be moderate-major to minor-moderate adverse permanent medium-term localised (significant) effects for immediate residents and recreational users adjacent to the Landfall.
- 15.8.15.11. There would be no significant effects on remaining residential, recreational and transport receptors during the operation of the development and effects on residential receptors would diminish further as planting matures reducing to minor-moderate adverse (not significant) to negligible by year 10.

### **Decommissioning Stage: Embedded Mitigation**

15.8.15.12. No embedded mitigation is proposed.

### **Assumptions**

15.8.15.13. Decommissioning would require the removal of the ORS buildings and surrounding compound. It is assumed that planting along the edge of Fort Cumberland would be retained in the form of a hedgerow and hedgerow trees, but the remainder of the compound and planting would be removed to accommodate further car parking spaces. It is assumed that the underground cables within Section 10, like the remainder of the route would remain underground.

### **Landscape Character - Summary of Significant Effects during Decommissioning**

#### **Landscape features**

15.8.15.14. Decommissioning would result in a direct/indirect temporary short-term localised moderate effect which would be significant on tranquillity and based on the assumption no planting would be removed.

#### **Visual summary - Summary of Significant Effects during Decommissioning**

15.8.15.15. Residential and recreational receptors: Direct temporary short-term moderate-major adverse localised (significant) effect.

15.8.15.16. Transport users: Direct moderate temporary, short-term localised (significant) effect.

### **PROPOSED ADDITIONAL MITIGATION AND ENHANCEMENT MEASURES**

15.8.15.17. No additional mitigation or enhancement measures are proposed other than those undertaken during construction.

15.8.15.18. The detailed design of the Converter Station, ORS buildings and accompanying landscape mitigation would be developed in line with the Design Principles, and subject to DCO consent, approved by the relevant discharging authority in consultation with the SDNPA.

15.8.15.19. Ongoing management measures outlined in the Outline Landscape and Biodiversity Strategy for the Converter Station Area and Landfall would be refined subject to DCO consent and included in a detailed Landscape and Biodiversity Strategy which would also include monitoring measures in the form of targets/indicators.

### **RESIDUAL EFFECTS**

15.8.15.20. The following Tables (Tables 15.10 and 15.11) provides a summary of the findings of the assessment. The residual effects are as stated above in the assessment as no additional mitigation measures are proposed.

**Table 15.10 - Summary of Effects Table for Landscape Character**

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Section 1 – Lovedean (Converter Station Area):</b>				
<b>Construction Stage</b>				
<b>Landscape Character</b>	SNDP D2 Hambledon and Clanfield Downs	Minor - moderate / - / T / I / ST (significant and localised)	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Minor - moderate / - / T / I / ST (significant)
<b>Landscape Character</b>	LCTW2 Hambledon Downs 17	Moderate / - / T / D / ST (localised)	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate / - / T / D / ST
<b>Landscape Character</b>	LCA3fi Downland Mosaic	Moderate / - / T / D / ST (localised)	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate / - / T / D / ST

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Landscape Designation</b>	Setting of the SDNP	Moderate / - / T / I / ST	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate / - / T / I / ST
<b>Local Landscape Features</b>	Landform	Moderate / - / P / D / LT	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate / - / P / D / LT
<b>Local Landscape Features</b>	Land use	Moderate / - / P / D / ST	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate / - / P / D / ST
<b>Local Landscape Features</b>	Planting (Option B(I))	Moderate-major / - / P / D / LT	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate-major / - / P / D / LT

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Local Landscape Features</b>	Planting (Option B(II))	Moderate / - / P / D / LT	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate / - / P / D / LT
<b>Local Landscape Features</b>	Infrastructure	Moderate / - / P / D & I / LT	Adherence to Design Principles, mitigation planting and retention and enhancement of existing planting and Onshore Outline CEMP.	Moderate / - / P / D & I / LT
<b>Local Landscape Features</b>	Tranquillity	Moderate / - / T / I / ST	Implementation of Onshore Outline CEMP.	Moderate / - / T / I / ST
<b>Operational Stage</b>				
<b>Landscape Character</b>	SNDP D2 Hambledon and Clanfield Downs	Moderate-major / - / P / I / LT (localised)	Retention/enhancement of existing planting and maturation of new mitigation planting.	Year 0 Moderate-major / - / P / I / LT Year 10 Moderate-major to minor-moderate / - / P / I / LT

