

Hornsea Project Three
Offshore Wind Farm



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Preliminary Environmental Information Report:
Chapter 4 - Landscape and Visual Resources (Part 2)

Date: July 2017

Environmental Impact Assessment

Preliminary Environmental Information Report

Volume 3

Chapter 4: Landscape and Visual Resources

Liability

This report has been prepared by RPS, with all reasonable skill, care and diligence within the terms of their contracts with DONG Energy Power (UK) Ltd.

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This report is also downloadable from the Hornsea Project Three offshore wind farm website at:

www.dongenergy.co.uk/hornseaproject3

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Front cover picture: Kite surfer near one of DONG Energy's UK offshore wind farms © DONG Energy Hornsea Project Three (UK) Ltd., 2016.

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4.6 Methodology to inform the baseline

4.6.1.1 This methodology relates to the baseline conditions which were identified by a desktop review of:

- Published seascape and landscape character assessments;
- Ordnance Survey 1:25,000 mapping; and
- Meteorological Office visibility data.

4.6.1.2 A number of site visits were also conducted in order to establish the existing landscape character and to identify the likely views available for the various landscape and visual receptors that are located within the onshore cable route 1 km study area, the three main onshore construction compound 1 km study areas, the HVAC booster station 5 km study area and the HVDC converter/HVDC substation 5 km study area. More information on the selection of the study area is provided in section 4.3.

Desktop study

4.6.1.3 Information on the landscape and visual resources within the onshore cable corridor, onshore HVAC booster station and onshore HVDC converter/HVAC substation was collected through a detailed desktop review of existing studies and datasets. These are summarised at Table 4.4 below.

Table 4.4: Summary of key desktop reports.

Title	Source	Year	Author
Seascape Characterisation around the English Coast (Marine Plan Areas 3 and 4 and Part of Area 6 Pilot Study) Report no. NECR106	Natural England website (accessed 03 March 2017)	2012	URS Scott Wilson for Natural England
Seascape character area assessment East Inshore and East Offshore marine plan areas	UK Government website (accessed 03 March 2017)	2012	Marine Management Organisation
East Inshore and East Offshore Marine Plans	UK Government website (accessed 03 March 2017)	2014	Marine Management Organisation
National Character Area Profiles	UK Government website (accessed 03 March 2017)	2014	Natural England
East of England Landscape Typology	Landscape East website (accessed 03 March 2017)	2011	Landscape East
North Norfolk Landscape Character Assessment	North Norfolk District Council website (accessed 03 March 2017).	2009	North Norfolk District Council Planning Policy Team
Broadland District Landscape Character Assessment	Broadland District Council website (accessed 03 March 2017).	2008 (updated 2013)	Chris Blandford Associates

Title	Source	Year	Author
South Norfolk District Landscape Character Assessment	South Norfolk District Council website (accessed 03 March 2017)	2001	Land Use Consultants
South Norfolk District Landscape Designations Review	South Norfolk District Council website (accessed 03 March 2017)	2012	Chris Blandford Associates
Norfolk Coast Area of Outstanding Natural Beauty Integrated Landscape Guidance	Norfolk Coast AONB website (accessed 03 March 2017)	2014	Norfolk Coast Partnership
Visibility data (2006 to 2016)	Meteorological Office	2017	Meteorological Office

Designated Sites

4.6.1.4 All designated sites within the landscape and visual resources study areas that could be affected by the construction, operation and maintenance, and decommissioning of the onshore and landfall elements of the Hornsea Three, were identified using the three step process described below:

- Step 1: All landscape designations of international, national and local importance within the study area 1 km for the onshore cable route, 5 km for the onshore HVAC booster station and onshore HVAC converter/HVDC substation were identified using a number of sources. The designated sites include The Broads, the North Norfolk Coast AONB and several Registered Parks and Gardens.
- Step 2: Information was compiled on the relevant features and special qualities for each of these landscape designations.
- Step 3: Using the above information and expert judgement, landscape designations were included for further consideration if:
 - A landscape designation directly overlaps with Hornsea Three; and
 - Landscape designations and associated features were located within the study area associated with Hornsea Three.

4.6.1.5 Designated landscapes considered in this assessment are illustrated on Figure 4.4 and the key characteristics summarised in volume 6, annex 4.4: Key Characteristics of Designated Landscapes.

Site specific surveys

4.6.1.6 Viewpoint locations were selected as a result of desktop surveys that included the generation of ZTVs. The viewpoints are designed to provide a representation of views available in a variety of directions and from a variety of distances. The viewpoints are selected because they are located on publically accessible locations such as PRowS and coincide with the ZTV. Site visits were undertaken on the 6 and 7 December 2016 (winter conditions) to undertake Viewpoint photography for the onshore HVAC booster station and onshore HVDC converter/HVAC substation. These baseline photos accompanied the list of proposed viewpoint locations during consultation with the relevant LPAs. Additional viewpoints were subsequently requested by the LPAs requiring additional photography. Further site visits were therefore undertaken from 8 to the 10 March 2017 and from the 15 to the 17 March 2017 (spring conditions) to undertake the additional viewpoint photography as well as record the landscape character of the study areas and identify potential visual receptors within the study area.

