



AQUIND Limited

AQUIND INTERCONNECTOR

Outline Landscape and Biodiversity Strategy

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1. OUTLINE LANDSCAPE & BIODIVERSITY STRATEGY

1.1. INTRODUCTION

1.1.1.1. This Outline Landscape and Biodiversity Strategy (the ‘Strategy’) has been prepared on behalf of AQUIND Limited (the ‘Applicant’). It forms part of the application for a Development Consent Order (‘DCO’) for the UK elements of AQUIND Interconnector (the “Proposed Development”).

1.1.2. BACKGROUND

1.1.2.1. The Applicant is seeking to construct and operate AQUIND Interconnector (the “Project”) - an electricity interconnector between France and the UK, to allow the transfer of electricity across borders. The Proposed Development which the DCO is applied for consists of the elements of the Project that are located in the UK and within the UK Exclusive Economic Zone (‘EEZ’).

1.1.2.2. The Strategy in relation to matters relating to landscaping and biodiversity deals with the Onshore Components of the Proposed Development, which include:

- Section 1 Lovedean (Converter Station Area);
- Sections 2 – 9 (Onshore Cable Corridor); and
- Section 10 Eastney (Landfall).
- Both Section 1: Converter Station Area and Section 10: The Landfall are based on a parameter envelope - see Converter Station and Telecommunication Building Parameter Plans (APP-012) for the Converter Station Area and Optical Regeneration Parameter Plan Sheet 1, (APP-017 Rev002) for the Landfall.

1.1.2.3. With regard to Sections 2 – 9, the Works Plans (APP-010 Rev 002) identify the Order Limits within which the Onshore Cables Route is to be located, with the Onshore Cables to be located anywhere within the Order Limits so as to provide sufficient flexibility to respond to constraints that may be encountered along the route e.g. service congestion in highways.

1.1.2.4. The parameter envelopes and the Order Limits represent a worst-case scenario in terms of the effects of the development on landscape character, being the envelopes within which the relevant parts of the Proposed Development must be constructed in accordance with the Development Consent Order (DCO).

1.1.2.5. A full description of the Proposed Development is given in Chapter 3 (Description of the Proposed Development) of the Environmental Statement ('ES') Volume 1 (APP-118).

1.1.3. PURPOSE OF THE STRATEGY

1.1.3.1. The purpose of the Strategy is to outline the measures that will mitigate the effects of the Proposed Development on landscape and biodiversity features and enhance the value of such features in accordance with relevant planning policies.

1.1.3.2. Mitigation and enhancement measures seek to protect and retain existing vegetation and habitats unaffected by the Proposed Development and restore the landscape temporarily lost through mitigation planting, as well as identifying additional areas to set aside for landscape and biodiversity enhancement.

1.1.3.3. The Strategy presents a coordinated approach to landscape, ecological and arboricultural requirements in order to avoid conflicts between them and maximise benefits.

1.1.3.4. The Strategy is accompanied by an outline planting specification for proposed new planting, including maintenance requirements for years 0 to 5 (see Appendix 1) and Outline Landscape and Biodiversity Strategy Management Plans for the Converter Station and Landfall (see Appendix 2).

1.1.3.5. To secure the landscaping related measures detailed in this Strategy, Requirement 7 of the dDCO (APP-019 Rev002) requires a detailed landscaping scheme to be submitted for approval to the relevant discharging authority prior to any phase of the works being carried out (and, where related to the Converter Station Area, for this approval to be in consultation with the SDNPA).

1.1.3.6. Any detailed landscaping scheme must accord with this Strategy (in so far as is relevant) and align with the Landscape Design Principles in the Design and Access Statement (APP-114 Rev002).

1.1.3.7. Requirement 8 of the dDCO requires all landscaping works to be carried out in accordance with any detailed landscaping scheme approved under Requirement 7 and to a reasonable standard in accordance with the relevant recommendations of appropriate British Standards. It includes requirements for replacement planting when necessary and, for the Converter Station Area and the Landfall, a requirement to maintain and manage the landscaping provided for so long as the Proposed Development is operational.

1.1.3.8. In accordance with this Strategy each detailed landscaping scheme in relation to the Converter Station Area and the Landfall must include detailed landscape mitigation plans, together with management, maintenance and monitoring plans and prescriptions alongside periodic reviews and confirmed management responsibilities.

- 1.1.3.9. The management, maintenance and monitoring plans included in any detailed landscaping scheme for the Converter Station Area and the Landfall must prescribe the maintenance regimes for all different landscape/habitats considering the aims, specific objectives and functions of each area of planting/habitat, to ensure the full and successful establishment of the planting when reviewed against specific targets/indicators.
- 1.1.3.10. This Strategy includes the management and enhancement objectives and associated landscape prescriptions for the Converter Station Area and Landfall, as well as background context and links to the overall Design Principles; outlined in the Design and Access Statement and mitigation assumptions relating to the Onshore Cable Corridor.
- 1.1.3.11. To secure the biodiversity related measures detailed in this Strategy, Requirement 15 of the dDCO requires a Construction Environmental Management Plan ('CEMP') to be produced. An Onshore Outline CEMP ('Onshore Outline CEMP') is provided as part of the Application (APP-505 Rev002). In addition, Requirement 9 of the dDCO requires a written biodiversity management plan covering the following subjects to be produced in accordance with this Strategy:
- measures to protect existing scrub and trees that are to be retained;
 - measures to enhance biodiversity and habitats;
 - an implementation timetable; and
 - biodiversity management and maintenance measures.
- 1.1.3.12. Each biodiversity management plan shall be submitted for approval to the relevant discharging authority prior to any phase of the relevant works being carried out.
- 1.1.3.13. Arboricultural mitigation measures will be secured through Requirement 15 of the dDCO which requires a CEMP to be produced, as explained above. Arboricultural Method Statements with details of Root Protection Areas (RPAs) shall be submitted as part of the relevant detailed CEMPs and accompany the detailed landscaping schemes referred to in Requirement 7 of the dDCO.
- 1.1.3.14. For the Onshore Cable Corridor, the flexibility required for design and construction means that it is necessary to develop mitigation in detail once the final alignment and construction areas have been decided and the areas to be impacted are known (albeit all potential impacts have been assessed). General and specific embedded mitigation measures and detailed design guidance to be implemented in relation to the Onshore Cable Corridor, which shall guide the detailed landscaping scheme and the written biodiversity management plans to be produced in relation to it, are contained at Section 5 of this document.

- 1.1.3.15. As such, this Strategy provides the framework of requirements which the detailed landscaping scheme required to be approved and complied with must contain, and in doing so secures the necessary landscape and biodiversity mitigations and enhancements that are to be delivered in connection with the Proposed Development.
- 1.1.3.16. The Strategy is structured as follows:
- Section 1.2: Local policy context;
 - Section 1.3: Existing features (Section 1 and Section 10 only);
 - Section 1.4: Effects of the Proposed Development (Section 1 to 10);
 - Section 1.5: Mitigation (Section 1 to 10 as appropriate);
 - Section 1.6: Landscape and Biodiversity Design for Mitigation and Enhancement
 - Section 1.7: Site specific landscape management prescriptions (Section 1 and Section 10 only); and
 - Section 1.8: Security rights, monitoring, responsibilities and review requirements.
- 1.1.3.17. In instances this Strategy outlines mitigation to be applied ‘where practicable’. The reason for this, as discussed above, is because the final routing of the Onshore Cable Route within the Order Limits cannot be confirmed at this time, with necessary flexibility included to allow for the navigation of the Onshore Cables around existing environmental constraints, including utilities. For example, in some instances it may prove not to be possible to avoid certain tree root protection areas. However, measures which are “where practicable” must be applied where they reasonably can be applied.
- 1.1.3.18. It should be noted that this document does not present an audit in relation to biodiversity features. Refer to the Biodiversity Position Paper (document reference 7.7.9) for further information in relation to the position in respect of biodiversity features.

1.2. LEGISLATION, LOCAL POLICY CONTEXT AND GUIDANCE

- 1.2.1.1. This Strategy has been produced taking into account legislation, local policy and guidance relevant to landscape and biodiversity. For a comprehensive review of legislation, policy and guidance, and information in relation to the Proposed Development in light of policy objectives, see the Chapter 15 (Landscape and Visual Amenity), Chapter 16 (Onshore Ecology) of the ES Volume 1 (APP-130 and APP-131) and Appendix 16.3 (Arboriculture Report) of the ES Volume 2 (APP-411).
- 1.2.1.2. The National Policy Statement for Energy ('EN-1') provides national planning policy that the SoS must have regard to when deciding the Application. Specific policy of relevance to the Strategy are covered in Chapter 15 (Landscape and Visual Amenity), Chapter 16 (Onshore Ecology) and Appendix 16.3 (Arboriculture Report) as detailed above.
- 1.2.1.3. A summary of local policy is provided below to identify the local planning context for this Strategy.

1.2.2. LOCAL POLICY CONTEXT

- 1.2.2.1. The Converter Station Area spans two LPA areas, EHDC and WCC, the Onshore Cable Corridor cuts across four LPA areas, EHDC, WCC, HBC and PCC whilst the Landfall lies within PCC.
- 1.2.2.2. EHDC, WCC, HBC and PCC Local Plans seek to conserve and enhance distinctive or important landscape, arboricultural and biodiversity features. Of particular interest to this Strategy is how the Proposed Development fits into the local landscape setting. Policies in relation to this and the local policy context of relevance to the Converter Station Area and Landfall are summarised below.

Section 1 – Lovedean (Converter Station Area)

- 1.2.2.3. The following policies are of relevance to this Strategy:
- East Hampshire District Local Plan: Joint Core Strategy. (East Hampshire District Council and South Downs National Park Authority, Adopted June 2014):
 - Policy CP19 Development in the Countryside seeks to exercise a general constraint in order to protect the countryside for its own sake;
 - Policy CP20 Landscape requires new development to protect and enhance natural and historic features which contribute to the distinctive character of the landscape; incorporate new planting to enhance the setting and maintain, manage and enhance the green infrastructure networks;
 - Policy CP21 Biodiversity requires development to protect and enhance sites and features; achieve a net gain in biodiversity by ensuring adverse impacts are avoided where possible or, if unavoidable are appropriately mitigated for; and

- Policy CP28 Green Infrastructure permits development which enhances and maintains the network of green infrastructure.
- East Hampshire Local Plan, Second Review, adopted version. (East Hampshire District Council, 2006). Policy UI1 New Utility Infrastructure in the Countryside states that development will be permitted if measures are taken to ameliorate the environmental impact. Policy C6 states that planning permission will not be granted for development which will damage or destroy one or more trees protected by a TPO or in a Conservation Area unless the removal is in the interests of good arboricultural practices
- Winchester District Local Plan Part 1 Joint Core Strategy, adopted version. (Winchester City Council and South Downs National Park, March 2013):
 - Policy MTRA 4 Development in the Countryside should not cause harm to the character and landscape of the area or neighbouring uses, or create inappropriate noise/light;
 - Policy CP13 High Quality Design ensures a landscape framework has been developed to maximise the potential to improve local biodiversity;
 - Policy CP15 Green Infrastructure supports proposals which demonstrate a net gain in green infrastructure, allows for adaptation to climate change, links areas of biodiversity and protects existing green infrastructure network;
 - Policy CP16 Biodiversity supports development which delivers a net gain in biodiversity;
 - Policy CP19 South Downs National Park ('SDNP') ensures new development is in keeping with the context and setting of the SDNP; and
 - Policy CP20 Heritage and Landscape Character requests management plans to enhance and protect the distinctive landscape.
- 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):
 - Policy DM15 Local Distinctiveness ensures proposals enhance or conserve trees; hedgerows and corridors which contribute to local distinctiveness;
 - Policy DM23 Rural Character ensures development takes in to account the impacts on the visual, physical and tranquillity factors impact upon the rural character; and

- Policy DM24 Special Trees, Important Hedgerows and Ancient Woodlands states development will not result in the loss or deterioration of these features and requests management schemes to ensure their long-term protection.
- Winchester District Local Plan Review, adopted version. (Winchester City Council, 2006):
 - Policy DP4 Landscape and the Built environment prohibits development which detracts from the loss of public views; trees and hedgerows; open areas; area of ecological importance and the landscape framework;
 - Policy DP11 Un-Neighbourly Uses ensures development is well screened by vegetation or landform and is of a size capable to contain the land use; and
 - Policy DP14 Public Utilities requests a landscaping/restoration scheme including a provision for management.
 - Policy CE2 Local Gaps states that development that physical or visually diminishes a Local Gap will not be permitted including the local gap within Section 3 referred to as Denmead- Waterlooville.
- Winchester City Council, SPD, High Quality Spaces (Winchester City Council, March 2015) covers an area which lies outside of the SDNP to encourage high quality design which considers the local distinctiveness and follows sustainable design principles.

1.2.2.4. Whilst the Proposed Development is not located within the SDNP, the Converter Station Area is located very close to the National Park boundary. Figure 15.1, ES Volume 2 (document reference 6.2.15.1) illustrates the boundary of the SDNP.

Section 2 to 9 – Onshore Cable Route

1.2.2.5. All of the above policies are relevant to the parts of the Onshore Cable Route in addition to policies in Havant Borough Council’s Local Plan (Core Strategy), adopted version (Havant Borough Council, March 2011) which states:

- Policy CS13 Green Infrastructure seeks to supports proposals which protect and enhance existing green infrastructure and accommodate new green infrastructure through on site provision or financial contributions;
- Policy CS16 High Quality Design ensure that’s the local context is respected considering features of natural, historic or local character and which promote wildlife and biodiversity;
- Policy CS21 Developer Requirements refers to on and off site infrastructure requirements or financial contributions which may include contributions to green infrastructure and the public realm;

- Policy DNM8 Conservation, Protection and Enhancement of Existing Natural Features seeks to protect and enhance local habitats and landscape distinctiveness as well as ensuring that new landscape works are integrated successfully into the local environment and making full provision for future landscape maintenance works.
- Havant Borough Council Local Plan, (Allocations), adopted version (Havant Borough Council, July 2014)
 - Policy AL8 Local Green Spaces protects and enhances existing spaces – development proposals which harm these spaces will not be permitted other than in special circumstances.
- Havant Borough Council, Borough Design Guide SPD, adopted version (December 2011) encourages good design including the retention of areas / features of distinctive character and good quality public realm.
- The Portsmouth Plan – Portsmouth Core Strategy, adopted version (Portsmouth City Council, 2012):
 - Policy PCS13 A Greener Portsmouth is in regard to protecting, enhancing and developing the green infrastructure network.
- The Portsmouth City Local Plan 2001-2011, adopted version and amended July 2007, 2009 and 2012 (Portsmouth City Council, 2012)
 - Policy LH2 Langstone Harbour Coastal Zone seek to ensure that proposals on the coastal zone have regard to the coastal setting and landscape, and nature conservation interests.

Section 10 – Eastney (Landfall)

- The Portsmouth Plan – Portsmouth Core Strategy, adopted version (Portsmouth City Council, 2012):
 - Policy PCS9 The Seafront ensures new development contributes to the revitalisation of the seafront, this includes protecting the open nature of the area and improving the quality of the open spaces; and
 - Policy PCS13 A Greener Portsmouth is in regard to protecting, enhancing and developing the green infrastructure network.

1.2.3. GREEN INFRASTRUCTURE ('GI') STRATEGIES

1.2.3.1. The Partnership for Urban South Hampshire Green Infrastructure Strategy (PUSH GI Strategy) provides a framework for locally prepared GI strategies including EHDC, WCC and PCC detailed below. Key objectives, of relevance to the Strategy, include:

- Protect and enhance biodiversity;

- Provide mitigation for the impact of development;
- Create new areas of GI to serve new developments;
- Maximise multifunctionality of new and existing GI; and
- Enhance quality of landscape and maintain distinctiveness of settlement pattern and promote sense of place.

1.2.3.2. One of the PUSH GI Strategy's project proposals is the Forest of Bere Land Management Initiative, where due to its distinctive landscape an area wide green infrastructure initiative could bring several large scale benefits including improved access opportunities. The area is an extensive former royal hunting forest with a mix of plantation, ancient semi natural woodland, open space, heathland, farmland and downland stretching across south east Hampshire. Objectives of woodland management are to:

- Maintain and increase the native composition of ancient semi-natural woodland.
- Restore planted ancient woodland sites to native and honorary native woodland.
- Maintain sustainable access and the provision for recreation within the woodlands, taking opportunities to enhance the experience where appropriate.
- Take opportunities to increase the nature conservation value of other existing habitats.
- Maintain and take opportunities to increase the resilience of the woodlands by diversifying age structure and appropriate species mix within the woodlands.
- Provide a regular supply of quality timber to support local employment and local timber processing industries.

1.2.3.3. East Hampshire Green Infrastructure Strategy, 2019 (East Hampshire District Council, May 2019) was produced to support the new Local Plan and summarises key opportunities to promote GI within the administrative area. The Strategy outlines how the design and maintenance for the Converter Station Area fulfils many of these opportunities, including:

- Increased woodland planting to improve connectivity and strengthen the landscape character; mitigate visual impacts of the Converter Station and improve structural diversity of woodlands;
 - Achieving a biodiversity net gain;
 - Utilising locally sourced plants and materials where appropriate;
 - Improving the coverage and condition of semi-improved grasslands;
 - Implementing Sustainable Drainage Systems where appropriate to improve water quality and prevent water run-off; and

- Securing a sustainable and long-term management plan.