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				(significant) Year 20 Minor-moderate / - / P / I / LT (significant)
<b>Landscape Character</b>	LCTW2 Hambledon Downs 17	Moderate-major / - / P / D / LT (localised)	Retention / enhancement of existing planting and maturation of new mitigation planting.	Year 0 Moderate-major / - / P / D / LT Year 10 Moderate / - / P / D / LT Year 20 Minor / - / P / D / LT (not significant)
<b>Landscape Character</b>	LCA3fi Downland Mosaic	Moderate / - / P / D / LT (localised)	Retention / enhancement of existing planting and maturation of new mitigation planting	Year 0 Moderate / - / P / D / LT Year 10 Minor / - / P / D / LT (not significant)



Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				Year 20 Minor / - / P / D / LT (not significant)
<b>Landscape Designation</b>	Setting of the SDNP	Moderate-major to moderate / - / P / I / LT	Retention / enhancement of existing planting and maturation of new mitigation planting	Year 0 Moderate-major to moderate / - / P / I / LT Year 10 Moderate / - / P / I / LT Year 20 Minor / - / P / I / LT (not significant)
<b>Local Landscape Features</b>	Landform	Moderate / - / P / D / LT	None proposed apart from mitigation planting screening	Year 0 Moderate / - / P / D / LT Year 10 Minor-moderate / - / P / D / LT (not significant)

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				Year 20 Minor-moderate to negligible / - / P / D / LT (not significant)
<b>Local Landscape Features</b>	Planting (Option B(I))	Moderate-major / - / P / D / ST-LT	Retention / enhancement of existing planting and maturation of new mitigation planting	Year 0 Moderate-major / - / P / D / ST-LT Year 10 Minor / + / P / D / ST-LT (not significant) Year 20 Moderate to minor / + / P / D / LT (significant)
<b>Local Landscape Features</b>	Planting (Option B(II))	Moderate / - / P / D / ST-LT	Retention / enhancement of existing planting and maturation of new mitigation planting	Year 0 Moderate / - / P / D / ST-LT Year 10 Minor / + / P / D / ST-LT (not significant)

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				Year 20 Moderate to minor / + / P / D / LT (significant)
<b>Local Landscape Features</b>	Infrastructure	Moderate / - / P / D / MT	Retention / enhancement of existing planting and maturation of new mitigation planting	Year 0 Moderate / - / P / D / MT Year 10 Minor / - / P / D / LT (not significant) Year 20 Minor / - / P / D / LT (not significant)
<b>Decommissioning</b>				
<b>Landscape Character</b>	SNDP D2 Hambledon and Clanfield Downs	Minor - moderate / - / T / I / ST (significant and localised)	None proposed	Minor -moderate / - / T / I / ST (significant)

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Landscape Character</b>	LCTW2 Hambledon Downs 17	Moderate / - / T / D / ST (localised)	None proposed	Moderate / - / T / D / ST
<b>Landscape Character</b>	LCA3fi Downland Mosaic	Moderate / - / T / D / ST (localised)	None proposed	Moderate / - / T / D / ST
<b>Landscape Designation</b>	Setting of the SDNP	Minor - moderate / - / T / I / ST	None proposed	Minor -moderate / - / T / I / ST (significant)
<b>Local Landscape Features</b>	Landform	Moderate / N / P / D / LT	None proposed	Moderate / N / P / D / LT
<b>Local Landscape Features</b>	Land use	Moderate to minor - moderate / - / T / D / ST	None proposed	Moderate to minor -moderate / - / T / D / ST (significant)

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
		(significant)		
<b>Local Landscape Features</b>	Planting (Option B(I))	Moderate / - / P / D / LT	None proposed	Moderate / - / P / D / LT
<b>Local Landscape Features</b>	Planting (Option B(II))	Moderate / - / P / D / LT	None proposed	Moderate / - / P / D / LT
<b>Local Landscape Features</b>	Infrastructure	Moderate / - / T / D / ST	None proposed	Moderate / - / T / D / ST
<b>Local Landscape Features</b>	Tranquillity	Moderate / - / P / I / ST	None proposed	Moderate / - / P / I / ST
<b>Section 2 - Anmore</b>				
<b>Construction</b>				
There are no identified significant effects				
<b>Section 3 – Denmead/Kings Pond Meadows</b>				