4.7 Baseline environment

4.7.1.1 This section reviews the landscape and visual resources of the location and the surrounding areas of the onshore components of Hornsea Three, comprising the landfall, onshore cable corridor, the onshore HVAC booster station, the onshore HVDC converter/HVAC substation site and the connection with the Norwich Main Substation.. Landscape and visual resources that are within the cable corridor 1 km study area, the onshore HVAC booster station 5 km study area and the onshore HVDC converter/HVAC substation 5km study area, and are coincident with the ZTV, are considered to make up the baseline environment for this PEIR assessment. Although resources located outside the identified study areas may be influenced by aspects of the proposed development, they are not likely to witness any significant effects either direct or indirect and as such, have not been included in the baseline assessment. This approach has been adopted in order to identify the likely significant effects while providing a proportionate assessment in line with GLVIA3.

4.7.1.2 Landscape and seascape character assessments have been published by Natural England, the District Councils and the AONB Partnership.

4.7.1.3 The onshore components have been divided, as follows:

- Onshore cable corridor – landfall;
- Onshore cable corridor – south of the beach, western option;
- Onshore cable corridor – south of the beach, eastern option;
- Onshore cable corridor – to the south of the convergence of the western and eastern options, including the corridor to and from the HVAC booster station and the HVDC converter/HVAC substation and the route to Norwich Main Substation;
- Onshore HVAC booster station; and
- Onshore HVDC converter/HVAC substation and connection to Norwich Main Substation..

4.7.1.4 Due to the differences in the extents of the study areas for the onshore cable corridor and the onshore HVAC booster station and onshore HVDC converter/HVAC substation, this chapter considers the baseline environment of these different elements separately.

Designated Seascape and Landscape Resources within the Study Areas

4.7.1.5 The Norfolk Coast AONB Management Plan (2014-2019) sets out the Special Qualities of the AONB. A summary of the special qualities is set out in volume 6, annex 4.4. The Norfolk Coast AONB Integrated Management Landscape Guidance, identifies the landscape baseline of the designation which is defined by the various Landscape Character Types and Landscape Character Areas that it has been divided into. The Landscape Character Types and Landscape Character Areas that the onshore cable corridor 1km study area is coincident with. The key characteristics of the LCTs and LCAs for the Norfolk Coast AONB that the cable corridor 1km study area, lie within are summarised in volume 6, annex 4.4: Key Characteristics of Designated Landscapes, and illustrated on Figure 4.4.

4.7.1.6 The Broads Landscape Character Assessment (2006) identifies the Local Character Areas that make up the Broads National Park and define the landscape baseline of the designation. The key characteristics of the Local Character Areas which lie within the study areas are set out in volume 6, annex 4.4: Key Characteristics of Designated Landscapes, and the location of Hornsea Three onshore infrastructure in relation to them is illustrated on Figure 4.4.

Undesignated Seascape and Landscape Resources within the Study Areas

National Seascape Character Areas (NSCAs)

4.7.1.7 In October 2012, Natural England published the final version of Report NECR106 'Seascape Characterisation around the English Coast (Marine Plan Areas 3 and 4 and Part of Area 6 Pilot Study)'. The Hornsea Three onshore cable corridor 1 km study area falls within part of Marine Plan Areas 3 and 4 as well as Marine Management Organisation Area 3. The document identifies NSCAs which present the seascape character baseline at a national level. The NSCAs that are coincident with the onshore cable corridor 1 km study area are:

- East Midlands Coastal Waters; and
- Norfolk Coastal Waters.

4.7.1.8 The onshore HVAC booster station and onshore HVDC converter/HVAC substation study areas do not coincide with any NSCAs.

4.7.1.9 Key characteristics for these areas are outlined in volume 6, annex 4.2: Key Characteristics of National Seascape and LCAs, and the location of Hornsea Three onshore infrastructure in relation to them is illustrated on Figure 4.7.

National Character Areas (NCAs)

4.7.1.10 Natural England has produced a series of national countryside character reports, which identified the baseline landscape character of England at a national level. The NCAs that are coincident with at least one of the onshore study areas are:

- NCA77: North Norfolk Coast;
- NCA88: Central Norfolk;
- NCA83: South Norfolk and High Suffolk Claylands; and
- NCA84: Mid Norfolk.

4.7.1.11 Key characteristics for these NCAs are outlined in volume 6, annex 4.2: Key Characteristics of National Seascape and LCAs, and the location of Hornsea Three onshore infrastructure in relation to them is illustrated Figure 4.6.