1.2.3.4. Winchester City Council Green Infrastructure Study, 2010 (Winchester City Council, Local Development Framework, May 2010) summaries the baseline of the administrative area and defines a strategy to enhance the GI assets within the district up to 2026. The study, working at a strategic level and in partnership with Hampshire County Council, has set up city-wide principles, covered in the PUSH GI Strategy. The LPAs' study seeks to promote woodland planting to encourage connections between habitats; reinforce the local character and enhance biodiversity through creation of new woodlands and active management.

1.2.3.5. PCC addresses the GI network through the Local Plan, Policy PCS13 'a greener Portsmouth'. The policy states that the City Council will work collaboratively to encourage a net gain in GI from new development to help deliver a greener Portsmouth and support the wider PUSH GI Strategy.

1.3. EXISTING FEATURES

1.3.1.1. A summary of the existing landscape, arboricultural and biodiversity context of the Converter Station Area and the Landfall is provided below. A more detailed description is presented in Chapter 15 (Landscape and Visual Amenity), Chapter 16 (Onshore Ecology) and Appendix 16.3 (Arboriculture Report), including context associated with the Onshore Cable Corridor.

1.3.2. EXISTING LANDSCAPE FEATURES

Section 1 – Lovedean (Converter Station Area)

1.3.2.1. The Converter Station Area is situated in close proximity to the border of the SDNP west of the existing Lovedean Substation and spans a number of small fields divided by hedgerows. A new Access Road would connect the new Converter Station with Broadway Lane to the east and run to the south of the existing Lovedean Substation.

1.3.2.2. Surrounding the Converter Station Area are mixed agricultural fields bounded by hedgerows 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.

1.3.2.3. Fields surrounding the Converter Station Area are used by off-road vehicles and horsiculture, resulting in the introduction of post and wire or electric fences. The existing Lovedean Substation, associated pylons and overhead lines are dominant features in the local landscape, as are the linear belts of woodland (formerly unmanaged hedgerows), ancient woodland (Crabdens Row, Crabdens Copse and Stoneacre Copse), small deciduous copses and occasional mature oak trees.

1.3.2.4. Existing planting (associated with Lovedean Substation extension and used for mitigation purposes) is located to the northwest and west of Lovedean Substation.

1.3.2.5. The existing vegetation and local topography help to limit visibility of the Converter Station Area to short and middle-distance views, although the existing Lovedean Substation is notable in these views, especially in winter.

1.3.2.6. The baseline landscape features associated with the Converter Station Area includes a wide variety of planting and associated habitats, namely:

- Broadleaved woodland, semi-natural;
- Ancient woodland;
- Native hedgerows;
- Native hedgerows with trees;
- Grassland/scrub;
- Scrub;
- Mature trees;

- Arable farmland; and
- Pasture.

Section 10 – Eastney (Landfall)

- 1.3.2.7. The Optical Regeneration Station(s) ('ORS') and associated compound are to be located in Fort Cumberland car park at Eastney.
- 1.3.2.8. Surrounding the Landfall is a mix of paths and small roads; a Site of Importance for Nature Conservation ('SINC') / open space to the east; Southsea Leisure Park with static caravans to the south and west; a children's play area to the west (Fort Cumberland Road Play Area) and numerous residential properties (typically 2-3 storeys). There are open views across the areas of public open space/common land, though views of Langstone Harbour and The Solent are only notable from higher elevations.
- 1.3.2.9. A mixed species hedge to the south, consisting primarily of unmanaged Leyland cypress trees, acts as a screen to the static caravans in Southsea Leisure Park. The hedge is in fair condition, although going bare at the base (G863, Appendix 16.3 (Arboriculture Report)).
- 1.3.2.10. Fort Cumberland Road borders the Landfall to the north, with Sustrans National Cycle Network Route 2 (also known as the Shipwrights Way) following Fort Cumberland Road. Fort Cumberland, a Scheduled Monument, lies 225 m to the east of the ORS buildings.
- 1.3.2.11. Existing features associated with Landfall include the following:
- Grassland/scrub; and
 - A single mature tree.
- 1.3.2.12. Approximately 9 m of grassland/scrub planting separates Fort Cumberland Road from Fort Cumberland car park, with a mature Ash tree located within the grassland. The existing Ash tree (T6, Appendix 16.3 (Arboriculture Report)) is a semi-mature tree in fair condition (Category C).

1.3.3. EXISTING BIODIVERSITY FEATURES

Section 1 – Lovedean (Converter Station Area)

- 1.3.3.1. Important ecological features identified within the Converter Station Area include:
- Species-rich hedgerows, with and without trees. These have intrinsic ecological value for the range of species they support, and also their function as corridors and refuges. They are considered important at a District scale;
 - Semi-improved neutral grassland;
 - Two badger clans. The extent of their territories is not fully mapped but there are main and annexe setts located within the Converter Station Area;

- Bat activity. Nine species of bat are active across the areas of mature woodland and hedgerows within the Converter Station Area, although no trees roosts were identified; and
- Breeding birds. Species were predominantly widespread UK species, but all wild birds are protected by Part 1 of the Wildlife and Countryside Act 1981; their presence and suitability of habitat to support them is considered within this Strategy.

1.3.3.2. There are important hedgerows, as classified by the Hedgerow Regulations 1997 (HM Government, 1997), present within the Converter Station Area. For further information regarding their location and quality/health see sheet 1, Figure 16.4 of the ES Volume 2 (APP-293) and also Hedgerow and Tree Preservation Order plans (APP-018).

1.3.3.3. Adjacent to the Converter Station Area are two SINCs comprising two areas of ancient woodland - Crabdens Copse and Crabdens Row; considered important at the County scale. They are both relatively small areas of ancient woodland (12.2 ha and 12.1 ha, respectively), but represent relics of historically extensive woodland. Both are predominantly composed of English oak, ash and beech with a well-developed shrub understorey as well as bluebells.

1.3.3.4. Stoneacre Copse also lies adjacent to the Converter Station Area, is ancient woodland, 1.49 ha in size and a relic of a more extensive woodland that was present historically and listed as a Priority Habitat.

1.3.3.5. No reptiles were recorded within the Converter Station Area during surveys, but habitats within it provide suitable conditions for native UK reptiles.

Section 10 – Eastney (Landfall)

1.3.3.6. Surveys confirmed the presence of breeding birds at the Landfall. Species were predominantly widespread UK species, except a Black Redstart which was identified in close proximity to the Landfall but outside the Order Limits and not susceptible to effects of the Proposed Development.

1.3.3.7. No reptiles were recorded within the Landfall during surveys, but habitats within it provide suitable conditions for native UK reptiles.

1.3.4. EXISTING ARBORICULTURAL FEATURES

1.3.4.1. Appendix 16.3 (Arboriculture Report) outlines the British Standard 5837: 2012 “Trees in relation to design demolition and construction – recommendations” (BS5837) tree valuation (non-fiscal) categories used in relation to tree surveys, as follows:

- Category A arboricultural features are high value. These include significant specimen trees, ancient, veteran and notable trees or trees of an age that replacement is not feasible in a generation. Ancient woodland has been regarded as a high value finite resource which is of national importance.

- Category B arboricultural features are moderate value. These are good trees not quite making Category A due to defects or being of a younger age or size.
- Category C arboricultural features are low value. These are generally unremarkable trees but may have value, particularly in larger groups. Replacement is considered practicable in less than 15 years.

1.3.4.2. A summary of the existing arboricultural baseline is provided below.

Section 1 – Lovedean (Converter Station Area)

1.3.4.3. A total of 27 high value features (woodland, groups of trees, trees and hedges) were identified in the Converter Station Area including:

- Ancient woodland (which just sit outside of the Order Limits including Crabdens Row, Crabdens and Stoneacre Copse) and associated groups (W630, W667, W669, W690, W714 and W887).
- Woodland group (identified as G689) forming part of the western boundary exhibiting ancient woodland characteristics. This group includes mature ash, oak, hazel coppice and hawthorn understorey, mixed with elder.
- Mature trees and hedges in excellent condition. Including an ash tree (identified as T532, located within G689 to the west of the Converter Station) which presented veteran characteristics.
- Along the western boundary, large mature trees are identified in groups and linear groups including G639 and G805 plus a hazel coppice hedgerow (H769), all of which are considered as high value (Category A features) based on the Arboriculture Report and in terms of landscape; emphasising the sense of enclosure and proving an important visual screening function.

1.3.4.4. A total of 22 medium value features were identified within the Converter Station Area including 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 Area (H843, H794, T552, T553, T559, G576). Some of these features (i.e. G731 and G742) were in impaired condition, albeit still providing associated benefits in a wider ecosystem.

1.3.4.5. Low value features, such as agricultural hedges, are common throughout the area.

Section 10 – Eastney (Landfall)

1.3.4.6. Due to coastal winds and salt spray there is little tree cover at the Landfall. No high features were identified within the Order Limits but a Category C semi-mature ash tree (T6) was identified, which provides some visual screening.

1.4. EFFECTS OF THE PROPOSED DEVELOPMENT

1.4.1.1. This section provides a summary of the likely significant effects at the Converter Station Area, in connection with the Onshore Cable Corridor and at the Landfall on landscape and visual amenity, arboricultural and biodiversity features. The proposed mitigation measures identified are set out in Section 1.5.

1.4.1.2. To allow for flexibility to identify the most appropriate Onshore Cable Route, including the joint bay locations, and to facilitate and accommodate construction works, it has been assumed at this stage that all arboricultural features within the Order Limits¹ would be at risk of removal.

1.4.1.3. Measures to avoid, reduce or minimise the identified effects, as well as measures to provide effective enhancements are proposed to address the loss and disturbance of existing landscape and biodiversity features. These are outlined below.

1.4.2. LANDSCAPE & VISUAL

Section 1 – Lovedean (Converter Station Area)

1.4.2.1. Chapter 15 (Landscape and Visual Amenity) concluded that there would be significant effects on specific landscape character types and areas, on the setting of the SDNP and on local landscape features in the immediate vicinity of the Converter Station Area. Adverse visual effects would be experienced by a variety of local visual receptors within 3 km of the Converter Station, with the degree of effect varying according to their proximity, orientation and the presence or absence of intervening vegetation and built form.

Section 2 – 9 Onshore Cable Corridor

1.4.2.2. The assessment only considered construction effects associated with the Onshore Cable Route installation and such effects were found to be temporary, short to medium term and localised.

1.4.2.3. Specifically, Chapter 15 found that Section 3 would have significant landscape effects locally on WCC Local Landscape W3 (part of LCA18 Forest of Bere Lowlands) and that Sections 8 and 9 would have significant effects locally on Urban Character Area 17 – Milton West.

1.4.2.4. Chapter 15 found that all effects on visual amenity and visual receptors in Section 2 – 9 would be not significant. However, the ES Addendum (document reference 7.8.1) found that there would be temporary significant visual effects on residential, recreational (including church worshippers) and educational receptors in Section 4.

¹ With the exception of hedges and hedgerow trees along the boundaries of the Order Limits, which are assumed to be retained unless specifically noted.

Section 10 – Eastney (Landfall)

- 1.4.2.5. Impacts associated with the Landfall were limited to its immediate vicinity, with significant indirect adverse effects on landscape character - tranquillity during construction and on openness during the duration of the operation of the Proposed Development. There would also be impacts on immediate visual receptors, namely local residents and residents of Southsea Leisure Park as well as recreational and transport users.

1.4.3. BIODIVERSITY

Section 1 – Lovedean (Converter Station Area)

- 1.4.3.1. Chapter 16 (Onshore Ecology) (APP-131) highlights the potentially significant effects of the Converter Station Area on sensitive ecological receptors.
- 1.4.3.2. Badger sett closure would be undertaken under a Natural England licence and in accordance with an agreed detailed methodology. In addition, there would be a temporary loss of habitat connectivity for bats during construction.
- 1.4.3.3. A number of hedgerows within the Converter Station Area would also be affected. These have been identified as species-rich, and would fall under the Hedgerow Regulations (HM Government, 1997), as referred to above see Sheet 1, Figure 16.4 of the ES Volume 2 (APP-293) for more details.
- 1.4.3.4. Trenching, installation of access routes, laydown areas and compounds would lead to further direct, temporary loss and degradation of semi-improved neutral grassland.

Section 2 – 9 Onshore Cable Corridor

- 1.4.3.5. Grassland at Kings Pond Meadow SINC and Soake Farm SINC comprises unimproved HPI-quality Lowland Meadow habitat and lesser-quality horse-grazed semi-improved grassland. Kings Pond Meadow SINC would be directly affected by trenching, but Soake Farm SINC has been avoided by use of HDD.
- 1.4.3.6. Denmead Meadows defines a wider area of grassland habitat between Hambledon Road and Anmore Road, incorporating Kings Pond Meadow SINC and Soake Farm SINC. Other than those areas described above, it is composed of unimproved HPI-quality Lowland Meadow habitat. HDD will be used to avoid the majority of such habitat, but grassland will receive direct impacts adjacent to Hambledon Road where an HDD compound will be located.
- 1.4.3.7. Proposed 24 hour working at Farlington Playing Fields would produce nocturnal light that could lead to indirect disturbance effects on foraging and commuting bats.
- 1.4.3.8. Chichester and Langstone Harbour SPA is designated for its internationally important wintering intertidal bird community, and the site is functionally connected to Solent Waders and Brent Goose Strategy ('SWBGS') sites, which are used as winter foraging areas.

1.4.3.9. The Onshore Cable Corridor passes through six SWBGS sites and would result in reduced foraging habitat during construction. Chichester and Langstone Harbour SPA would therefore be adversely affected through direct impacts to the SWBGS sites. This SPA would also receive indirect impacts through irregular noise and vibration at HDD sites which is likely to disturb birds.

1.4.3.10. The Onshore Cable Corridor includes an option to run along a well-used path through Milton Common SINC. Construction access would be required into the SINC, alongside trenching for the cable itself. Therefore, direct impacts of the Proposed Development would lead to the temporary loss of habitat within the SINC and potential alterations to soil structure which could affect the botanical community in the long-term.

Section 10 – Eastney (Landfall)

1.4.3.11. There would be no impact at the Landfall.

1.4.4. ARBORICULTURE

1.4.4.1. The Tree Survey Schedule and Constraints Plans (document reference 7.4.1.10) show the trees and hedges considered at risk following the revisions to the Order Limits. These figures also show the trees for retention and loss within the revised order limits.

Section 1 – Lovedean (Converter Station Area)

1.4.4.2. Appendix 16.3 of the ES found the impacts on the arboricultural resources at the Converter Station Area to be moderate adverse. Impacts include direct removal, ground compaction and construction within, or close to the RPA of trees to be retained.

1.4.4.3. Of the high value features, eight tree groups, four trees, two woodlands and two hedges would be partially or fully removed or at risk of removal (depending on details of the final design and the Converter Station Option selected).

1.4.4.4. Of the medium value features, six tree groups, five trees, one woodland and six hedges would be similarly affected.

1.4.4.5. Most of the woodlands in the vicinity are estimated to contain between 40% and 80% ash population and are likely to be substantially affected by ash dieback disease.

Section 2 – 9 Onshore Cable Corridor

1.4.4.6. The arboricultural assessment found the impacts on the arboricultural resources in Sections 2 - 9 overall to be moderate adverse.

1.4.4.7. There are however a substantial number of high and medium value features at risk, depending on the final alignment of the Onshore Cable Route.

1.4.4.8. Particular high value features that would be partially or fully removed include:

- Section 2 Anmore: Two oak trees.

- Section 3 Denmead/Kings Pond Meadow: Four hedges. It should be noted that these features will only be partially impacted and not lost entirely.
- Section 4 Hambledon Road to Farlington Avenue: One TPO tree (T154).
- Section 5 Farlington: No high value features but a substantial number of street trees individually of medium or low value that collectively contribute to the street scene.
- Section 6 Zetland Field and Sainsbury's Car Park: No high value features to be lost in this section.
- Section 7 Farlington Junction to Airport Services: None.
- Section 8 Eastern Road to Moorings Way: None.
- Section 9 Moorings Way to Bransbury Road: None.

Section 10 – Eastney (Landfall)

- 1.4.4.9. The arboricultural assessment found the impacts on the arboricultural resources in Sections 10 to be negligible. . There is one semi-mature ash tree in fair condition to be retained although it should be noted that this is at risk from ash die-back disease.

1.5. MITIGATION

1.5.1. GENERAL MITIGATION MEASURES

1.5.1.1. Construction related environmental impacts of the Converter Station Area, Onshore Cable Corridor and Landfall shall be managed through standard control measures secured through the Onshore Outline CEMP in accordance with Requirement 15 to the dDCO.

1.5.1.2. An Onshore Outline CEMP is provided as part of the Application. To comply with Requirement 15 of the dDCO, any and all CEMPs must be in accordance with the Onshore Outline CEMP.

1.5.1.3. For ease of use and as noted in the Glossary of the ES (APP-006) the following terms have been used in this section:

- Horizontal Directional Drilling (HDD): A trenchless technology that involves drilling into the ground to create a bore with a generally horizontal profile, along a planned pathway.
- Onshore Cable Micrositing: Refinement of the Onshore Cable Route and trench design, particularly the alignment, as a result of identifying and / or exposing underground feature, such as tree roots and buried services.
- Trenching: The excavation and reinstatement of a narrow trench, typically 700 – 1,000 mm wide and 1,200 mm deep, into which the Cable ducts will be placed. The trench may be internally supported and will be reinstated as per the original construction.