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Construction</b>				
<b>Landscape Character</b>	LCA18 W3	Moderate / - / T / D / MT (localised)	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / MT
<b>Local Landscape Designation</b>	Denmead Gap	Moderate / - / T / D & I / MT	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D & I / MT
<b>Local Landscape Features</b>	Trees (including TPOd trees)	Moderate / - / T / D / MT	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / MT
<b>Local Landscape Features</b>	Lowland Meadows	Moderate / - / T / D / ST	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where	Moderate / - / T / D / ST



Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
			practicable	
<b>Section 4 – Hambledon Road to Farlington Avenue</b>				
<b>Construction</b>				
<b>Local Landscape Feature</b>	Specific Walking Routes / PRow	Moderate / - / T / D / ST	Implementation of Onshore Outline CEMP and reinstatement of surfaces to the same quality and condition	Moderate / - / T / D / ST
<b>Local Landscape Feature</b>	TPO's trees and groups of trees	Moderate / - / T / D / MT	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / MT
<b>Local Landscape Designation</b>	Local designated open space	Moderate / - / T / D / ST	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / ST
<b>Section 5 - Farlington</b>				

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Construction</b>				
<b>Local Landscape Feature</b>	TPO's trees and street trees	Moderate / - / T / D / MT	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / MT
<b>Local Landscape Feature</b>	Tranquillity	Moderate / - / T / I / ST	Implementation of Onshore Outline CEMP	Moderate / - / T / I / ST
<b>Section 6 – Zetland Field and Sainsbury's Car Park</b>				
<b>Construction</b>				
<b>Local Landscape Feature</b>	Ornamental trees	Moderate / - / T / D / MT	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	
<b>Section 7 – Farlington Junction to Airport Service Road</b>				

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Construction</b>				
<b>Local Landscape Feature</b>	Trees	Moderate / - / T / D / MT	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / MT
<b>Local Landscape Designation</b>	Local designated open space	Moderate / - / T / D / ST	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / ST
<b>Section 8 – Eastern Road (Adjacent to Great Salterns Golf Course) to Moorings Way</b>				
<b>Construction</b>				
<b>Landscape Character</b>	UCA17	Moderate / - / T / D / ST (localised)	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / ST

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Local Landscape Feature</b>	Vegetation (scrub and trees)	Moderate / - / T / D / ST to MT	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / ST to MT
<b>Local Landscape Designation</b>	Local designated open space	Moderate / - / T / D & I / ST	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / ST
<b>Section 9 – Moorings Way to Bransbury Road</b>				
<b>Construction</b>				
<b>Landscape Character</b>	UCA17	Moderate / - / T / D / ST (localised)	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / ST
<b>Local Landscape</b>	Trees including	Moderate / - /	Implementation of Onshore Outline CEMP, retention of existing	Moderate / - / T / D / MT

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Features</b>	TPO'd trees and shrubs	T / D / MT	planting and replacement mitigation planting where practicable	
<b>Local Landscape Features</b>	Local designated open space	Moderate / - / T / D / ST	Implementation of Onshore Outline CEMP, retention of existing planting and replacement mitigation planting where practicable	Moderate / - / T / D / ST
<b>Local Landscape Features</b>	Tranquillity	Moderate / - / T / I / ST	Implementation of Onshore Outline CEMP	Moderate / - / T / I / ST
<b>Section 10 – Eastney (Landfall)</b>				
<b>Construction</b>				
<b>Local landscape Feature</b>	NCR2 and footpath intersecting with Fort Cumberland Road	Moderate / - / T / D / ST	Implementation of Onshore Outline CEMP and reinstatement of surfaces to the same quality and condition	Moderate / - / T / D / ST

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional measures are proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Local Landscape Feature</b>	Tranquillity and sense of openness	Moderate / - / T / I / ST	Implementation of Onshore Outline CEMP	Moderate / - / T / I / ST
<b>Operation</b>				
<b>Local Landscape Feature</b>	Sense of openness	Moderate / - / T / I / LT	None proposed	Year 0 / 10 and 20 Moderate / - / T / I / LT
<b>Decommissioning</b>				
<b>Local Landscape Feature</b>	Tranquillity	Moderate / - / T / I / ST	Implementation of Onshore Outline CEMP	Moderate / - / T / I / ST