General Landscape & Visual Mitigation

1.5.1.4. Standard construction practice measures contained within the Onshore Outline CEMP and secured through Requirement 15 which are embedded into the Landscape and Visual Amenity Assessment to control impacts on landscape character and visual amenity include:

- 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 in accordance with Section 6.2 of BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations.
- Careful siting of temporary topsoil storage areas considering using 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 shall be provided alongside the construction corridor or where this is not practicable, a safe alternative route shall be provided. This shall 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.
- During construction of the Onshore Cable Route reasonable access shall be made for pedestrians going to or from premises abutting a street
- 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 shall be provided within the carriageway.
- Some temporary footway closures may be required to facilitate delivery and collection of materials. Where necessary this shall be mitigated through alternative footway links being available or other measures stipulated in the Traffic Management Strategy
- Temporary screening for sensitive visual receptors shall be provided through implementation of solid construction hoardings with the use of natural existing screens (topsoil and existing vegetation) where practicable. Hoardings shall be attractive (visually recessive and sensitive in design), used to screen low level “clutter” and reduce noise.
- Hoardings shall be well lit in poorly lit walkways and any gates positioned to minimise noise transmitted to nearby sensitive receptors.
- Large plant/equipment shall be located away from most sensitive visual receptors where there are viable alternatives.
- Temporary structures and stockpiles shall be removed 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 practicable after sections of work are complete. Reinstatement shall involve the careful handling of soils and a return to the existing habitat type.
- Implementation of mitigation planting alongside construction areas where planting can take place alongside construction works and during winter (November – February as per Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) of the ES Volume 3 (APP-405).
- Mitigation planting to replace hedgerows and trees lost following completion of the construction works. All planting lost shall be replaced with like for like species of a similar size and in agreement with the relevant discharging authority.
- The micro-siting of embedded landscape mitigation measures will be subject to the results of archaeological trial trenching.
- All PRow / footpaths / car parks affected by the Proposed Development shall be reinstated to at least the condition and quality prior to works being carried out.

General Arboricultural Mitigation

1.5.1.5.

The following general mitigation measures apply to all of the Proposed Development are contained in the Onshore Outline CEMP and secured through Requirement 15 of the dDCO:

- Where practicable the works shall be organised to avoid the root protection areas (RPA) of trees and hedges to be retained, including those along the Works Order boundaries.
- All excavations shall follow an arboricultural method statement included within the relevant CEMP to minimise risk to root protection areas².
- Works affecting high value trees shall be carried out under the direct supervision of a suitably experienced Clerk of Works.
- Ground protection shall be used where RPAs are encroached upon and it is practicable to retain the relevant feature. For example, use of a no-dig construction for access routes must be employed.
- Where works need to be undertaken near retained trees, such works shall be in accordance with best practice:
 - British Standard ('BS') 5837:2012 trees in relation to design, demolition and construction – recommendations.

² Note: A Generic Arboricultural Method Statement is provided in Appendix 16.3 (Arboriculture Report, Appendix F)

- Arboricultural Method Statements with associated RPA plans shall be submitted as part of the relevant CEMP. These shall cover in detail the protection of root areas, protective barriers, precautions in respect of temporary works, sequence of activities, utilities, post construction and emergency remedial works.
- Pruning outside of the Order Limits to allow abnormal loads shall be designed to comply with The Highways Act 1980 section 154 requirements. This is a statutory obligation for the person who owns / is responsible for the trees to prune tree to remove an obstruction to the safe use of the highway. Should the abnormal load require additional clearance, this shall be targeted pruning at specific points to be agreed with the haulier, landowner, project team and where appropriate, the local planning authority prior to the works being carried out. All tree works are to be carried out in accordance with British Standard 3998:2010 “Tree Work - Recommendations”.
- Within the Order limits lopping and felling of trees may only be carried out where absolutely necessary and will be prescribed in accordance with British Standard 3998: 2010 “Tree Works – Recommendations” and industry best practice. All pruning and felling works shall be specified by a suitably trained and experienced Arboriculture consultant and shall be carried out by a suitably trained and experienced arboriculture contractor.

General Biodiversity Mitigation

1.5.1.6. General biodiversity mitigation covering all of the Proposed Development onshore will be secured through Requirement 15 of dDCO, with such measures included in the Onshore Outline CEMP. Embedded mitigation measures comprise those to reinstate and diversify habitats in the form of landscape planting, functioning to offset loss of habitats and ensure features are not affected by indirect impacts of the Proposed Development, such as pollution prevention measures.

1.5.1.7. General biodiversity mitigation measures which apply to the whole of the Works are listed below. Measures which apply to specific sections are listed against those sections.

Working Practices

1.5.1.8. Advance site visits, in pre-construction/site clearance phases, shall reassess the ecological baseline and determine if any additional ecological mitigation is required, beyond that specified in this Strategy/the Onshore Outline CEMP. The scope of the walkover shall be to inform the detailed delivery of Construction Stage mitigation. Should any new constraints arise, these shall be identified.

1.5.1.9. An Ecological Clerk of Works shall be required to deliver the environmental components of the Proposed Development as detailed in the Onshore Outline CEMP.

1.5.1.10. All Site staff shall receive Toolbox Talks on the relevant environmental risks, legal requirements and working requirements to comply with legislation.

- 1.5.1.11. In addition to the above, a Biodiversity Management Plan will be produced meeting Requirement 9 of the dDCO which will set out how mitigation measures will be implemented upon commencement of the Proposed Development.

Construction Lighting

1.5.1.12. Lighting of construction work shall be designed with reference to recommendations issued by The Bat Conservation Trust (2014) and Institute of Lighting Engineers (2009) and be cowled and/or hooded to avoid extraneous light spill, and focussed onto works areas only.

1.5.1.13. Construction work shall be restricted to daylight hours between dawn and dusk within areas without public street lighting (e.g. Denmead Meadows, the Converter Station Area) during the bat active season (April to October) to avoid disturbance effects on bats

Precautionary methods to avoid effects on reptiles

1.5.1.14. To avoid killing or injuring reptiles that may be present, a Precautionary Method of Works ('PMoW') shall precede vegetation clearance and earthworks in habitats which could support these animals. The PMoW shall detail how working methods during the construction stage of the Proposed Development can minimise the risk of killing or injury to reptiles.

Precautionary methods to avoid effects on stag beetles

1.5.1.15. In addition to methods to avoid effects on reptiles, the PMoW shall also prescribe methods to avoid killing or injuring stag beetles that, although not identified in the Order Limits, may be present at the time of Works being undertaken. Working methods to search for stag beetle larvae and adults in suitable habitat shall be prescribed and shall precede vegetation clearance and earthworks to minimise the risk of killing or injury to them.

1.5.2. SECTION 1 LOVEDEAN (CONVERTER STATION AREA)

Landscape & Visual Mitigation

1.5.2.1. Embedded mitigation and enhancement measures specific to the Converter Station Area (which are secured through Requirements 7 and 8 of the dDCO) have focused on:

- The design of the Converter Station and associated infrastructure;
- Landform and drainage; and
- Retention of existing planting and the provision of new mitigation planting to provide visual screening.

1.5.2.2. A parameter envelope was defined for the Converter Station Area allowing required flexibility for siting, orientation and massing within this envelope. The detailed design of the Converter Station must be in accordance with the Design Principles (contained in the DAS) and the landscape mitigation planting will be approved by the relevant discharging authority in consultation with the SDNPA.

1.5.2.3. Section 1.6 of this Strategy goes into further detail on the design of mitigation and enhancement measures. Mitigation measures are shown in plan form in Figures 1, 2 and 3 for Section 1 and 10 (Appendix 2) and accord with Appendix 15.7 of the ES (Landscape Schedules, Planting Heights and Image Board) (APP-405).

Arboricultural mitigation

1.5.2.4. The following measures (which are to be included in the relevant CEMP, secured through Requirement 15 of the dDCO) are required:

- Works Compound and Laydown Area shall be prohibited within 15 m of the ancient woodland and hedgerows. When storing materials, particularly liquids, slopes and drainage channels shall be used to prevent spillages and flow into the buffer zone of the ancient woodland and hedgerows.
- Design shall avoid positioning apparatus in conflict with the above (stem and canopy) and below ground (RPA's) elements of existing trees. Where significant incursion is unavoidable, trees shall be appropriately replaced.
- Mitigation for the loss of hedgerows and hedgerow trees would be replaced with like for like species of a similar size with hedgerow trees repositioned at least 5 m away from the Onshore Cable Route within the Order Limits.
- In line with the proposed Generic Arboricultural Method Statement (see Appendix 16.3 Appendix F) (APP-411), the process of construction of the Converter Station must minimise encroachment on the west side of the Converter Station and impacts on the existing hedgerow and hedgerow trees.

Biodiversity mitigation

1.5.2.5. Biodiversity mitigation measures specific to the Converter Station Area (which are to be included in the relevant CEMP and secured through Requirement 15 of the dDCO) are as follows:

Precautionary methods to avoid effects on hedgehogs

1.5.2.6. To avoid killing or injuring hedgehogs that may be present, hedgerows, scrub and other dense vegetation within the Converter Station Area where suitable habitat is present shall be hand-searched for hedgehogs prior to its clearance. Piles of cut vegetation such as brash piles shall also be searched as they can harbour sheltering hedgehogs. Hedgehogs found shall be moved to a suitable release site away from the Converter Station Area within scrub, hedgerow or other dense cover.

Closure of Badger Setts under Licence

1.5.2.7. Badger Sett closure requirements include the following:

- Closure shall proceed outside the badger breeding season (June-November inclusive).

- Setts shall be closed using one-way gates so badgers can leave but cannot return to the sett. Following a 21-day period of monitoring to ensure badgers are not within them, the setts shall be dug out.
- This process would avoid potential death or injury to badgers as a result of development, and work shall be undertaken under a NE licence to allow legal sett closure.
- Badger sett closure applies only to the construction stage of the Proposed Development. Due to the mobile nature of badgers and their ability to dig new setts, a further plan of mitigation measures to offset effects on them may be necessary to permit decommissioning. Survey work and mitigation planting shall be undertaken to inform this stage and ensure the Proposed Development would not affect badgers.
- In addition, open excavations shall be fitted with mammal ladders (planks of wood at either end) to allow animals to climb out if they fall in and prevent the trapping of animals including badgers.

1.5.3. SECTION 2- 9 ONSHORE CABLE CORRIDOR – GENERAL MITIGATION MEASURES

1.5.3.1. Note: these measures also apply to those sections of the Onshore Cable Route that lie within Sections 1 and 10.

Landscape & Visual

1.5.3.2. General embedded mitigation measures which apply to the whole of the Proposed Development onshore and of relevance to the Onshore Cable Corridor are detailed at paragraph 1.5.1.4. The following are general embedded mitigation measures (secured through Requirement 15 of the dDCO and to be included in the relevant CEMP) which apply to the whole of the Onshore Cable Corridor:

- All land temporarily impacted upon through the installation of the Onshore Cable Route shall be reinstated;
- Any street furniture removed or damaged during the installation of the Onshore Cable Route shall be replaced with street furniture of the same quality;
- All PRoW / footpaths / car parks affected by the Proposed Development shall be reinstated to a quality and finish at least equivalent to before works being carried out;
- All planting lost shall be replaced with like for like species of a similar size in agreement with the relevant discharging authority;

- Where hedgerows are lost these shall be replanted with like for like species; on the basis that a concrete duct block will be provided underground to protect the cables from roots and the drying out of the duct surround;
- New tree planting shall be offset at least 5 m away from the Onshore Cable Route, and more specifically the cable trench, within the Order Limits;
- Any landscaping associated with Portsmouth City Council's Coastal Defence Scheme (considered in cumulative effects) and referred to in paragraph 15.5.4.8 of Chapter 15 of the ES (APP-130) which is impacted by the works shall be reinstated to the same quality and finish as the future baseline; and
- Cable routing shall be developed to avoid affecting hedgerows and hedgerow trees on the boundaries of the Order Limits.

Arboricultural

1.5.3.3.

General mitigation measures for working around trees and which apply to the whole of the Onshore Cable Corridor (secured through Requirement 15 of the dDCO and which shall be included in the relevant CEMP) are as follows:

- The Onshore Cable Route shall be diverted around or under RPAs where practicable.
- Where diversion around the RPA of high value trees is not practicable, detailed design measures considering solutions to avoid major root damage in accordance with Section 7.7 and Table 3 of BS 5837 shall be taken to minimise the impact on trees.
- Where it is not possible to avoid trees, landscape and ecological advice shall be sought to agree the priority to be given to the potentially affected trees. Priority shall normally be given to avoiding higher value (Category A and B trees) although in some circumstances where multiple trees may be impacted the cumulative value of a group of lower value trees may be greater than an alternative impact on a single high value tree.
- Tree roots are likely to be infrequent within the carriageway. However, roots may persist at greater depths where conditions are favourable. Cable routing in the carriageway (road surface and sub base) would be considered favourable in comparison to areas where ground conditions are likely to result in more prolific root growth.
- Significant tree roots are likely to be frequent within footway, verge areas and other soft landscape areas where trees are present. Works in these areas must be avoided in so far as is practicable.

Biodiversity

1.5.3.4. The following mitigation measures, secured through Requirement 15 of the dDCO and described in the Onshore Outline CEMP are relevant to multiple sections of the Onshore Cable Route:

Proposed Winter Restriction of Works Adjacent to Chichester and Langstone Harbour SPA Harbour SPA

1.5.3.5. Effects of the construction stage on Chichester and Langstone Harbour SPA and its wintering intertidal bird community shall be avoided by restricting works within the winter season. Working restrictions comprise 6 principles that shall be incorporated into working methods:

- **Principle 1:** Construction works cannot take place in SWBGS (those categorised as either core, primary support, secondary support, low use or candidate) sites that overlap with the Proposed Developments Order Limits during October – March. An exception is the gravel car park within site P11 that is already disturbed by movements of cars, lorries and plant, and offers no functional habitat for brent geese or other waterbirds associated with Chichester and Langstone Harbour SPA.
- **Principle 2:** Where HDD works are to take place underneath the SWBGS site (e.g. at Eastney Landfall) no direct impacts are considered to occur and the restriction does not apply.
- **Principle 3:** Elements of the Onshore Cable Route that are over 400 m from the SPA are not subject to any restriction.
- **Principle 4:** Construction noise events of <55 dB can occur unrestricted.
- **Principle 5:** Construction works of 55 – 72 dB LAFmax immediately adjacent to a major road and/or adjacent to industrial sites with notable levels (>60 dB) of existing noise can be undertaken unrestricted. It is considered that noise levels from the Proposed Development would be masked (i.e. indistinguishable from the baseline) in these instances.
- **Principle 6:** Percussive piling or works with heavy machinery (i.e. plant resulting in a noise level in excess of 69 dB LAFmax – measured at the sensitive receptor) should be avoided during the bird overwintering period (i.e. October to March inclusive). The sensitive receptor is the nearest point of the SPA or any SPA supporting habitat (e.g. high tide roosting site). P54 and P29 are excluded from this principle. Buildings that are situated between them and the construction works will buffer noise such that it will not be in excess of 69 dB LAFmax within either site.

Soil Horizon Preservation

- 1.5.3.6. Mitigation for temporary loss of important grassland shall be to maintain soil horizons and preserve grassland turf. Mitigation shall be put in place at Kings Pond Meadow SINC, Denmead Meadows, Milton Common SINC and semi-improved grasslands in along the Onshore Cable Corridor.

Improvements in remaining grassland

- 1.5.3.7. Improvement of grassland at the Converter Station involves the application of green hay. Green hay contains seed from a diversity of wildflower species and would inoculate retained grassland with new flora. The green hay shall be sourced from Denmead / Kings Pond Meadow to ensure native plants of local provenance are used to colonise and increase the value of the grassland. Improvement using green hay shall take place in late spring (June-July) in the year following completion of construction works.

Ground Protection

- 1.5.3.8. Use of bog matting, temporary membranes with Type 1 aggregate or similar ground protection solutions shall be used to prevent compaction of grassland soils at Kings Pond Meadow SINC, Denmead Meadows, Milton Common SINC and semi-improved grasslands along the Onshore Cable Corridor. This mitigation measure would promote regrowth of vegetation to its original state.
- 1.5.3.9. Topsoil and sub soil removed from different fields within Denmead Meadows shall be stored separately during works with no mixing of soils from these different locations. Soil piles shall not be stored on HPI quality habitat.

Stripping of Turves and their Preservation

- 1.5.3.10. With timing subject to sod conditions, before works commence turves shall be cut from the HDD launch compound at the southern end of Denmead Meadows as this particularly sensitive HPI-quality Lowland Meadow habitat. Other fields do not comprise HPI habitat or are above HDD so will not be affected.
- 1.5.3.11. Turves shall be removed from Field 3 and stored away from Denmead Meadows locally. Cutting shall utilise a turf cutting machine attached to low ground pressure machinery (e.g. farm tractor) with an operator with appropriate experience.
- 1.5.3.12. Turves shall be cut to a thickness of 5-8 cm (2-3 inches) to maintain root systems, seed bank and soil to provide material to aid keeping turves moist whilst they are stored. Rolls of turf shall be collected for movement by a telehandler, with pallets used to transport the rolls as necessary. At the storage site, turves shall be unrolled onto the ground and shall not be stacked. Measures shall be put in place to maintain the turves and keep them moist; daily monitoring and potentially twice daily watering would be a minimum but dependent on weather conditions. Storage area vegetation shall be cut tight to the ground prior to delivery of turves to create a relatively smooth surface for storage.

Seed Harvesting and Reseeding

- 1.5.3.13. Where HDD launch compound will be placed at the southern end of Denmead Meadows, regrowth of habitat shall be promoted by collecting seed from plants already present and reseeded using this collected seed following work. This will preserve the local mixture of meadowland plants unique to Denmead Meadows and used rather than buying a commercial seed mix.
- 1.5.3.14. Using a specialist contractor, a seed harvester shall be used to collect seed prior to the onset of works. Re-seeding shall take place using collected seed in spring following the completion of construction and decommissioning stage works.
- 1.5.3.15. Two seed collection sweeps shall be undertaken, one in late June/Early July to catch early flowering plants and one in late August/early September for late flowering plants.

Restoration of Habitat within Denmead Meadows

- 1.5.3.16. Turves shall be returned to the area used for the HDD launch compound following completion of HDD work and its demobilisation. Replacement to proceed from back of field towards the access point to avoid tracking over turves.
- 1.5.3.17. Watering in of turves shall follow their replacement.
- 1.5.3.18. Re-seeding of the compound area shall be undertaken using collected seed in spring following the completion of works.
- 1.5.3.19. Fields supporting the HDD reception compound in the north of Denmead Meadows shall be reseeded with any seed remaining from that harvested from the lowland meadow areas, augmented by a commercially available lowland meadow seed mix as necessary.

Monitoring and Management

- 1.5.3.20. Pre-construction survey currently scheduled for spring 2021 to establish green winged orchid population in lowland meadow habitat, and general character of the vegetation there. Suitably qualified botanists shall carry out direct counts of green winged orchid plants present. They shall also use quadrats to carry out a National Vegetation Classification (NVC) survey of the field, identifying plant species present and classifying the habitat type present.
- 1.5.3.21. Three years of management e.g. cutting/weed pulling, spread over a 5 year period (i.e. carried out in years 1, 3 and 5) shall be applied to former compound areas within the Order Limits at Denmead Meadows. Management shall mimic that which occurs currently (i.e. prior to construction) to maintain diversity, including any grazing which may be present.
- 1.5.3.22. No additional heavy interventions shall be made, only a once yearly hay cut.
- 1.5.3.23. Botanical survey in each year of management (years 1, 3 and 5 post construction) to inform changes required to maintain habitats, comprising the same method as the pre-construction survey.

1.5.4. SECTION 2- 9 ONSHORE CABLE ROUTE: SECTION-SPECIFIC MITIGATION

1.5.4.1. The following paragraphs set out mitigation specific to individual Sections of the Onshore Cable Route which shall be incorporated in the relevant detailed landscaping schemes (secured through Requirement 7) and relevant CEMPs (Requirement 15 of the dDCO). Where the detailed design of the Cable Route has yet to be determined and route options remain open, they set out detailed design guidance which must be implemented to minimise impacts.

Section 2 Anmore

- Trees are an important feature visually within this section. The detailed alignment shall be developed to ensure no mature trees are affected by the cable routing.
- The impact of the cable installation on the deciduous copse (W682) to the field east of Saltbox Barn/Cottages shall be avoided with a 15 m standoff.
- Sections of hedgerows bounding the edge of the Order Limits would remain unaffected. Hedgerows lost shall be replaced and hedgerow trees shall be replaced where it is practicable to plant replacements at least 5 m from the Onshore Cable Route within the Order Limits.
- The Onshore Cable Route shall avoid impacting on the TPO'd oak tree (T393) (TPO - 2246 T1) to north of Anmore Road and a mature Category A oak tree (T409).

Section 3 Denmead/Kings Pond Meadow

- Detailed design measures shall be taken to minimise the impact on mature Category A / B trees (predominately oak trees).
- Sections of hedgerows bounding the Order Limits would remain unaffected. Hedgerows lost shall be replaced and hedgerow trees shall be replaced where it is practicable to plant replacements at least 5m from the Onshore Cable Route within the Order Limits.
- Works that run close to the edge of (G661, T302 and T306) (TPO - 1350 G1) and (T300 and H799) (TPO - 1350 G6) shall be reviewed at detailed design to minimise impacts through Onshore Cable Micrositing.

Section 4 Hambledon Road to Farlington Avenue

- Works shall not be permitted in the footway or verge where there are mature trees (Category A/B), except where technical constraints make this unavoidable.
- Works would take place within Portsdown Country Park car park on top of Portsdown Hill and shall avoid trees to the north of Portsdown Hill Road.

- Mitigation tree planting to replace any trees lost opposite the junction of Hambledon Road and Darnel Road, and to the north of Hambledon Road and south of Milton Road shall be repositioned at least 5 m away from the Onshore Cable Route within the Order Limits. Where the siting of new trees cannot be accommodated, replanting in the locality is required.
- Cable works that run close to the edge of a number of trees subject to TPO's including G651 (TPO 1301) must be reviewed at detailed design to minimise impacts, considering Onshore Cable Micrositing.
- Works shall avoid impacting on G654 (TPO 75/1982) Christ Church, Portsdown.

Section 5 Farlington

- Detailed design measures shall be taken to minimise the impact on mature ornamental street and garden trees. These include Category A to C trees which form an important visual feature in this section. Where significant incursion is unavoidable, replanting in the locality is required.
- Cable works that run close to the edge of a partially pollarded poplar and hedgerow (H896 and T925) which are subject to a TPO (TPO – 201) shall be reviewed at detailed design to minimise impacts considering Onshore Cable Micrositing, with a slight variation in the route to avoid the TPO trees (within the Order Limits).
- In agreement with PCC, in the event that TPO feature H896 (201/1997) requires replacement, other than the poplar (T925), these features shall be replaced like for like. For T925, alternative species such as beech, sweet chestnut or yew may be considered.
- Tree group G911 (category C trees) would be lost where the cable route proceeds through land to the south of Eveleigh Road.
- Sections of hedgerows lost shall be replaced with like for like species.
- Where trees are to be replanted in proximity to the Onshore Cable Route, they shall be repositioned at least 5 m away from the Onshore Cable Route within the Order Limits.

Section 6 Zetland Field and Sainsbury's Car Park

- The Onshore Cable Corridor will result in the partial loss of some Category A trees within group (G720) and Category B tree groups (G660 and G910) as well as the loss of one Category B tree T73 and Category C trees T71, T72 and T74 within Zetland Field. The installation works shall avoid impacting on a willow, Category B T924. Trees and shrubs shall be replaced with like for like species of a similar size where practicable and trees repositioned at least 5 m away from the Onshore Cable Route within the Order Limits. Where the siting of new trees cannot be accommodated, replanting in the locality is required.
- Detailed design measures shall be taken to minimise 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.
- There will 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.

Section 7 Farlington Junction to Airport Service Road

- Detailed design measures shall be taken to minimise the impact on tree and scrub planting along the southern edge of the railway line.
- The Onshore Cable Corridor will run through Farlington playing fields west of the hotel. Should the access track to the cricket pavilion and hotel car park not be sufficient to withstand heavy vehicular loading (and therefore not impact on adjacent Category B tree groups G680, G783, G706, G671 and G582) bog matting or similar techniques in accordance with paragraph 1.5.3.8 shall be used to avoid compaction of the RPAs.
- Where significant incursion is unavoidable and the siting of new trees cannot be accommodated, replanting in the locality is required.
- Trees in this section including 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 form strong landscape features. If any trees are likely to be affected by construction traffic, they must be pruned back sufficient to avoid accidental damage and monitored. If it becomes necessary to remove any trees they shall be replaced like for like and of a similar size (subject to agreement with PCC as the relevant discharging authority). Replacement trees shall be repositioned at least 5 m away from the Onshore Cable Route within the Order Limits.

- Trees and shrub planting (Category B G695, G711 and T70) and associated root protection areas to the west of the Baffins Milton Rovers Football Ground (Kendall Stadium) would experience partial loss by the cable routing since the cable routing would run through the football ground rather than to the west. Planting around Baffins Milton Rovers Football Ground is a key landscape feature which serves an important contribution to visual amenity and screening. Detailed design should avoid positioning cables in conflict with RPAs of existing trees.
- The Order Limits include an access road to the east of the Baffins Milton Rovers Football Ground which runs to Andrew Simpson Watersports Centre passed Kendall's Wharf (a mineral aggregate wharf) and existing vegetation to the north. The Onshore Cable Corridor will impact on Category C trees and shrubs (a mix of poplar, willow, lime, pine and sycamore - G663, W885, W886, G908 and G909). All of these trees and shrubs serve a limited visual amenity function apart from G663 which visually connects with tree planting south of the access road to the Football Ground and Watersport Centre. In these areas where significant incursion is unavoidable, trees must be replaced. To mitigate for the loss of these features a similar tree mix shall be planted on either side of the access road into Kendall's Wharf and Andrew Simpson Watersports Centre allowing for easements associated with the Onshore Cable Corridor.
- Farlington Playing Fields is unlit and construction lighting could result in disturbance of bat commuting routes and foraging areas located around the site's edge where scrub and woodland are located. These habitats are used by bats to navigate and find food (open areas are avoided as no physical features are present to reflect echolocation calls). To avoid effects on bats, trenching areas and compounds for HDD work shall be set back from the edge of the playing fields by at least 10 m to maintain habitats there and preserve bat flight lines.

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

- Works shall not be permitted in the footway or verge where there are mature trees except where existing constraints make this unavoidable. Where significant incursion is unavoidable and the siting of new trees cannot be accommodated, replanting in the locality is required.
- Detailed design measures shall be undertaken to minimise the impact on mature Category B trees and design and construction must follow BS 5837 as a minimum.

- Detailed design measures shall be undertaken to avoid impacting on trees within Milton Common and the eastern edge of Portsmouth College/Eastern Road. Some scrub may be lost as a consequence of the works.
- Should the final details of the route alignment confirm the loss of TPO feature T59 opposite the junction of Burrfields Road near Great Salterns Mansion, this feature must be replaced with like for like species of a similar size.

Section 9 Moorings Way to Bransbury Road

- Works shall not be permitted in the footway or verge where there are mature trees except where existing constraints make this unavoidable.
- A small number of Category B trees and shrubs (G900) edging Milton Lock Nature Reserve and the pub car park will 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. Liaison shall take place with the site manager at Milton Lock Nature Reserve to agree the most appropriate form of mitigation.
- Whilst the Onshore Cable Corridor will be via HDD across Milton and Eastney Allotments, there will be the loss of Category C trees to the south (T916, T917 and G899). From a visual amenity perspective these serve a limited amenity function both in terms of character and screening – G899 mainly scrub with occasional trees and are not considered to be key landscape features.
- Detailed design measures shall be undertaken to limit the impact on Category A, B and C avenue trees and their RPAs running north/south within Bransbury Park and ornamental street trees to the south and western boundary of the Park under the supervision of the Environmental Clerk of Works. This includes tree group G697. Trees include ash, birch, copper beech and London plane. These trees serve an important function in terms of visual amenity albeit some of the ash are suffering from ash die back. Opportunities must be explored to remove diseased trees and replace with other ornamental species of a similar size in agreement with PCC. Where significant incursion is unavoidable, trees shall be replaced with like for like species of a similar size subject to agreement with PCC and planted 5 m beyond the Onshore Cable Route within the Order Limits. Where the siting of new trees cannot be accommodated, replanting in the locality is required.

1.5.5. SECTION 10 - EASTNEY (LANDFALL)

1.5.5.1. General embedded mitigation measures which apply to the whole of the Proposed Development and of relevance to Section 10 Landfall are detailed in paragraph 1.5.1.4. Given that there is greater certainty over the location of potential structures and cable route in this location the following section outlines specific embedded mitigation measures (secured through Requirement 15 and to be included in the relevant CEMP) and detailed design guidance to be implemented:

Specific embedded mitigation measures

- 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 of the ES Chapter 15) 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 will 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 (trip rails) replaced if removed or damaged.

Detailed design guidance to be implemented

- Works shall not be permitted in the footway or verge where there are mature trees (Category B) except where existing constraints make this unavoidable. Where significant incursion is unavoidable, trees shall be replaced with like for like species of a similar size.
- Detailed design measures shall be taken to minimise the impact on mature medium value Category B trees along Henderson Road/Fort Cumberland Road. Trees include ash and cherry, many of which are subject to TPOs. Design and construction shall follow BS 5837 as a minimum.
- Category C mature ash (T6) within to the northern edge of Fort Cumberland car park shall be retained as this is an important landscape feature.

1.5.5.2. As outlined above all landscape mitigation and enhancement measures occur during the construction phase and are embedded. Mitigation generally refers to the mitigation of visual impacts, improvements on connectivity and fragmentation, whereas enhancement measures typically contribute to enhanced landscape character and improved quality of existing habitats. In specific locations, enhancements such as the introduction of hedgerow trees and new hedgerows will also contribute towards mitigating visual impacts.

1.6. LANDSCAPE AND BIODIVERSITY DESIGN FOR MITIGATION AND ENHANCEMENT

1.6.1.1. The above sections outlined the impacts of the Converter Station, Onshore Cable Corridor and Landfall, and gave an overview of embedded mitigation and enhancement measures. The following section outlines the design approach to all proposed planting (both embedded mitigation and embedded enhancement planting) for Section 1 and 10, referring to specific offsets and constraints associated with the landscape design and consideration of climate resilience.

1.6.2. DESIGN PRINCIPLES AND PHILOSOPHY

1.6.2.1. The Design and Access Statement explains the form and appearance of the Proposed Development and provides a tool to communicate how the requirements for good design and access provision have been considered. It also includes Design Principles, which are to be followed to progress the final design. Design Principles cover a number of aspects including general principles, building design, and landscape design principles.

1.6.2.2. The fundamentals of the landscape design are anchored in the landscape design principles discussed below.

1.6.3. LANDSCAPE DESIGN PRINCIPLES

1.6.3.1. A set of landscape design principles for the Converter Station Area and the Landfall, were prepared and refined following discussions and close consultation with the design team, LPAs (WCC, EHDC and HBC) and SDNPA. These Principles were used to inform the Parameter Envelope for both the Converter Station Area and Landfall as defined in the following documents:

- Converter Station and Telecommunication Building Parameter Plans Sheet 1 to 3 (APP-012);
- Optical Regeneration Station Parameter Plan Sheet 1 (APP-017);

1.6.3.2. Indicative Landscape Mitigation Plans, which informed and in turn are based on the Parameter Envelope for both the Converter Station Area and Landfall are provided by the following documents:

- Indicative Landscape Mitigation Plans for the Converter Station Area (see Figures 15.48 and 15.49 of the ES Volume 2 (APP-281 and APP-282); and
- Indicative Landscape Mitigation Plans for the Landfall (see Figure 15.50 of the ES Volume 2 (APP-283).

1.6.3.3. The Indicative Landscape Mitigation Plans for the Converter Station Area and Landfall seek to reduce potential landscape and visual effects of those elements of the Proposed Development and create positive new habitats, as well as improving connectivity and creating links to existing ancient woodland. The plans also considered:

- Local landscape character assessments;
- Existing constraints for the Converter Station Area; and
- New planting constraints for the Converter Station Area.

1.6.3.4. The constraints for existing and new planting relate to offsets from security fencing, underground and overhead cables, badger sets, ancient woodland and hedgerows. Offsets are also provided for through the application of limits to vegetation heights. The offsets and constraints were informed by health and safety guidelines stipulated in Electricity Safety, Quality and Continuity Regulations 2002, as amended by the Health and Safety Executive (Health and Safety Executive, 2002).

1.6.4. **SPECIFIC OFFSETS AND CONSTRAINTS**

1.6.4.1. A number of fixed offsets / standoffs are required due to the range of utilities and landscape and ecological constraints present. These are as follows:

Existing Features for Converter Station Area

- Ancient Woodland, groups of existing trees (formerly hedgerows) hedgerows - at least 15 m clearance from the Converter Station and associated infrastructure.
- Badger Setts – 30 m.
- Overhead lines – 30 m exclusion from 400 KV overhead lines (taken from the outermost conductor) for all trees.³
- No planting can take place over 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.

Proposed planting constraints for Converter Station Area

- Hedgerows (growth up to 2 m) - set back 5 m from security fence.
- Scrub (growth up to 4 m) – set back 10 m from the security fence.
- Trees (up to 15 m height) – 1.5 x 15 m + 3 m = 25.5 m standoff from security fence.

³ It should be noted that in specific locations and to improve connectivity scrub has been introduced near or under overhead lines and this would be managed to a height of 4m

- Trees (up to 25 m in height) – 1.5 x 25 m + 3 m = 40.5 m standoff from security fence. For safety and security reasons, offsets are required to ensure: a clear line of sight along the security fence; that falling trees do not damage the security fence and; that vegetation does not aid an intruder to climb the security fence.

Proposed planting constraints for the Landfall

- Hedgerow with trees shall be set back 5 m from the Onshore Cable Route within the Order Limits; and
- Trees shall be offset 8 m from the ORS building(s) within the Order Limits.