Key to table:

+ / - = Beneficial or Adverse P / T = Permanent or Temporary, D / I = Direct or Indirect, ST / MT / LT = Short Term, Medium Term or Long Term, N/A = Not Applicable



**Table 15.11- Summary of Effects Table for Visual Amenity**

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Section 1 – Lovedean (Converter Station Area)</b>				
<b>Construction Stage</b>				
Residential receptors	North west – Nos. 1 and 2	Major / - / T / D / ST	Implementation of Onshore Outline CEMP, adherence to Design Principles, retention of existing planting and replacement mitigation planting	Major / - / T / D / ST
Residential receptors	North west – Nos. 3, 4, 5 and 6	Minor-moderate / - / T / D / ST (significant)	Implementation of Onshore Outline CEMP, adherence to Design Principles, retention of existing planting and replacement mitigation planting	Minor-moderate / - / T / D / ST (significant)
Residential receptors	North east – No. 21	Minor-moderate / - / T	Implementation of the	Minor-moderate / - / T / D

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
		/ D / ST (significant)	Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	/ ST (significant)
Residential receptors	East – Nos. 17 and 18	Moderate-major / - / T / D / ST	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Moderate-major / - / T / D / ST
Residential receptors	South east – Nos. 14, 15 and 23	Moderate-major to minor-moderate / - / T / D / ST (significant)	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Moderate-major to minor-moderate / - / T / D / ST (significant)
Residential receptors	South – Nos. 10, 11, 12 and 13	Major / - / T / D / ST	Implementation of the Onshore Outline CEMP, adherence to Design	Major / - / T / D / ST

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
			Principles, retention and introduction of mitigation planting	
Residential receptors	South west – No. 9	Moderate-major / - T / D / ST	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Moderate-major / - T / D / ST
Recreational receptors	Monarch's Way (DC21 / HC06):	Moderate-major / - / T / D / ST	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Moderate-major / - / T / D / ST
Recreational receptors	PRoW HC25a/b / HC41)	Minor-moderate / - / T / D / ST (significant and localised)	Embedded mitigation: Implementation of the Onshore Outline CEMP, adherence to Design	Minor-moderate / - / T / D / ST (significant)

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
			Principles, retention and introduction of mitigation planting	
Recreational receptors	PRoW DC16 / HC04:	Moderate / - / T / D / ST	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Moderate / - / T / D / ST
Recreational receptors	PRoW DC19 / HC28	Minor-moderate / - / T / D / ST (significant)	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Minor-moderate / - / T / D / ST (significant)
Recreational receptors	Cyclists along Day Lane /Broadway Lane	Moderate / - / T / D / ST (localised)	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation	Moderate / - / T / D / ST

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
			planting	
Transport users	Broadway lane (east) Day Lane	Moderate / - T / D / ST (localised)	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Moderate / - T / D / ST
Transport users	Broadway Lane (south)	Moderate / - / T / D / ST	Implementation of the Onshore Outline CEMP, adherence to Design Principles, retention and introduction of mitigation planting	Moderate / - / T / D / ST
<b>Operational Stage</b>				
Residential receptors	North west – No. 1	Major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Major / - / P / D / LT Year 10 Moderate to major / - / P /

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				D / LT Year 20 Minor-moderate / - / P / D / LT (significant)
Residential receptors	North west – No. 2	Major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Major / - / P / D / LT Year 10 and year 20 Moderate to major / N / P / D / LT
Residential receptors	North west – Nos. 3 and 5	Minor-moderate / - / P / D / LT (significant)	Retention and maturation of mitigation planting	Year 0 Minor-moderate / - / P / D / LT (significant) Year 10 and year 20 Negligible / - / P / D / LT
Residential receptors	North west – Nos. 4 and 6	Moderate-major to minor-moderate / - / P	Retention and maturation of mitigation planting	Year 0 Moderate-major to minor-



Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
		/ D / LT (significant)		moderate / - / P / D / LT (significant) Year 10 and year 20 Minor - moderate / - / P / D / LT (not significant)
Residential receptors	North east – No. 21	Moderate-major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0, 10 and 20 Moderate-major / - / P / D / LT
Residential receptors	East – No. 17	Moderate-major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate-major / - / P / D / LT Year 10 Minor-moderate / - / P / D / LT (significant) Year 20 Minor-moderate / - / P / D / LT (not significant)