Proposed planting constraints for the Onshore Cable Route falling within the Converter Station Area

- New cables can be planted over with hedgerows / scrub on the basis that they are housed within underground concrete ducting blocks to avoid unintentional damage and drying out of the duct cable surround.
- New tree planting shall be offset by 5 m on either side of the Onshore Cable Route within the Order Limits.
- It is not permitted to plant over existing SSE oil filled cables.

Proposed planting and routing constraints for the Onshore Cable Route for Section 2 to 10

- New cables can be planted over with hedgerows / scrub on the basis that they are housed within underground concrete ducting blocks to protect the cables from roots and the drying out of the duct surround.
- New tree planting shall be offset by 5 m on either side of the Onshore Cable Route within the Order Limits.
- Impacts of important habitats and vegetation (particularly trees subject to Tree preservation Orders ('TPO's), hedgerow trees, hedgerows and grassland shall be minimised through Onshore Cable Micrositing.
- Cable routing shall be developed to avoid affecting hedgerows and hedgerow trees on the Order Limit boundaries, as far as practicable.

1.6.4.2. Planting proposals beneath and adjacent to overhead lines are specified for slow and low-growing species of trees and shrubs (see Indicative Converter Station Layout Plans for Option B(i) Sheet 1 (APP-013) for the location of some of the existing constraints).

1.6.4.3. All planting lost shall be replaced with like for like species of a similar size in so far as is practicable and in agreement with the relevant discharging authority. All land shall be reinstated following the installation of the Onshore Cable Route.

1.6.5. OPPORTUNITIES TO MAXIMISE BIODIVERSITY

1.6.5.1. Opportunities to maximise biodiversity for the specific sections of the Proposed Development will be reflected in the biodiversity management plan and reflected in the detailed landscape scheme. Opportunities include the following:

Section 1 – Lovedean (Converter Station Area)

1.6.5.2. For the Converter Station Area and as identified in the indicative landscape mitigation plans opportunities include:

- Extension / reinforcement of ancient woodland;
- Management / extension of existing woodlands and linear tree belts – this would have benefits for breeding birds and improve habitat connectivity for example commuting and foraging bats;
- New native woodland belts and copses with glades and more open woodland edges to encourage understorey and ground flora to develop - again would benefit several ecological features;
- Native scrub planting;
- Areas set aside for natural regeneration;
- New native hedgerows;
- Management and retention of existing hedgerows and hedgerow trees;
- Calcareous and marshy grassland – the latter associated with the attenuation ponds and swales; and
- Marginal planting for attenuation ponds and swales.

1.6.5.3. The management, extension and establishment of woodland belts, copses and scrub would have benefits to several ecological features. It would support invertebrate and breeding birds in addition to protected species such as badger. The improved connectivity of woodland habitat would also benefit commuting and foraging bat species.

1.6.5.4. Native hedgerow planting would also assist protected species particularly red listed bird species such as yellowhammer and linnet. Existing hedgerows/ hedgerow trees within the Order Limits would be maintained in perpetuity through:

- 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.

- 1.6.5.5. New hedgerow planting will be introduced to the north of the Converter Station to reflect the line of a former historic hedgerow.
- 1.6.5.6. Opportunities for hedgerow laying or coppicing would be considered for new hedgerow planting in the Converter Station Area in discussions with the relevant discharging authority and in consultation with the SDNPA.
- 1.6.5.7. Calcareous wildflower grassland will be introduced to reflect effects of the underlying chalk geology lost to agricultural improvement. Green hay gathered in Section 3 Denmead/Kings Pond Meadow shall be integrated into the grassland mix.
- 1.6.5.8. Management of grassland and swales while providing higher quality botanical value would also support or allow colonisation by protected species such as reptiles and/or great crested newts.

Section 2 – 9 Onshore Cable Corridor

- 1.6.5.9. No enhancement measures are proposed.

Section 10 – Eastney (Landfall)

- 1.6.5.10. No enhancement measures are proposed. Embedded mitigation measures shall include new planting in the form of amenity grassland, hedgerows and hedgerow trees where practicable.

1.6.6. RESPONDING TO CLIMATE CHANGE

- 1.6.6.1. The UK Climate Change Risk Assessment 2017 Evidence Report informs the government's ongoing National Adaptation Programme.
- 1.6.6.2. The UK Climate Change Risk Assessment takes a three-step approach to ensure climate risks are assessed in a consistent manner and graded based on the level of urgency required in response:
- Considering the magnitude of risk now and in the future;
 - Taking into account policies and adaption plans already in place to manage the risks; and
 - Considering the potential benefits of further action.
- 1.6.6.3. The landscape design shall incorporate the following resilience measures to future changes in landscape and biodiversity demands:
- All seed mixes and planting stock will be ordered as early as practicable to ensure that the supply can be met without risk of substitution;

- All seed mixes and planting stock will be sourced from a local British supplier of native plants who can source all identified stock locally (i.e. not a non-specialist nursery that buys in stock or an agricultural/ general merchant that buys stock from diverse sources, including non-British sources);
- All plant species will be common in the local vicinity to maximise the chance of successful establishment;
- All grassland wildflower mixtures (other than seed obtained from Denmead/Kings Pond Meadow) will be approved in accordance with the Seed (Registration, Licensing and Enforcement) (England) Regulations 2002;
- No part of the order for planting shall be substituted with stock of alternative species or origin and any change must be mutually agreed between the contractor and the environmental clerk of works overseeing the planting;
- Existing on-site topsoil shall be utilised in so far as is practicable for new proposed planting;
- Species mixes and densities will be proposed which encourage growth to maturity and in consideration of constraints with overhead cables;
- A diverse mix of species and ages of planting suited to local conditions will, in the short-term, be resilient to threats and associated with tree pests and diseases (such as Chalara/ash dieback) at a landscape level;
- Sustainable Urban Drainage System will be introduced including attenuation ponds in response to topography amendments and altered drainage demands;
- A range of floral species mixes will be planted to ensure maximum biodiversity and avoid monocultures; and
- A variety of habitats shall be created appropriate to the local fauna and environment.

1.6.6.4. The above requirements shall be incorporated into contractor specifications (an outline of which is included in Appendix 1 (Outline Specification) of this document) and contracts as appropriate to deliver genuinely native plantings in accordance with the biodiversity objectives of this Strategy.

1.6.7. PROPOSED PLANTING

1.6.7.1. With the above design principles, constraints and climate resilience in mind, the principles of the proposed planting at the Converter Station Area include the following:

- Use of a mix of plant stock of local provenance where practicable, including larger trees in specific locations and native 'pioneer' species to create variations in the woodland structure and mix;

- Woodlands containing a mix of predominantly deciduous trees and small elements of native coniferous species where appropriate, understorey and ground flora to aid screening. Areas of scrub shall extend beyond woodland areas aiding low level screening. Within specific locations (determined through detailed design), glades and open “looser” woodland edges shall be created to provide a range of woodland habitats and enable the understorey and ground flora (including ferns) to establish and regenerate naturally;
- Native mixed species hedgerows will connect with existing hedgerows for instance along the 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; and
- A mix of marshy grassland and marginal planting will be selected for the attenuation ponds and swales, with root protection barriers alongside the Access Road.

1.6.7.2. The proposed planting serves the following 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 reasonably 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.

1.6.8. **PLANTING SCHEDULES AND PLANTING HEIGHTS**

1.6.8.1. Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) (APP-405) contains a detailed breakdown of the proposed planting species and mixes to be used, but in summary, the habitats and mixes identified are outlined below. These are based on Phase 1 habitat types as per the Joint Nature Conservation Committee’s (‘JNCC’) Phase 1 Handbook. The final breakdown of species, mixes and heights will be subject to approval of the relevant discharging authority post consent in discussion with the SDNPA as part of the detailed landscaping scheme (secured by Requirement 7 to the dDCO (APP-019)).

Converter Station Area

- 1.6.8.2. Within the Converter Station Area, the following planting types are proposed:
- Native hedgerow;
 - Native hedgerow with hedgerow trees;
 - Native mixed woodland (up to 15 m in height) with understorey planting and ground flora;
 - Native mixed woodland (up to 25 m in height) with understorey planting and ground flora;
 - Scrub;
 - Scrub with scattered trees;
 - Calcareous grassland;
 - Marshy grassland;
 - Attenuation pond; and
 - Vegetated conveyance and infiltration swale (marginal planting)
- 1.6.8.3. The exact location of understorey planting and ground flora (including ferns) within woodland shall be determined through detailed design.
- ### Landfall
- 1.6.8.4. The following planting types are proposed for the Landfall:
- Native hedgerow;
 - Native hedgerow with hedgerow trees; and
 - Amenity grassland.
- 1.6.8.5. Table 13 in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) (APP-405) details the anticipated height of proposed species at 10 years, 20 years, and at maturity.

1.7. SITE SPECIFIC LANDSCAPE MANAGEMENT PRESCRIPTIONS (SECTION 1 AND 10 ONLY)

1.7.1. OVERVIEW

- 1.7.1.1. The Applicant's overall objectives of the landscape management for both the Converter Station Area and Landfall are to ensure the existing and proposed vegetation matures to maximise biodiversity benefits; reduce the visual presence of the Proposed Development and respects local landscape character.
- 1.7.1.2. Existing features will be enhanced and managed, whilst new features shall be maintained and monitored to ensure they achieve an effective contribution to the Proposed Development.
- 1.7.1.3. The proposed management prescriptions for existing, new and replacement planting associated with Section 1 Converter Station Area will take place throughout the operational lifetime of the Proposed Development. The undertaker will be responsible for the maintenance of landscaping to be provided in connection with the ORS buildings at the Landfall, as confirmed at Requirement 8 to the dDCO.
- 1.7.1.4. New planting will be subject to a five-year establishment period. An outline specification and management guidelines for 0-5 years of aftercare of new planting is outlined in Appendix 1 to this document (Outline Specification).
- 1.7.1.5. The following sections, supported by the Outline Landscape and Biodiversity Strategy Management Plans (included in Appendix 2 of this document), provides:
- General management prescriptions for landscape features; and
 - More specific objectives for management areas defined within the Converter Station Area and the Landfall which include a mix of landscape features.
- 1.7.1.6. The Outline Landscape and Biodiversity Strategy Management Plans shall be reviewed periodically following site inspections to ensure the current management prescriptions are effective and if landscape targets need to be adjusted.
- 1.7.1.7. Each identified existing and proposed landscape feature shall receive management prescriptions based on their species mix and intended mitigation purpose.

1.7.2. CONVERTER STATION AREA

- 1.7.2.1. Management prescriptions are included for the following existing features within the Order Limits at the Converter Station Area:
- Broadleaved woodland, semi-natural;
 - Mature trees;
 - Native hedgerows and native hedgerows with trees; and
 - Scrub.

1.7.2.2. Management prescriptions are included for the following proposed features within the Order Limits at the Converter Station Area:

- Native mixed woodland (up to 15 m) with understorey planting and ground flora;
- Native mixed woodland (up to 25 m) with understorey planting and ground flora;
- Native hedgerow; and native hedgerow with hedgerow trees;
- Scrub and scrub with scattered trees;
- New calcareous grassland;
- Marshy grassland;
- Attenuation ponds; and
- Vegetated conveyance and infiltration swale (marginal planting).

1.7.2.3. Existing management regimes shall be maintained for Ancient Woodland, National Grid mitigation planting (where not removed as a consequence of the Converter Station being sited in this location), arable and pasture farmland, and such regimes are outside the responsibility of the Applicant. Construction/operation works undertaken close to such areas shall however need to consider indirect impacts.

1.7.3. LANDFALL

1.7.3.1. Management prescriptions are included for the following existing features within the Order Limits at the Landfall:

- Grassland/scrub; and
- A mature tree.

1.7.3.2. Management prescriptions are included for the following proposed features within the Order Limits at the Landfall:

- Native hedgerow and native hedgerow with hedgerow trees; and
- Amenity grassland.

1.7.4. PRESCRIPTIONS FOR EFFECTIVE MANAGEMENT

1.7.4.1. The management for each landscape area and individual features after the initial 0-5 year maintenance period referred to in Appendix 1 is detailed in the corresponding sections below. All planting must be undertaken in strict accordance with the following drawings referred to in Appendix 2 (noting that as there are two options for the Converter Station only the drawing for the option selected in accordance with Requirement 4 to the dDCO will be relevant).

- Figure 1 which provides the Outline Landscape and Biodiversity Strategy Management Plan for Option B(i)- Converter Station Area;

- Figure 2 which provides the Outline Landscape and Biodiversity Strategy Management Plan for Option B(ii) - Converter Station Area; and
- Figure 3 which provides the Outline Landscape and Biodiversity Strategy Management Plan - Landfall.

1.7.4.2. Each feature containing management prescriptions is identified with acronyms where appropriate, which are shown on the above figures and as outlined in the following table.

Table 1.1 - Landscape features and their acronyms

Landscape Feature	Acronym
Existing broadleaved woodland, semi-natural	EW
Proposed native mixed woodland (up to 15 m and 25 m)	PW
Existing and proposed native hedgerows	EH
Existing and proposed native hedgerows with trees	PH
Proposed scrub	SC
Proposed scrub with scattered trees	ST

1.7.5. CONVERTER STATION AREA - LANDSCAPE FEATURES PRESCRIPTIONS

Existing broadleaved woodland, semi-natural (EW)

- 1.7.5.1. EW provides intrinsic ecological value. Areas identified for retention must be retained and protected during Construction unless unforeseen technical constraints make this impracticable. Any areas damaged must be repaired.
- 1.7.5.2. Further investigation is required to determine the condition of trees and whether appropriate replacement planting must be introduced where there are suitable gaps in the woodland and where trees have failed and gaps are evident (including those affected by ash dieback).
- 1.7.5.3. Any construction activity in the proximity of trees shall incorporate a suitable root protection buffer, in consideration of the RPA in accordance with BS 5837:2012. An arboriculturalist shall be consulted to advise on the appropriate specification and location of protective fencing.
- 1.7.5.4. The following table outlines the management activities for EW.

Table 1.2 - Management prescriptions for existing broadleaved woodland, semi natural (EW)

Proposed Management Actions	Timing
Pruning during the appropriate season to maintain heath and vigour. Remove and dispose appropriately of any identified invasive species.	Annually (between October – March)
Remove and dispose appropriately of any disease-ridden timber outside of the bird nesting season to prevent disturbance. Deadwood which is not disease-ridden can be partially buried in areas where it would not impede the rooting systems of retained woodland scrub, ideally within areas with limited or no ground cover. The dead wood may be partially buried to replicate naturally occurring decay patterns in standing and fallen deadwood. .	Annually (between October – March)
Any ash trees infected with Chalara ash dieback shall be disposed appropriately and replaced with an alternative suitable species from the proposed planting palette.	Annually (between October - March)

Proposed native mixed woodland (up to 15 m and 25 m) (PW)

- 1.7.5.5. PW have a common objective to visually screen the Converter Station from the surrounding landscape receptors. Heights are limited due to offset constraints of existing infrastructure.
- 1.7.5.6. Using species of local provenance (see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for species information) (APP-405), the woodland would create a naturalistic and biodiverse woodland habitat appropriate to the local climate and site characteristics. Furthermore, the woodland will provide wildlife connections through the site and visual screening of the Proposed Development. More open “looser” woodland edges / margins will be designed to encourage understorey and ground flora (including ferns) to develop and regenerate where indicated providing a range of woodland habitats. The exact location of understorey and ground flora planting shall be determined through detailed design.
- 1.7.5.7. Areas of PW planting shall receive protective deer fencing enclosing the space to ensure the successful establishment of the plant stock.
- 1.7.5.8. Species selection will consider the growing rate and mature heights to ensure the areas reach 15 m or 25 m as appropriate (see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes) (APP-405).
- 1.7.5.9. The following Table 1.3. outlines the management activities for PW.

Table 1.3- Management prescriptions for proposed native mixed woodland (up to 15 m and 25 m) (PW)

Proposed Management Actions	Timing
Inspect planting for signs of defects or poor health to determine if works are necessary to ensure good health.	Annually (between October - March)
Remove and dispose appropriately of any identified invasive species.	Annually (between October - March)
Remove and dispose appropriately of any disease-ridden timber. Any ash trees infected with Chalara ash dieback shall be disposed appropriately and replaced with an alternative suitable species from the proposed planting palette. Deadwood which is not disease-ridden can be partially buried in areas where it would not impede the rooting systems of retained woodland scrub, ideally within areas with limited or no ground cover. The dead wood may be partially buried to replicate naturally occurring decay patterns in standing and fallen deadwood.	Annually (between October - March)
Inspect growth and height of woodland planting and understorey planting. A suitably qualified tree surgeon must be consulted if tree surgery is required to retain objective height.	Annually (between October - March)
Selective thinning of planting.	10 years after planting (between October - March)
Inspect ground flora and ferns. Remove dead material.	Annually (between October - March)

Existing mature trees

- 1.7.5.10. See Appendix 16.3 (Arboriculture Report) for further information regarding location, condition/quality and species of existing mature trees. See Section 1.4.5 for a list of the existing woodland within the Order Limits.
- 1.7.5.11. Refer to section above on EW for typical management objectives for individual existing mature trees.

Existing and proposed native hedgerows (and with trees) (EH) (PH)

- 1.7.5.12. Refer to the Outline Landscape and Biodiversity Strategy Management Plans for the location of named hedgerows (included within Appendix 2 of this document) and Appendix 16.3 (Arboriculture Report), for species composition and quality of EH and PH.
- 1.7.5.13. Hedgerows shall be managed to improve foraging and wildlife corridor value, whilst creating a functional boundary, connecting to the wider local landscape and maintained to a specified height to provide visual screening. Any supplementary or replacement planting shall use species within the immediate vicinity for continuity and consistency across the length of the hedgerow habitat.
- 1.7.5.14. Where hedgerow trees exist, or are to be introduced, they must continue to be clearly tagged to avoid flailing and to allow them to develop in to mature specimens.
- 1.7.5.15. Infill planting to existing hedgerows post five years maintenance shall receive tree or shrub guards to protect from damage of grazing rabbits and deer.
- 1.7.5.16. All pruning shall promote bushy growth while providing continued habitat, to create a consistent landscape biodiversity feature.
- 1.7.5.17. The following Table 1.4 outlines the management activities for existing and proposed native hedgerows; with and without trees.

Table 1.4 - Management prescriptions for existing and proposed native hedgerows (and with trees) (EH)(PH)

Proposed Management Actions	Timing
Following establishment, all new and infill planting shall be managed in accordance with the regime for existing hedgerows.	Annually (between May – August)
Replace any dead or dying specimens.	Annually (between November - March)
Cut hedges in to an ‘A’ shape. Cutting shall be carried out in early Jan – Feb to maximise the retention of berries in the hedgerow.	Annually (between January – February)
Hedges must be pruned on one side at a time alternating on a 3 year rotation cycle. Pruning must occur in Jan-Feb to maintain hedges at specified heights.	Annually (between January – February)

Existing Hedgerows

- 1.7.5.18. Type 1 – maintain at 3-4 m in height, gap up with new planting as required to achieve continuous hedgerow.
 - EH1, EH2, EH3, EH4, EH6, EH8, EH10, EH11, EH16, EH17, EH18, EH19, EH20, EH21, EH22, EH-31.

1.7.5.19. Type 2 – maintain at 3-4 m in height, gap up with new planting as necessary to achieve a continuous hedgerow, but also include hedgerow trees where practicable avoiding overhead lines.

- EH7, EH15, EH23, EH24, EH25, EH26, EH27, EH28, EH29, EH30.

Proposed Hedgerows

1.7.5.20. Most of the proposed hedgerows shall be maintained up to 3- 4 m in height with, where specified, hedgerows trees allowed to grow through and form a partial screen at a greater height.

1.7.5.21. Certain hedgerows shall be maintained at 2-2.5m, these either lie within 5 m of the Converter Station security fence; their height restricted to prevent their use as climbing aid for unauthorised entry or close to or under overhead lines.

1.7.5.22. Type 1 – maintain at 3-4 m in height with no hedgerow trees.

- PH2, PH-10, PH-11, PH12, PH13

1.7.5.23. Type 2 – maintain at 3-4 m in height and include hedgerow trees.

- PH1, PH5, PH8, PH9

1.7.5.24. Type 3 – maintain at 3-4 m in height and include hedgerow trees unless constrained by proximity to Converter Station or overhead power lines where they are then to be maintained at 2.-2.5m.

- PH3, PH4

1.7.5.25. Type 4 – maintain at 2 to 2.5 m in height with new hedgerow trees to reflect a continuous feature with PH7.

- PH6

1.7.5.26. Type 5 – maintain at 2 to 2.5 m in height with no hedgerow trees due to overhead power lines.

- PH7

Proposed scrub (and with scattered trees) (SC) (ST)

1.7.5.27. Scrub planting would enhance the habitat mosaic associated with woodland areas to form a new understorey edging the proposed woodlands, improve habitat cover and connectivity for local wildlife and achieve a greater diversity of species and habitats.

1.7.5.28. Scrub areas closest to the Converter Station, near to the ancient woodland and Telecommunications Buildings shall be managed to restrict the successional development due to constraints associated with the Converter Station and overhead lines. Beyond the offsets scrub shall be allowed to naturally regenerate.

1.7.5.29. The following Table 1.5 outlines the management activities for SC and ST.

Table 1.5- Management prescriptions for proposed scrub (and with scattered trees)

Proposed Management Actions	Timing
Inspect planting for signs of defects or poor health to determine if works are necessary to ensure good health.	Annually (between October – March)
Replace any dead or dying specimens.	Annually (between November - March)
Remove and dispose appropriately of any disease-ridden timber.	Annually (between October – March)
Retain fallen deadwood where appropriate and does not pose a health and safety risk	Annually (between October – March)

Proposed grassland (calcareous and marshy)

- 1.7.5.30. As referred to in Appendix 1 species-rich calcareous grassland habitat shall be established following topsoil removal or inversion and ground preparation. The seed mix sown shall be appropriate to the local geographical context and native species of UK provenance. Seed harvested prior to works in Section 3 Denmead/Kings Pond Meadow (late June/early July and late August/early September) shall be sown to supplement the species mix above as specified in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) (APP-405) following the completion of the construction works.
- 1.7.5.31. New marshy grassland will replace grassland lost with a mix to match species identified through the Phase 1 Habitat Survey. See Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.
- 1.7.5.32. Arisings shall be retained in situ for three days during dry conditions to allow seed dispersal. Some arisings shall be retained in low habitat piles as animal refuge areas on grassland boundaries.
- 1.7.5.33. No fertiliser shall be applied to any areas to be established as wildflower grassland.
- 1.7.5.34. The following Table 1.6 outlines the management activities for the proposed grasslands.

Table 1.6 - Management prescriptions for proposed grassland (calcareous and marshy)

Proposed Management Actions	Timing
Two cuts undertaken each year, keep sward to 4-6 cm.	Twice annually (March – April and September – October)
Remove weeds by hand.	Annually (between May – August)

Proposed attenuation ponds

1.7.5.35. The attenuation ponds shall be managed as part of a functional surface water drainage regime and generating a new habitat within the landscape. It will be ensured that no herbicides or chemicals are used on or near aquatic locations. See Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) (APP-405) for proposed planting palettes.

1.7.5.36. The following Table 1.7 outlines the management activities for the attenuation ponds.

Table 1.7 - Management prescriptions for proposed attenuation ponds

Proposed Management Actions	Timing
Prevent any individual species becoming dominant and encroaching into surrounding areas by removing unwanted plants by hand.	Annually (between November - February)
Ensure inlet and outlet channels are kept clear and any encroaching vegetation is removed.	Annually (between November - February)
Allow margins to naturally regenerate to encourage succession. Check and clear pond of rubbish. Remove leaf litter on a two-year rotation. No dredging works to be undertaken without appropriate ecological consultation.	Annually (between November - February)
Maintain suitable access routes for maintenance.	Annually (between November - February)

Proposed marginal planting

1.7.5.37. Areas of marginal vegetation with no single species allowed to dominate shall be maintained to maximise wildlife opportunities. See ES Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) (APP-405) for proposed planting palettes.

1.7.5.38. The following Table 1.8 outlines the management activities for the proposed marginal planting.

Table 1.8 - Management prescriptions for proposed marginal planting

Proposed Management Actions	Timing
Physically remove invasive species and/or notifiable weeds.	Annually (between May – August)
Prevent encroachment into water body, ensuring that sufficient open water is maintained at all times to prevent stagnation.	Annually (between May – August)
Remove any dead plant material.	Annually (between May – August)

1.7.6. LOVEDEAN (CONVERTER STATION AREA) - MANAGEMENT AREAS

1.7.6.1. Management prescriptions have been identified for each landscape feature. Due to the mosaic of the planting design and breadth of management objectives for each landscape planting feature, certain areas within the Converter Station Area have been grouped together. These are referred to as management areas A to G, where a particular approach and set of management prescriptions is required to achieve specific landscape objectives in the longer term.

1.7.6.2. The location of the management areas is shown in:

- Figure 1 Outline Landscape and Biodiversity Strategy Management Plan for Option B(i) - Converter Station Area; and
- Figure 2 Outline Landscape and Biodiversity Strategy Management Plan for Option B(ii) - Converter Station Area; in Appendix 2 (Outline Landscape and Biodiversity Strategy Management Plans) of this document.

Management Area A

1.7.6.3. Location: Approximately 25 m to the west and north of the Converter Station at its closest point.

1.7.6.4. Total area, area of new planting and planting breakdown is detailed in Table 1.9 below:

Table 1.9 - Total area, area of planting and planting breakdown for each Option

	Option B(i)	Option B(ii)
Total Area	3.98 ha	4.65 ha
Total area of new planting comprising:	1.97 ha	2.11 ha
• Native Woodland (Up to 25m)	1.23 ha	1.23 ha
• Native Woodland (up to 15 m)	0.28 ha	0.64 ha
• Scrub with scattered trees	0 ha	0.06 ha
• Scrub	0.46 ha	0.18 ha

- 1.7.6.5. The management objectives of this area are to:
- Create a visual screen through a dense belt of native woodland comprising a combination of existing established hedgerows and hedgerow trees and proposed native tree planting with understorey and ground flora, with the intention of reducing views of the Converter Station particularly for residents immediately to the north and north west.
 - Enhance landscape connectivity and provide habitat corridors.
 - Contribute to biodiversity in the wider area.

- 1.7.6.6. The constraint specific to this area is that planting within Management Area A is defined by its proximity to the Converter Station to the east and by overhead high voltage cables to the north.

- 1.7.6.7. Landscape features (or parts thereof) contained within Management Area A are:

Option B(i):

- EH-9, EH-12, EH-13, EH-14, EH-31
- PW-5, PW-7, PW-8, PW-9, PW-10
- SC-6, SC-9 and SC-10

Option B(ii):

- EH-9, EH-12, EH-13, EH-14, EH-31
- PW-5, PW-6, PW-7, PW-8, PW-10
- ST-3, SC-6, SC-10 and SC12

Management Area B

1.7.6.8. Location: East of the Access Road, approximately 65 m south of the Converter Station, adjacent to Stoneacre Copse Ancient Woodland.

1.7.6.9. Total area, area of new planting and planting breakdown is detailed in Table 1.10 below:

Table 1.10 - Total area, area of planting and planting breakdown for each Option

	Option B(i)	Option B(ii)
Total Area	2.34 ha	2.34 ha
Total area of new planting comprising:	1.93 ha	1.93 ha
• Native Woodland (Up to 25m)	1.03 ha	1.03 ha
• Native Woodland (up to 15 m)	0.07 ha	0.07 ha
• Scrub with scattered trees	0.57 ha	0.57 ha
• Scrub	0.25 ha	0.25 ha

1.7.6.10. The management objectives of this area are to:

- Expand and enhance the existing Ancient Woodland at Stoneacre Copse to improve connectivity through the planting of a mixture of native woodland and understorey planting, successional scrub with scattered trees, scrub and ground flora.
- Planting and management must seek to increase the structural diversity of the existing woodland habitat through the use of scalloped woodland edges, glades and rides.
- Enhance overall landscape connectivity and provide habitat corridors.
- Contribute to increased biodiversity in the wider area.

1.7.6.11. Planting within Area B is defined by its proximity to the Converter Station, Ancient Woodland at Stoneacre Copse to the east, by overhead high voltage cables to the north, and the Telecommunications Building compound to the west.

1.7.6.12. Landscape features (or parts thereof) contained within Area B for both Options are:

- EW-1;
- SC-1, SC-9;
- ST-1, ST-2; and
- PW-14, PW-15, PW-16.

Management Area C

1.7.6.13. Location: Approximately 200 m to the north-east of the Converter Station, and 70 m to the south of Monarch’s Way.

1.7.6.14. Total area, area of new planting and planting breakdown is detailed in Table 1.11 below:

Table 1.11 - Total area, area of planting and planting breakdown for each Option

	Option B(i)	Option B(ii)
Total Area	1.51 ha	1.51 ha
Total area of new planting comprising:	0.68 ha	0.68 ha
<ul style="list-style-type: none"> Native woodland (Up to 25m) 	0.68 ha	0.68 ha

1.7.6.15. The management objectives of this area are to:

- Create a belt of native woodland with understorey and ground flora by incorporating existing established hedgerows and hedgerow trees into proposed woodland planting and managing in accordance with the management prescriptions EW and PW.
- Once established, encourage growth of the woodland belt to strengthen the visual screening of the Converter Station for users of Monarch’s Way to the north.
- Encourage growth to enhance landscape connectivity and provide habitat corridors.
- Prune and control species dominance to contribute to biodiversity in the wider area.

1.7.6.16. Planting within Area C is constrained by its proximity to overhead high voltage cables to the south and east.

1.7.6.17. Landscape features (or parts thereof) contained within Area C for both Options are:

- EH-5, EH-6; and
- PW-1, PW-2, PW-3.

Management Area D

1.7.6.18. Location: Approximately 550 m to the south-west of the Converter Station, at the corner of the arable field adjacent to the junction of Edney’s Lane, Old Mill Lane and an un-named road.

1.7.6.19. Total area, area of new planting and planting breakdown is detailed in Table 1.12 below:

Table 1.12 - Total area, area of planting and planting breakdown for each Option

	Option B(i)	Option B(ii)
Total Area	0.62 ha	0.62 ha
Total area of new planting comprising:	0.58 ha	0.58 ha
• Native Woodland (Up to 25 m)	0.42 ha	0.42 ha
• Native Woodland (up to 15 m)	0.09 ha	0.09 ha
• Scrub	0.07 ha	0.07 ha

- 1.7.6.20. The management objectives of this area are to:
- Create a native woodland copse with understorey and ground flora through a combination of existing hedgerows and new tree planting.
 - Once established, the copse would effectively screen views of the Converter Station from Kimberley House to the south west.
 - Make a positive contribution to biodiversity in the wider area.
- 1.7.6.21. Planting within Area D is constrained by its proximity to overhead high voltage cables to the north.
- 1.7.6.22. Landscape features (or parts thereof) contained within Area D for both Options are:
- EH-15, EH-16;
 - PW-20, PW-21; and
 - SC-7.
- Management Area E**
- 1.7.6.23. Location: Approximately 220 m to the south-west of the Converter Station Area, and 25 m to the west of the Telecommunications Buildings.
- 1.7.6.24. Total area, area of new planting and planting breakdown is detailed in Table 1.13 below:

Table 1.13 - Total area, area of planting and planting breakdown for each Option

	Option B(i)	Option B(ii)
Total Area	1.39 ha	1.39 ha
Total area of new planting comprising:	0.71 ha	0.71 ha
• Native Woodland (Up to 25m)	0.50 ha	0.50 ha
• Native Woodland (up to 15 m)	0.04 ha	0.04 ha
• Scrub	0.16 ha	0.16 ha

- 1.7.6.25. The management objectives of this area are to:
- Create a native woodland copse through a combination of existing hedgerows and new tree planting.
 - Once established, the copse would effectively screen views of the Telecommunications Buildings from the west.
 - Enhance landscape connectivity and provide habitat corridors.
 - Make a positive contribution to biodiversity in the wider area.
- 1.7.6.26. Planting within Area E is constrained by its proximity to overhead high voltage cables and underground cables to the north, and by the Telecommunications Buildings to the east.
- 1.7.6.27. Landscape features (or parts thereof) contained within Area E for both Options are:
- EH-18, EH-19;
 - PW-18, PW-19, PW-25;
 - EW-2
 - SC-4
- Management Area F**
- 1.1.1 Location: Split into 3 areas, either side of the Access Road approximately 10 m to the south of the Converter Station and wrapping around the attenuation pond.
- 1.7.6.28. Total area, area of new planting and planting breakdown is detailed in Table 1.14 below:

Table 1.14 - Total area, area of planting and planting breakdown for each Option

	Option B(i)	Option B(ii)
Total Area	0.93 ha	0.88
Total area of new planting comprising:	0.71 ha	0.74 ha
• Native woodland (Up to 25m)	0.1 ha	0.19 ha
• Native Woodland (up to 15 m)	0.25 ha	0.20 ha
• Scrub	0.46 ha	0.35 ha

- 1.7.6.29. The management objectives of this area are to:
- Establish areas of native woodland and scrub on the engineered ground to the south of the Converter Station with the intention of providing an effective visual screen.
 - Enhance landscape connectivity and provide habitat corridors.
 - Make a positive contribution to biodiversity in the wider area.
- 1.7.6.30. Planting within Area F is constrained by its proximity to the Converter Station to the north, and by overhead high voltage cables to the south. Particular care must be exercised when planting on the steep banks in this area.
- 1.7.6.31. Landscape features (or parts thereof) contained within Area F are:
- Option B(i):
- SC-2, SC-3, SC-11; and
 - PW-6, PW-11, PW-12, PW-13.
- Option B(ii):
- SC-2, SC-3, SC-11; and
 - PW-9, PW-11, PW-12, PW-13.
- Management Area G**
- 1.7.6.32. Location: Approximately 550 m to the south east of the Converter Station, to the north and west of Broadway Cottages and adjacent to the site entrance and Access Road.
- 1.7.6.33. Total area, area of new planting and planting breakdown is detailed in Table 1.15 below:

Table 1.15 - Total area, area of planting and planting breakdown for each Option

	Option B(i)	Option B(ii)
Total Area	0.38 ha	0.38 ha
Total area of new planting comprising:	0.37 ha	0.37 ha
<ul style="list-style-type: none"> Native woodland (Up to 25m) 	0.17 ha	0.17 ha
<ul style="list-style-type: none"> Scrub 	0.20 ha	0.20 ha

- 1.7.6.34. The management objectives of this area are to:
- Establish areas of native woodland and naturally regenerating scrub with the intention of providing an effective visual screen for the residential properties adjacent to the Order Limits.
 - Enhance landscape connectivity and provide habitat corridors.
 - Make a positive contribution to biodiversity in the wider area.