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
Residential receptors	East – No. 18	Moderate-major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate-major / - / P / D / LT Year 10 and year 20 Moderate-major / N / P / D / LT
Residential receptors	South east – Nos 14, 15 and 23	Moderate-major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate-major / - / P / D / LT Year 10 and year 20 Minor-moderate/- / P / D / LT (not significant)
Residential receptors	South – No. 12	Major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Major / - / P / D / LT Year 10 and year 20 Moderate-major / N / P /

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				D / LT
Residential receptors	South – No. 10	Moderate-major to major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate-major to major / - / P / D / LT Year 10 Minor-moderate / - / P / D / LT (significant) Year 20 Minor-moderate / - / P / D / LT (not significant)
Residential receptors	South – No. 11 and 13	Minor-moderate / - / P / D / LT (significant)	Retention and maturation of mitigation planting	Year 0 Minor-moderate / - / P / D / LT (significant) Year 10 Minor-moderate / - / P / D / LT (significant) Year 20

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				Minor-moderate / - / P / D / LT (not significant)
Residential receptors	South west – No. 9	Moderate-major to major / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate-major to major / - / P / D / LT Year 10 Moderate-major / - / P / D / LT Year 20 Minor-moderate / - / P / D / LT (significant)
Recreational receptors	Monarch's Way (DC21 / HC06):	Moderate-major / - P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate-major / - P / D / LT Year 10 Moderate / - P / D / LT Year 20

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				Minor-moderate / - P / D / LT (not significant)
Recreational receptors	PRoW HC25a/b / HC41)	Moderate / - / P / D / LT (localised)	Retention and maturation of mitigation planting	Year 0, 10 and 20 Moderate / - / P / D / LT
Recreational receptors	PRoW DC13 / D41	Moderate / - / P / D / LT (localised)	Retention and maturation of mitigation planting	Year 0 and year 10 Moderate / - / P / D / LT Year 20 Minor-moderate / - / P / D / LT (not significant)
Recreational receptors	PRoW DC16 / HC04	Minor-moderate / - / P / D / LT (significant)	Retention and maturation of mitigation planting	Year 0 Minor-moderate / - / P / D / LT (significant) Year 10 Minor / - / P / D / LT (not significant) Year 20

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
				Negligible / - / P / D / LT
Recreational receptors	PRoW DC19 / HC28	Moderate / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate / - / P / D / LT Year 10 Minor-moderate / - / P / D / LT (significant) Year 20 Minor to negligible / - / P / D / LT
Recreational receptors	PRoW DC17 / DC20	Moderate / - / P / D / LT (Localised)	Retention and maturation of mitigation planting	Year 0 and year 10 Moderate / - / P / D / LT Year 20 Minor to negligible / - / P / D / LT
Recreational receptors	Cyclists along Day Lane /Broadway Lane	Moderate / - / P / D / LT	Retention and maturation of mitigation planting	Year 0 Moderate / - / P / D / LT

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
		(Localised)		Year 10 and 20 Minor / - / P / D / LT
Transport users	Broadway lane (west) Day Lane	Moderate / - / P / D / LT (Localised)	Retention and maturation of mitigation planting	Year 0, 10 and 20 Moderate / - / P / D / LT
Transport users	Broadway Lane (south)	Moderate / - / P / D / LT (Localised)	Retention and maturation of mitigation planting	Year 0, year 10 and 20 Moderate / - / P / D / LT
<b>Decommissioning</b>				
<b>Residential receptors</b>	North east - No. 21	Minor-moderate / - / T / D / ST (significant)	None proposed	Minor-moderate / - / T / D / ST (significant)
<b>Residential receptors</b>	North west Nos. 2 and South 12	Moderate-major / N / P / D / LT	None proposed	Moderate-major / N / P / D / LT
<b>Residential receptors</b>	East No. 17	Minor-moderate / - / P / D / LT (significant)	None proposed	Minor-moderate / - / P / D / LT (significant)



Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Residential receptors</b>	East No. 18	Minor-moderate / N / P / D / LT (significant)	None proposed	Minor-moderate / N / P / D / LT (significant)
<b>Recreational receptor</b>	Cyclists along Day Lane /Broadway Lane	Moderate / - / T / D / ST (Localised)	None proposed	Moderate / - / T / D / ST
<b>Recreational receptor</b>	Users of Monarch's Way	Moderate / - /T / D / ST	None proposed	Moderate / - /T / D / ST
Transport users	Broadway lane (east) Day Lane	Moderate / - T / D / ST (localised)	None proposed	Moderate / - T / D / ST
<b>Section 2 – Anmore</b>				
There are no identified significant effects				
<b>Section 3 – Denmead/Kings Pond Meadow</b>				
There are no identified significant effects				
<b>Section 4- Hambledon Road to Farlington Avenue</b>				

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
There are no identified significant effects				
<b>Section 5 - Farlington</b>				
There are no identified significant effects				
<b>Section 6- Zetland Field and Sainsbury's Car Park</b>				
There are no identified significant effects				
<b>Section 7 – Farlington Junction to Airport Service Road</b>				
There are no identified significant effects				
<b>Section 8 – Eastern Road (Adjacent to Great Saltern Golf Course) to Moorings Way</b>				
There are no identified significant effects				
<b>Section 9 – Moorings Way to Bransbury Road</b>				
There are no identified significant effects				

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>Section 10 – Eastney (Landfall)</b>				
<b>Construction</b>				
<b>Residential receptors</b>	Within the immediate vicinity of the Landfall	Moderate-major / - / T / D / ST	Implementation of the Onshore Outline CEMP, retention and introduction of mitigation planting	Moderate-major / - / T / D / ST
<b>Recreational receptors</b>	Within the immediate vicinity of the Landfall	Moderate-major / - / T / D / ST	Implementation of the Onshore Outline CEMP, retention and introduction of mitigation planting	Moderate-major / - / T / D / ST
<b>Transport users</b>	Within the immediate vicinity of the Landfall	Moderate / - / T / D / ST	Implementation of the Onshore Outline CEMP, retention and introduction of mitigation planting	Moderate / - / T / D / ST
<b>Operation</b>				
<b>Residential</b>	Within the immediate	Moderate-major to minor-moderate / - / P	Retention and maturation	Year 0

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>receptors</b>	vicinity of the Landfall	/ D / MT	of mitigation planting	Moderate-major to minor-moderate / - / P / D / MT (significant) Year 10 and 20 Minor-moderate / - / P / D / LT (not significant)
<b>Recreational receptors</b>	Within the immediate vicinity of the Landfall	Moderate-major / - / T / D / ST	Retention and maturation of mitigation planting	Year 0 Moderate-major to minor-moderate / - / P / D / MT Year 10 and 20 Minor-moderate / - / P / D / LT (not significant)
<b>Decommissioning</b>				
<b>Residential receptors</b>	Within the immediate vicinity of the Landfall	Moderate-major / - / T / D / ST	None proposed	Moderate-major / - / T / D / ST
<b>Recreational</b>	Within the immediate	Moderate-major / - / T	None proposed	Moderate-major / - / T / D

Description of Effects	Receptor	Significance and Nature of Effects Prior to mitigation	Summary of Embedded Mitigation/Enhancement (No additional mitigation measures proposed)	Significance and Nature of Residual Effects following Mitigation/Enhancement
<b>receptors</b>	vicinity of the Landfall	/ D / ST		/ ST
<b>Transport users</b>	Within the immediate vicinity of the Landfall	Moderate / - / T / D / ST	None proposed	Moderate / - / T / D / ST

Key to table:

+ / - = Beneficial or Adverse P / T = Permanent or Temporary, D / I = Direct or Indirect, ST / MT / LT = Short Term, Medium Term or Long Term, N/A = Not Applicable

## 15.9. CUMULATIVE EFFECTS ASSESSMENT

15.9.1.1. The Cumulative Landscape and Visual Amenity Assessment ('CLVA') follows the recommended approach as detailed by PINS in PINS Advice Note Seventeen (The Planning Inspectorate, 2019). This approach is summarised in Chapter 29 (Cumulative Effects) of the ES Volume 1 (document reference 6.1.29) and the detailed CEA Matrices for Landscape and Visual Amenity are contained in Appendix 15.9 (LVIA Cumulative Assessment Matrix (Stage 1 & 2)) and 15.10 (LVIA Cumulative Assessment Matrix (Stage 3 & 4)). Details of the ZOIs and how other developments were screened at Stage 1 and 2 are summarised in the appendices above.