1.7.6.35. Planting within Area G is constrained by the Order Limits to the east, and by the Access Road to the north. High voltage cables run north-south through the area which require a 10 m offset for any planting.

- 1.7.6.36. Landscape features (or parts thereof) contained within Area G for both Options are:
- EH-27;
 - SC-8;
 - PW-23, PW-24; and
 - PH-3.

1.7.7. EASTNEY (LANDFALL) - LANDSCAPE FEATURES PRESCRIPTIONS

1.7.7.1. The undertaker shall be responsible for the management and maintenance of the planting at the Landfall in connection with the ORS buildings.

Existing grassland/scrub

1.7.7.2. This area shall be protected during the Construction Stage to avoid soil compaction and minimise the impacts.

1.7.7.3. The existing grassland/scrub habitat should be left to regenerate naturally with minimal intervention.

Existing mature trees

- 1.7.7.4. One existing tree is located within the Landfall, the Arboriculture Report identified this as a Category C Ash (T6, Appendix 16.3 (Arboricultural Report). The tree is semi-mature and reported in fair condition see general tree works section above for typical management objectives for individual existing trees.
- 1.7.7.5. Proposed native hedgerows (and with trees) (PH-8)
- 1.7.7.6. Planting proposals shall be managed to encourage a dense planting feature to screen the ORS from residents’ properties to the north and partially screen views from Southsea Leisure Park.
- 1.7.7.7. Pruning shall promote bushy growth while improving habitat for foraging and wildlife benefit. Hedgerow trees must continue to be clearly tagged to avoid flailing and encouraged to develop to full maturity see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.
- 1.7.7.8. The following Table 1.16 outlines the management activities for proposed native hedgerows and proposed native hedgerows with trees.

Table 1.16 - Management prescriptions for proposed native hedgerows (and with trees)

Proposed Management Actions	Timing
Following establishment, all new and infill planting shall be managed in accordance with the regime for existing hedgerows.	Annually (between May – August)
Replace any dead or dying specimens.	Annually (between November - March)
Cut hedges in to an ‘A’ shape. Cutting shall be carried out in early Jan – Feb to maximise the retention of berries with the hedgerow.	Annually (between January – February)
Hedges must be pruned on one side per year alternating on a 3 year rotation cycle. Pruning shall occur in Jan-Feb to maintain hedges at a maximum height of 3.0 metres.	Annually (between January – February)

Proposed amenity grassland

- 1.7.7.9. The objective for this area is to maintain a short-cut, attractive landscape treatment within the visibility splays of the car park access.
- 1.7.7.10. The feature shall be managed to retain open visibility splays, free of litter and an accessible surface treatment to manage the native hedgerows; native hedgerows with trees and the existing mature tree.

1.8. SECURING RIGHTS, MONITORING, RESPONSIBILITY AND REVIEW REQUIREMENTS

1.8.1. SECURING RIGHTS

1.8.1.1. The Land Plans (APP-008) identify parcels of land which are proposed to be subject to new landscaping rights and this reflected in the Book of Reference (APP-024).

1.8.1.2. Agreement, by way of a deed of covenant, is being sought with the appropriate landowners for the long-term maintenance and management of existing planting and retained hedgerows. Where voluntary agreement for the acquisition of landscaping rights is not reached, the Applicant is seeking powers of compulsory acquisition to acquire the rights. This is to ensure the existing planting which provides a screening mitigation function is retained for this purpose.

1.8.2. MONITORING OF PLANTING

1.8.2.1. The management of existing and proposed landscapes/habitats at the Converter Station Area and in connection with the ORS shall be subject to a detailed landscaping scheme. This shall encompass the management, maintenance and monitoring plans to ensure the full and successful establishment and ongoing monitoring of existing, new and replacement planting throughout the operational lifetime of the Proposed Development.

1.8.2.2. The detailed landscaping scheme shall prescribe maintenance regimes.

1.8.2.3. New planting shall be subject to a five-year period within which reinstatement is required to secure successful establishment, commencing on completion of landscaping works associated with each phase.

1.8.2.4. The plan shall consider the management of the identified features in further detail, considering the objectives and functions and align with the Onshore Outline CEMP (APP-505).

1.8.3. MANAGEMENT RESPONSIBILITIES

1.8.3.1. Proposed management responsibilities will vary across specific sections of the Proposed Development as summarised below:

Section 1: Converter Station Area

1.8.3.2. The long term management of existing and new planting shall be undertaken by the Applicant using suitably qualified and experienced contractors managed by the Applicant's environmental clerk of works. The Applicant has had discussions with a local farmer who operates an agricultural contracting business and has shown an interest in working with the Applicant as the scheme develops.

- 1.8.3.3. Access for ongoing landscape management shall either be agreed with the relevant landowner by way of a voluntary agreement, or is otherwise provided for in the rights sought to be acquired via compulsory acquisition as shown on the Land Plan (APP-008) and detailed in the Book of Reference (APP-024).

Section 2 to 9 Onshore Cable Route

- 1.8.3.4. Management responsibilities shall be handed over to the landowner on completion of construction works and reinstatement of vegetation.
- 1.8.3.5. Additional management and monitoring provisions have been made for HDD compound areas within Denmead Meadows for years 1, 3 and 5 post-construction. These provisions are described in paragraphs 1.5.3.20 to 1.5.3.23.

Section 10 Landfall

- 1.8.3.6. The Applicant shall responsible for the maintenance of the planting around the Landfall for the lifetime of the Proposed Development and this is confirmed in dDCO Requirement 8(2).
- 1.8.3.7. Further detail on the management responsibilities for Section 1 and 10 of the Proposed Development will be covered in the detailed landscaping scheme post consent.
- 1.8.3.8. The Applicant or appointed contractor shall be responsible for:
- Correct instruction of all parties contributing to delivery of the detailed landscaping scheme and written biodiversity management plan (including but not restricted to the Applicant’s staff, Ecological and Environmental Clerk of Works, landscape contractors, construction contractors and management organisations);
 - Compliance with the detailed landscaping scheme and written biodiversity management plan, relevant legislation and any related planning commitments;
 - Keeping the appointed Ecological and Environmental Clerk of Works and each other informed of work activities that require support and supervision, so that it is clear when attendance at site is required;
 - Enacting/enforcing recommendations made by the ecologist/landscape architect/arbiculturist, or otherwise agreeing an appropriate alternative course of action if it is subsequently determined that previous advice is not practicable or is out of date; and
 - Keeping a record of measures taken to deliver the requirements of the detailed landscaping scheme and written biodiversity management plan to provide an auditable record of compliance and part of the site records book as part of CDM requirements.

Ecological Clerk of Works

- 1.8.3.9. The appointed Ecological Clerk of Works shall be responsible for:
- Advising the Applicant on ecological matters and requirements for compliance, providing support as instructed and monitoring compliance with the detailed landscaping scheme and written biodiversity management plan;
 - Providing the Applicant with survey reports and other written evidence required by accordance with the detailed landscaping scheme and written biodiversity management plan; and
 - Planning and undertaking ecological monitoring surveys (where necessary) which shall be outlined in detail within the overarching management, maintenance and monitoring plan as part of the detailed landscaping scheme and/or written biodiversity management plan.

Environmental Clerk of Works

- 1.8.3.10. The appointed Environmental Clerk of Works⁴ shall be responsible for:
- Providing specialist site supervision in the form of walk over assessments relating to relevant landscape areas. This shall be to assess existing, new and replacement landscape components and their condition, and identify the need for landscape enhancement as instructed and in accordance with the detailed landscaping scheme and written biodiversity management plan, once the Proposed Development has been completed;
 - Undertaking a detailed analysis of impacts associated with RPAs once the cable route alignment is finalised;
 - Monitoring and assessing the landscape related features of the detailed landscaping scheme for their effectiveness on an annual basis for the first five years as part of an initial monitoring and assessment phase following the completion of the Proposed Development, informed by the management, maintenance and monitoring plans within the detailed landscaping scheme;
 - Ensuring that existing, new and replacement landscape related features of the detailed landscaping scheme are reviewed every five years beyond the initial monitoring and assessment phase. The detailed landscaping scheme must be amended accordingly to suit any changing landscape conditions and ultimately inform the landscape maintenance operations associated with the development throughout the operational life of the Proposed Development; and

⁴ The Environmental Clerk of Works role may be covered by a suitably experienced and qualified Landscape Clerk of Works with an arboriculturalist called in to cover specific issues associated with trees and RPAs.

- Ensuring that any reviews associated with existing, new and replacement landscape related features of the detailed landscaping scheme clearly identifies any changes to site conditions and circumstances, whether the aims and objectives of the detailed landscaping scheme are being met, and where identified changes are needed to existing management practices and timeframes.

1.8.4. MANAGEMENT PLAN REVIEWS

- 1.8.4.1. The areas under landscape management shall be inspected at least every five years and the management plan updated as necessary to reflect the outcome of the inspections.
- 1.8.4.2. A site walkover shall be scheduled following any extreme weather event to inspect the overall health of the landscape features and structural integrity of the trees. Any trees noted to have suffered damage shall be subject to an arboricultural survey by a suitably qualified arboriculturalist.
- 1.8.4.3. The Outline Landscape and Biodiversity Management Strategy Management Plans (Appendix 2) illustrate the objectives for the existing and proposed landscape features and shall be reviewed appropriately to the current environmental conditions to consider unforeseen circumstances such as extreme weather events, climate change influences or changes in hydrology and natural drainage routes.
- 1.8.4.4. The detailed landscaping scheme and written biodiversity management plan and associated management, maintenance and monitoring plans shall be reviewed annually and appropriate amendments made to the detailed landscaping scheme and written biodiversity management plan or associated plans.

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Appendix 1

Outline Landscape

Specification

Years 0 to 5

1.1. OUTLINE LANDSCAPE SPECIFICATION YEARS 0-5

1.1.1.1. The outline landscape specification years 0 to 5 summarises measures taken by the contractor during construction and post construction for the Converter Station Area and the Landfall. This timescale is based on a standard defects liability period. The outline specification would be revised post DCO consent and following detailed design.

1.1.1.2. Proposed planting is outlined in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board). The final breakdown of species, mixes and heights would be subject to approval of the relevant discharging authority post consent in discussion with the SDNPA,

1.1.1. OUTLINE SPECIFICATION: YEARS 0 - 5

1.1.1.3. The following outlines briefly the general landscape management guidelines for year 0 to 5.

Pruning Generally

1.1.1.4. All tree work and pruning to hedges must be in accordance with British Standards BS 3998:2010 Tree work – Recommendations (BSI Standards Publication, 2012 British Standards Limited).

1.1.1.5. Trees and shrubs must be pruned in the appropriate season to maintain health and vigour and to prevent encroachment on paths, parking areas etc. The removal of vegetation is normally to be timed for outside the bird nesting season (March to August inclusive) to prevent disturbance of breeding birds and to prevent committing an offence under the Wildlife and Countryside Act 1981 (amended). If this is not possible, a check for active nests would first be undertaken by an ecologist. Should any active bird nests be found, the pruning works must cease immediately and a disturbance-free buffer zone established around the nest until the young birds have fledged.

1.1.1.6. All dead, damaged or diseased tree branches would be either removed and arisings removed from site or partially buried to replicate naturally occurring decay patterns in standing and fallen deadwood.

1.1.1.7. All ash trees present on site would be regularly inspected for the presence of Chalara ash dieback. Should any ash tree become infected, these must be managed to best practice guidance (Forestry Commission and Natural England, 5 November 2018.) and left standing unless there is a safety issue. Felling would commence once the tree is unable to maintain a healthy crown for three years. Any branches and leaves must be burned, buried or deep-composted on site if practicable. If they are removed from the site, they would be transported in a securely closed container to a place where they can be destroyed appropriately.

Scrub

- 1.1.1.8. All areas of scrub should be left to regenerate naturally with minimal intervention, unless otherwise stated. Planting density and spacing would be agreed and defined through the Detailed Strategy and supporting mitigation plans.
- 1.1.1.9. Scrub with scattered trees surrounding the Ancient Woodland would receive protective deer fencing enclosing the space to ensure the successful establishment of the plant stock see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.

Scattered Trees

- 1.1.1.10. Planting of native bare-root stock as detailed in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) must be undertaken between October and March. No planting would be carried out during periods of frost or if the ground is either too dry or waterlogged.
- 1.1.1.11. Tree pits would be dug to a size at least 1.5 times the size of the root ball of the specimen to be planted. Soils at the sides and bottom of the pits would be well cultivated and friable to allow roots to spread.
- 1.1.1.12. Specimens must be checked for good health before planting in a 50/50 mixture of existing soils and locally sourced high-quality peat-free compost, and fully firmed and watered in.
- 1.1.1.13. Newly planted trees would be staked and either guarded or fenced to prevent browsing damage. Fences and guards must be regularly checked to ensure they are functional. Tree guards would be removed after a period of 3 - 5 years, or once they begin to split due to tree growth, if sooner.
- 1.1.1.14. Fallen and standing deadwood which is free from infection, either robustly attached to the tree or located where it does not pose a health and safety risk would be preserved in-situ for the benefit of saprophytic organisms, invertebrates and to act as refuge opportunities for small mammals.
- 1.1.1.15. Dead wood free from infection can be partially buried in areas where it would not impede the rooting systems of retained woodland scrub, ideally within areas with limited or no ground cover.
- 1.1.1.16. Where tree surgery is planned as part of the management plan, or for health and safety remedial works, the potential for bats to be present must be assessed prior to the works being carried out. Identification of features such as rot holes, split limbs or loose bark would be undertaken by a suitably qualified ecologist.

- 1.1.1.17. Any removal of vegetation or tree surgery works must be undertaken in accordance with the requirements of BS 3998:2010 'Tree Work Recommendations' (BSI Standards Publication, 2010 British Standards Limited) and BS 5837:2012 'Trees in relation to design demolition and construction - Recommendations' (BSI Standards Publication, 2012 British Standards Limited).
- 1.1.1.18. Ground protection must be used where RPAs are encroached upon, for example, use of no-dig construction methods must be employed.
- 1.1.1.19. Any pruning or necessary tree works are to be carried out in the appropriate season to maintain health and vigour and to prevent encroachment in paths, parking areas etc. The removal of vegetation would be timed to avoid the bird nesting season (March to August inclusive).
- 1.1.1.20. Works storage compounds and site welfare must be offset from arboriculture and biodiversity features as referred to in Section 6.10.5 see Indicative Converter Station Layout Plans Sheet 2 and 3 (document reference 2.7).
- 1.1.1.21. Where grass is used as a ground cover, a 500 mm minimum radius from the base of the tree must be left clear of turf and mulched to reduce the risk of completion and mechanical damage from mowing and strimming machinery (BSI Standards Publication, 2012 British Standards Limited).

Hedges

- 1.1.1.22. Ground would be cultivated to a depth of at least 300 mm to ensure the soil is friable, and stones larger than 50 mm removed.
- 1.1.1.23. Planting of native bare-root stock as detailed in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) would be undertaken between October and March. No planting would be carried out during periods of frost or if the ground is either too dry or waterlogged.
- 1.1.1.24. Specimens would be checked for good health before planting in a 50/50 mixture of existing soils and locally sourced high-quality peat-free compost, and fully firmed and watered in.
- 1.1.1.25. Planting density and spacing would be agreed and defined through the Detailed Strategy and supporting mitigation plans.
- 1.1.1.26. Where hedgerow trees are specified, larger specimens would be planted randomly within the hedgerow, tagged clearly and allowed to develop into trees.
- 1.1.1.27. Infill planting to existing hedgerows would receive tree or shrub guards to protect from damage of grazing rabbits and deer.
- 1.1.1.28. Planting mixes can be refined to exclude particular species based on specific requirements of livestock in the location.
- 1.1.1.29. Inspect new planting mulch matting and protection measures. Remove weed growth at base by hand for first two years.

- 1.1.1.30. Inspect any installed stakes or guards and adjust or replace to ensure they remain functional and stems of trees are not chafed. Remove guards after a period of 3-5 years or once split due to tree growth.

Woodland (including understorey and ground flora)

- 1.1.1.31. Ground would be cultivated to remove grasses and pernicious weeds that might compete with young trees.
- 1.1.1.32. Planting of native bare-root stock as detailed in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) would be undertaken between October and March. No planting would be carried out during periods of frost or if the ground is either too dry or waterlogged.
- 1.1.1.33. Tree pits would be dug to a size at least 1.5 times the size of the root ball of the specimen to be planted. Soils at the sides and bottom of the pits would be well cultivated and friable to allow roots to spread.
- 1.1.1.34. Specimens must be checked for good health before planting in a 50/50 mixture of existing soils and locally sourced high-quality peat-free compost, and fully firmed and watered in.
- 1.1.1.35. Trees and understorey planting would be planted an agreed density to achieve the specific objectives referred to in the Outline Strategy in random groups of the same species and secured with suitable stakes and ties.
- 1.1.1.36. Ground flora (including ferns) would be planted at agreed locations and at an agreed density within woodland margins and glades where light is allowed to penetrate to create a diverse field layer. Inspect ground flora, remove dead material and replace dead plants annually.
- 1.1.1.37. New plantings must be fenced to prevent browsing damage. Fences and guards must be regularly checked to ensure they are functional. Tree guards would be removed after a period of 3 - 5 years and 2-3 years for understorey planting, or once they begin to split as they might hamper tree growth.
- 1.1.1.38. Access routes must be maintained through the woodland to allow for maintenance, and any invasive or non-native species that might threaten the habitat must be removed and disposed of elsewhere.