### 15.9.2. CONSTRUCTION STAGE

15.9.2.1. Other developments which would act in-combination with the construction stage of the Proposed Development and generate significant cumulative effects on landscape character, features and visual amenity are summarised below.

15.9.2.2. Appendix 15.9 (LVIA Cumulative Assessment Matrix (Stage 1 & 2)) and 15.10 (LVIA Cumulative Assessment Matrix (Stage 3 & 4)) also refer to other developments where the CLVA concluded that effects were not significant.

#### Section 1: Lovedean (Converter Station Area)

15.9.2.3. Development No 67 Land South of Lovedean Electricity Substation, Broadway Lane (57524/001) would generate in-combination localised moderate adverse (significant) effects on landscape character Downland Mosaic - Horndean Clanfield Edge LCA 3f during construction as well as on landscape features, namely land use, infrastructure and tranquillity.

15.9.2.4. There would also be moderate adverse (significant) effects on immediate residents including residents of Broadway Cottages and recreational users of PRoW DC16/HC04.

15.9.2.5. Development No 68 Land to the south of Old Mill Lane and east/south east of the Haven, Denmead (19/0107/FUL) would generate localised moderate adverse (significant) cumulative effects on landscape character Downland Mosaic, LCTW2 and the setting of the SNDP during construction. There would also be moderate adverse (significant) effects on land use, infrastructure and tranquillity.

15.9.2.6. There would also be moderate adverse (significant) effects on immediate residents and recreational users of the Monarch's Way.

#### Section 2 – 9: Onshore Cable Corridor

15.9.2.7. Development No 21 Portsmouth Park Hotel (16/00522/FUL) (Section 7) would in-combination generate localised moderate adverse (significant) cumulative effects on tranquillity and moderate to major adverse localised (significant) effects on visitors to the hotel during construction.

- 15.9.2.8. Development 62 North Portsea Island Coastal Flood Defence Scheme (19/00706/FUL) (Section 7) would generate in-combination moderate adverse localised (significant) effects on landscape character features (open space, trees and the Solent Way) and minor to moderate adverse localised (significant) effects on recreational receptors.
- 15.9.2.9. Development No 73 England Coast Path – Portsmouth to South Hayling has the potential to generate in-combination cumulative effects installation works associated with Section 7, 8 and 9. Such effects would result in a minor to moderate adverse (significant) effect on recreational users utilising the Solent Way, Eastern Road and cycle routes.
- 15.9.2.10. Effects would reduce to not significant (varying from minor-moderate to negligible) where there is site liaison and management of works to avoid overlaps where practicable and where a coordinated approach is taken to replacement planting.

**15.9.3. OPERATIONAL STAGE**

- 15.9.3.1. Only two other developments would generate in-combination cumulative landscape and visual amenity effects during operation and such effects are focused on Section 1 Lovedean (Converter Station Area).
- 15.9.3.2. No other cumulative effects are expected from other plans or projects in the Proposed Development’s Zones of Influence during the operational stage. During this time, the Onshore Cable Corridor would be buried and will not influence surrounding features or visual receptors.

**Section 1: Lovedean (Converter Station Area)**

- 15.9.3.3. Development No 67 Land South of Lovedean Electricity Substation, Broadway Lane (57524/001) would continue to generate in-combination localised moderate adverse (significant) effects on landscape features, namely land use and infrastructure. There would also be moderate adverse (significant) immediate residents and recreational users of PRow DC16/HC04. Effects would reduce to not significant by year 10 as embedded mitigation planting matures (varying from minor- moderate to negligible).
- 15.9.3.4. Development No 68 Land to the south of Old Mill Lane and east/south east of the Haven, Denmead (19/0107/FUL) would generate in-combination localised moderate adverse (significant) cumulative effects on landscape features namely land use and infrastructure. There would also be moderate adverse (significant) effects on immediate residents and recreational users of the Monarch’s Way. Effects would reduce to not significant by year 10 as embedded mitigation planting matures and additional planting is implemented to serve a visual screening function (varying from minor-moderate to negligible).



#### 15.9.4. DECOMMISSIONING STAGE

- 15.9.4.1. It is unknown whether cumulative effects would arise from the Proposed Development acting in-combination with others within the Zones of Influence during the decommissioning stage. This is due to the long-time period between construction and likely decommissioning.

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