Calcareous and Marshy Wildflower Grassland

- 1.1.1.39. Annual and perennial weeds must be controlled by mechanical means, or by the use of a contact based herbicide such as Glyphosate.
- 1.1.1.40. Any stones and unwanted vegetation must be removed.
- 1.1.1.41. Ground must be cultivated to a fine tilth to achieve a suitable seed bed where there is good contact between the seed mix and the soil.

- 1.1.1.42. Seed must be sown at the rate show in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) and lightly raked before rolling.
- 1.1.1.43. Watering would be undertaken regularly until the grassland is established, and particularly during periods of dry weather. Once established there would be no requirement for additional watering.
- 1.1.1.44. Two cuts must be undertaken each year. If sowing in March / April in accordance with manufacturer's instructions, the first cut after sowing must take place after flowering in August/ September/October. The sward must be cut to a height to 4-7 cm.
- 1.1.1.45. In subsequent years, the sward would be maintained thereafter to a height of 4-6 cm in March/April to remove excess grass and again in September/October to a height of 4 cm. No fertiliser would be applied to any areas to be established as wildflower grassland.
- 1.1.1.46. All arisings from calcareous and marshy grassland would be left in situ for three days during dry conditions to allow for seed dispersal before raking up and removing. Some of the arisings would be retained in low habitat piles as animal refuge areas on grassland boundaries. Weeds must be controlled by hand pulling to eradicate injurious or pernicious weeds as required between May to August. No fertiliser must be applied to any areas to be established as wildflower grassland.

Ponds and Pond Margins

- 1.1.1.47. Pond margins (attenuation basins) must be left to regenerate through natural succession with minimal intervention where practicable. The proposed waterbody must be checked and cleared of rubbish. Leaf litter would be removed on a two-year rotation. No dredging works to be undertaken without appropriate ecological consultation.
- 1.1.1.48. Ensure inlet and outlet channels are kept clear and any encroaching vegetation is removed.
- 1.1.1.49. Maintain suitable access routes for maintenance.
- 1.1.1.50. Ensure no herbicides or chemicals are used on or near aquatic locations.

Drainage Channels/Swales

- 1.1.1.51. Manage grassland in the same way as outlined for calcareous and marshy wildflower grasslands as above.
- 1.1.1.52. Remove any invasive species, notifiable weeds and any leaves or dead plant material to ensure the swale is able to function properly at all times.

General

- 1.1.1.53. All areas of planting and wildflower grassland would be maintained, to include:
 - Ample irrigation;

- Weed control (herbicide application or hand weeding);
- Litter picking;
- Topping up mulch; and
- Checking condition of protective fencing, tree stakes, ties and tree guards, and replacing/repairing as necessary.

1.1.1.54. All tree planting is to be in accordance with the required standoffs for overhead and underground cables as shown on the landscape mitigation plans.

1.1.1.55. All guards, stakes and ties must be inspected during the growing season and adjusted as necessary to ensure that they are secure and firm and that the ties are not chafing the stem of the trees. Stakes and ties would be removed and disposed of when plants become self-supporting.

1.1.1.56. Planting which fails to thrive or dies during the 5-year maintenance period must be replaced during the next planting season.

1.1.1.57. Infill planting to existing hedgerows would receive protective tree or shrub guards to prevent damage from rabbits and deer. Larger areas of new proposed woodland planting would be protected by an appropriate deer fence until trees are sufficiently established and mature to warrant removal. Guidance relating to fencing specification can be found in Forestry Commission Technical Guide (2006) (Forestry Commission, 2006). If required, suitable fencing details would be drawn up to accommodate badger gates.

Watering

1.1.1.58. Water evenly and without displacing plant, seed or soil at a frequency necessary to ensure the establishment and continued thriving of all proposed planting.

1.1.1.59. All plants must be watered at rates in accordance with the Landscape Institute Technical Bulletin: Watering Restrictions and Watering Specifications (Landscape Institute, May, 1996) on the day of planting unless otherwise directed.

Weed Control

1.1.1.60. All existing and proposed landscape features, including temporary soil mounds used in the Construction Stage, must be kept free from weeds. Cutting or spraying would be undertaken as appropriate, to control plant growth, prevent the production of seed and the subsequent spread of weeds into adjoining land.

1.1.1.61. Weeds would either be cut prior to seeding to prevent further spread, or alternatively spot treated with a chemical spray approved by Natural England and the Environment Agency as suitable for use on weeds in or near waterbodies and as recommended by a BASIS qualified advisor.

- 1.1.1.62. Application of chemical spray must be carried out by a suitably qualified operative, under appropriate weather conditions as a suitable means of control for persistent weeds.

Replacement Planting

- 1.1.1.63. All new plants which fail (within the five after care period) would be replaced in the next planting season with others of a similar size and species; as agreed by the project landscape architect.

Protected Species

- 1.1.1.64. If evidence of any protected species, nests, shelters, young or eggs are found at any point, all work would cease immediately. Before any further work takes place, a suitably qualified ecological consultant must be contacted to advise on how to proceed. Existing management regimes must be reviewed by the project ecologist and techniques which promote habitat development would be incorporated into the future programme.

- 1.1.1.65. As a precautionary measure, there must be no removal of trees, scrub, hedgerows or grassland between March and August inclusive to prevent disturbance of breeding birds.

Ground/Soil Protection

- 1.1.1.66. The depth and type of soil to be placed the Proposed Development would vary depending on the nature of the vegetation to be established. All soil handling, management and replacement would be carried out in accordance with established soil handling protocols.

- 1.1.1.67. Plant and vehicles would not cross any area of replaced and loosened ground or replaced topsoil except where essential and unavoidable works are required. RPAs of trees must not be crossed unless suitable ground protection measures are in place in accordance with section 6.2 of BS 5837:2012.

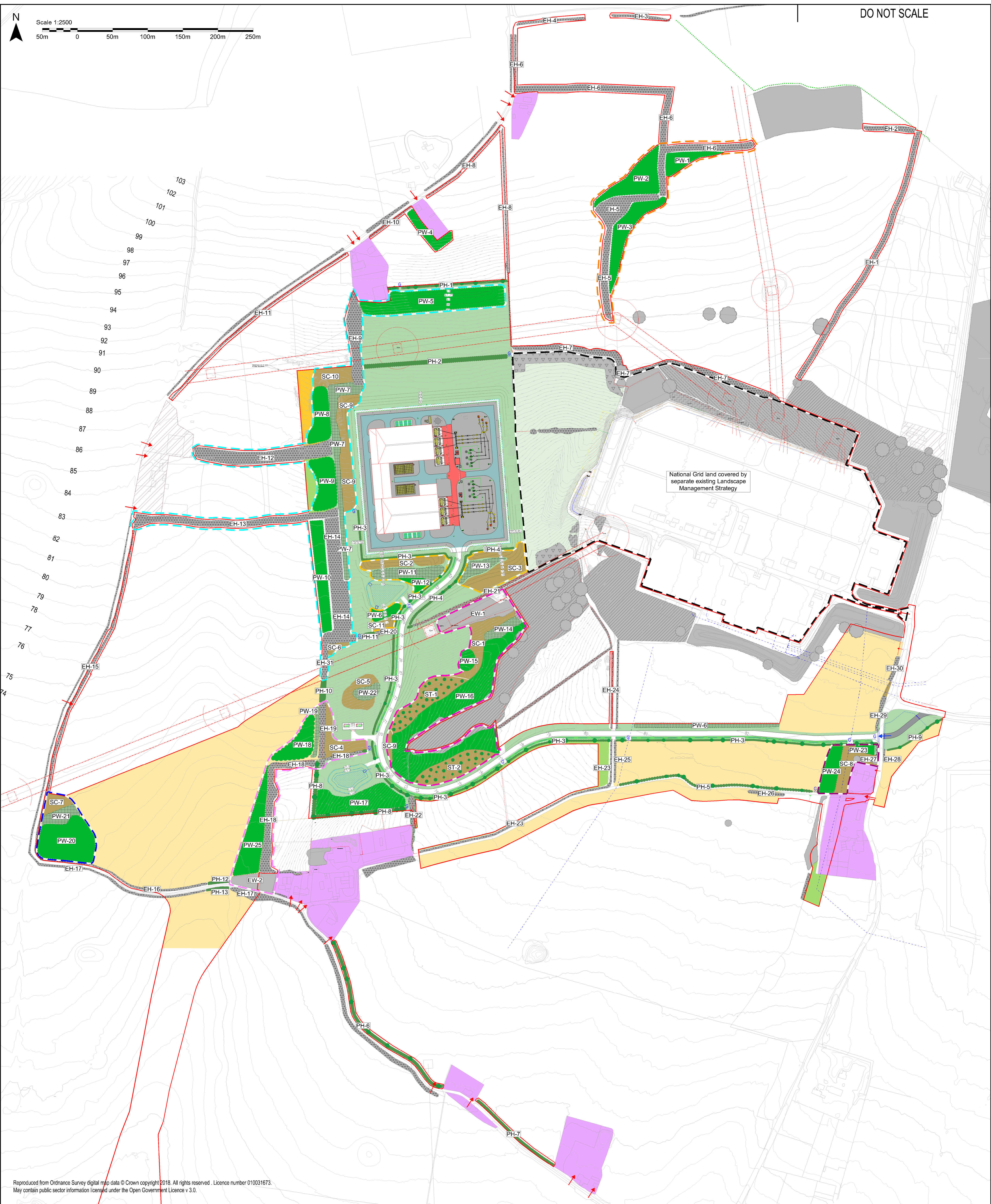
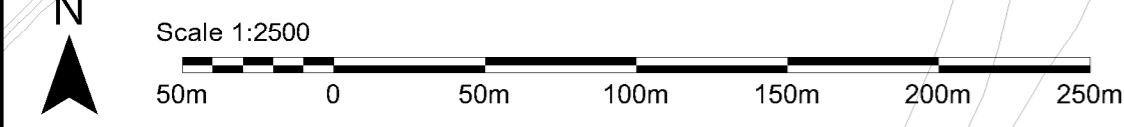
Appendix 2

Outline Landscape

and Biodiversity

Strategy Management

Plans



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Legend	<ul style="list-style-type: none"> Indicative existing overhead power lines Existing fencing Existing woodland (EW) Existing ancient woodland Existing native hedgerows (EH) Existing native hedgerows with hedgerow trees (EH) Existing grassland / scrub Existing scrub Existing National Grid mitigation planting Existing mature trees 	<ul style="list-style-type: none"> Existing arable farmland Existing pasture Existing recreation area Existing semi-improved grassland Bare ground 	Proposed <ul style="list-style-type: none"> Proposed contours Proposed native hedgerow (PH) Proposed native hedgerow with hedgerow trees (PH) Proposed native mixed woodland (up to 15m) (PW) Proposed native mixed woodland (up to 25m) (PW) Proposed scrub (SC) Proposed scrub with scattered trees (ST) Proposed calcareous grassland Proposed marshy grassland 	<ul style="list-style-type: none"> Proposed attenuation pond Vegetated conveyance and infiltration swale (marginal planting) Proposed access road Proposed additional access road Proposed gate Proposed vehicular access point Proposed fence 	Landscape Management <ul style="list-style-type: none"> PH-6 Landscape Prescription Land covered by existing National Grid management plan Management Area A Management Area B Management Area C Management Area D Management Area E Management Area F Management Area G
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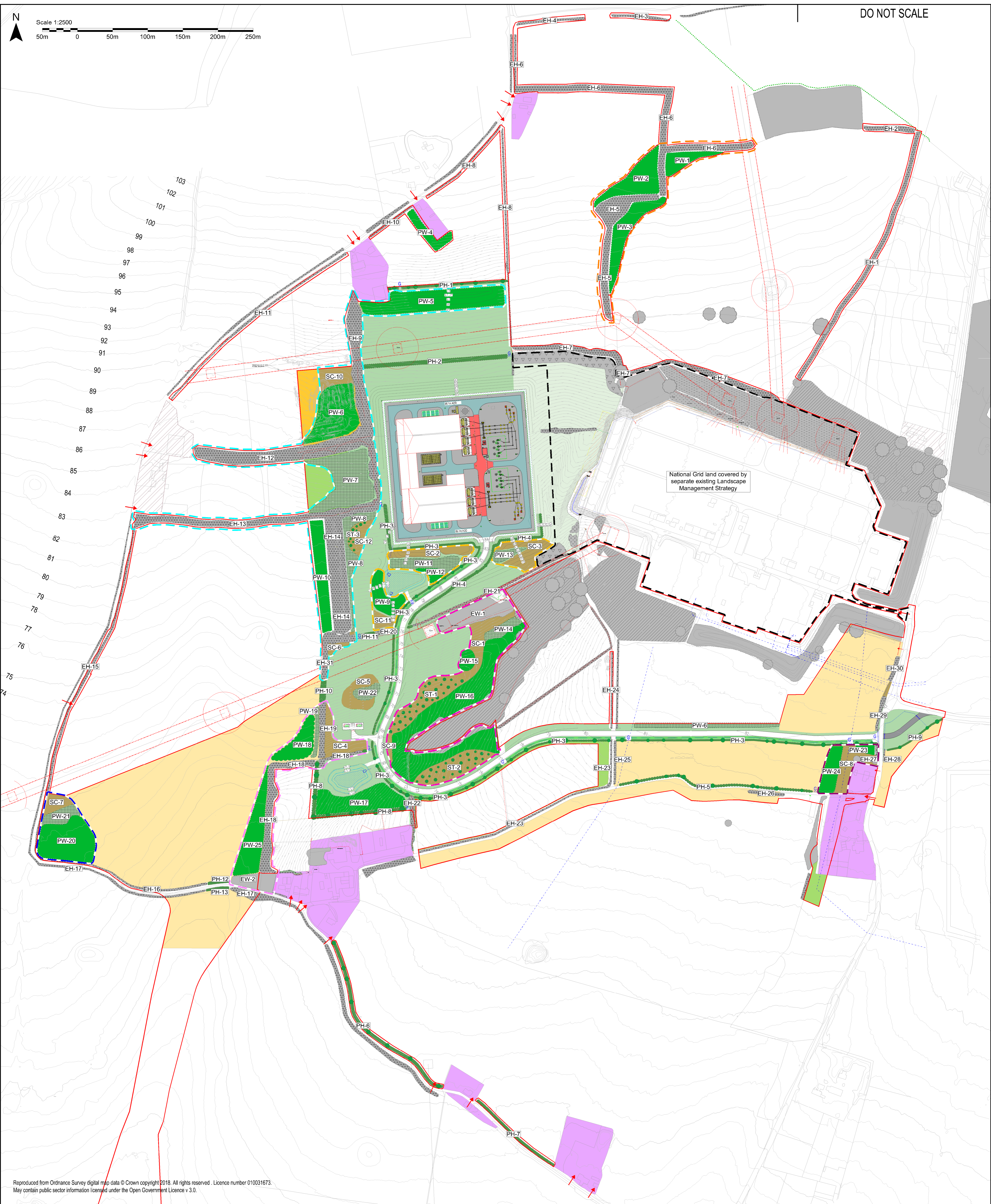
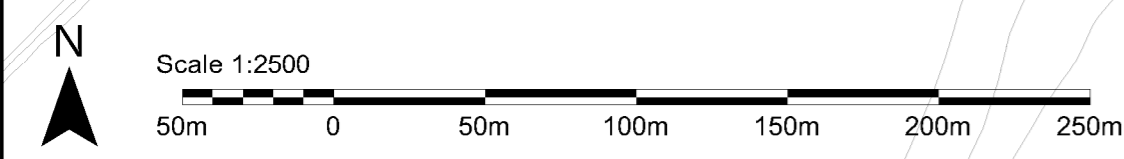
TITLE: Figure 1 - Outline Landscape and Biodiversity Strategy Management Plan for Option B(i) - Converter Station Area

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Legend Order Limits Existing Existing vehicular access point Existing ground level contour Existing non-residential development Existing residential development Existing underground cable route Monarch's Way (PRow) Existing pylon Indicative existing overhead power lines Existing fencing Existing woodland (EW) Existing ancient woodland Existing native hedgerows (EH) Existing native hedgerows with hedgerow trees (EH) Existing grassland / scrub Existing scrub Existing National Grid mitigation planting Existing mature trees Existing arable farmland Existing pasture Existing recreation area Existing semi-improved grassland Bare ground	Proposed Proposed contours Proposed native hedgerow (PH) Proposed native hedgerow with hedgerow trees (PH) Proposed native mixed woodland (up to 15m) (PW) Proposed native mixed woodland (up to 25m) (PW) Proposed scrub (SC) Proposed scrub with scattered trees (ST) Proposed calcareous grassland Proposed marshy grassland Proposed attenuation pond Vegetated conveyance and infiltration swale (marginal planting) Proposed access road Proposed additional access road Proposed gate Proposed vehicular access point Proposed fence	Landscape Management Landscape Prescription Land covered by existing National Grid management plan Management Area A Management Area B Management Area C Management Area D Management Area E Management Area F Management Area G
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TITLE: Figure 2 - Outline Landscape and Biodiversity Strategy Management Plan for Option 3(iii) - Converter Station Area

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