Local Landscape Character Types and Areas (LCTs and LCAs)

4.7.1.12 The proposed onshore cable corridor, onshore HVAC booster station and onshore HVDC converter/HVAC substation are located within three districts, North Norfolk, Broadland and South Norfolk. The boundaries of the districts (local authorities) and the parishes within them are illustrated on Figure 4.1, Figure 4.2 and Figure 4.3. The landscape baseline for each of the three district councils is presented in the North Norfolk Landscape Character Assessment (2009), the Broadland District Council Landscape Character Assessment (2013), and the South Norfolk Landscape Character Assessment (2001).

4.7.1.13 The key characteristics of the local LCTs and LCAs that are coincident with at least one of the onshore study areas are summarised in volume 6, annex 4.3: Key Characteristics of Local Landscape Areas. The location of Hornsea Three onshore infrastructure in relation to the local LCTs and LCAs is illustrated on Figure 4.7, Figure 4.8 and Figure 4.9.

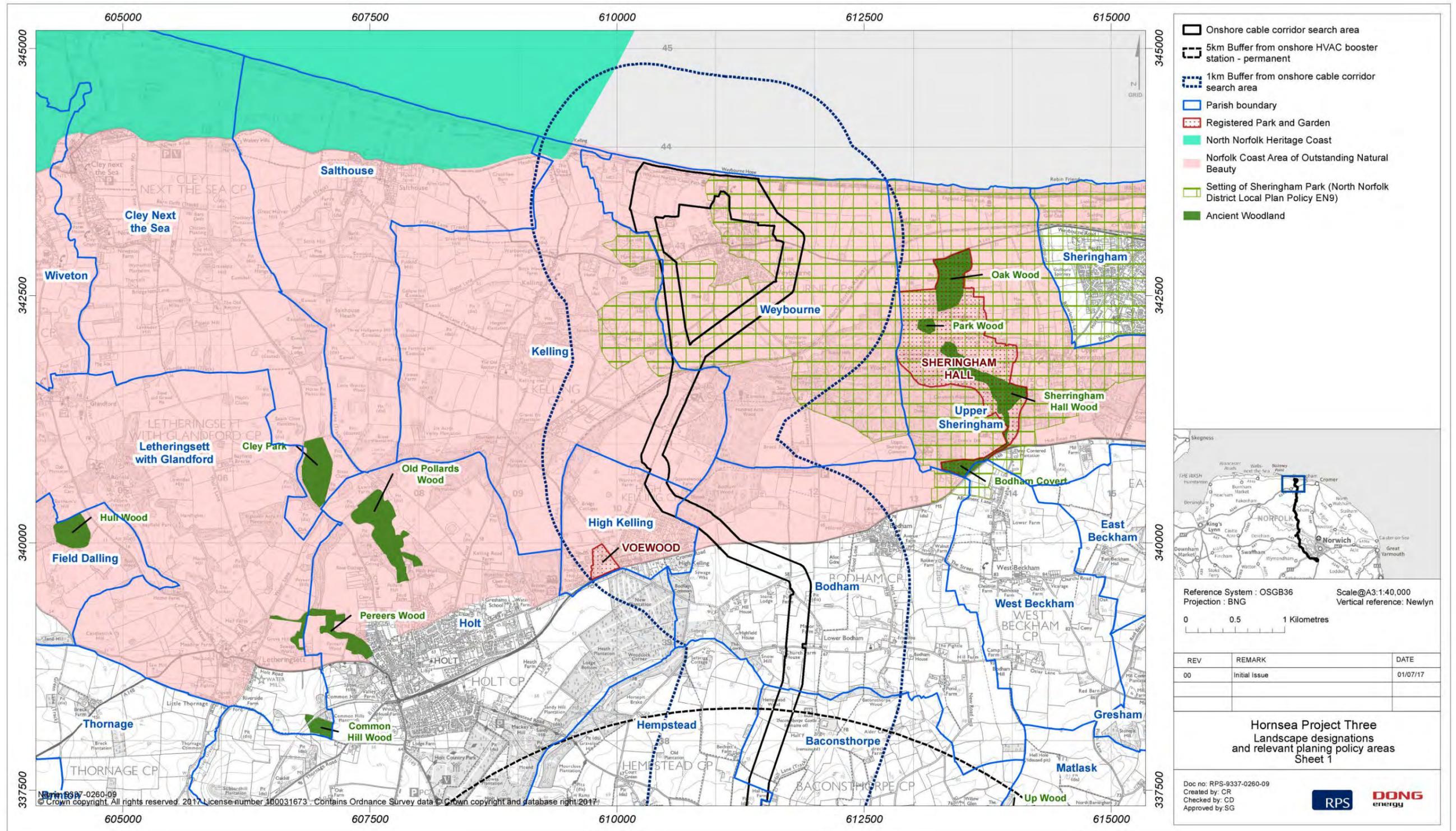


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 1 of 10.

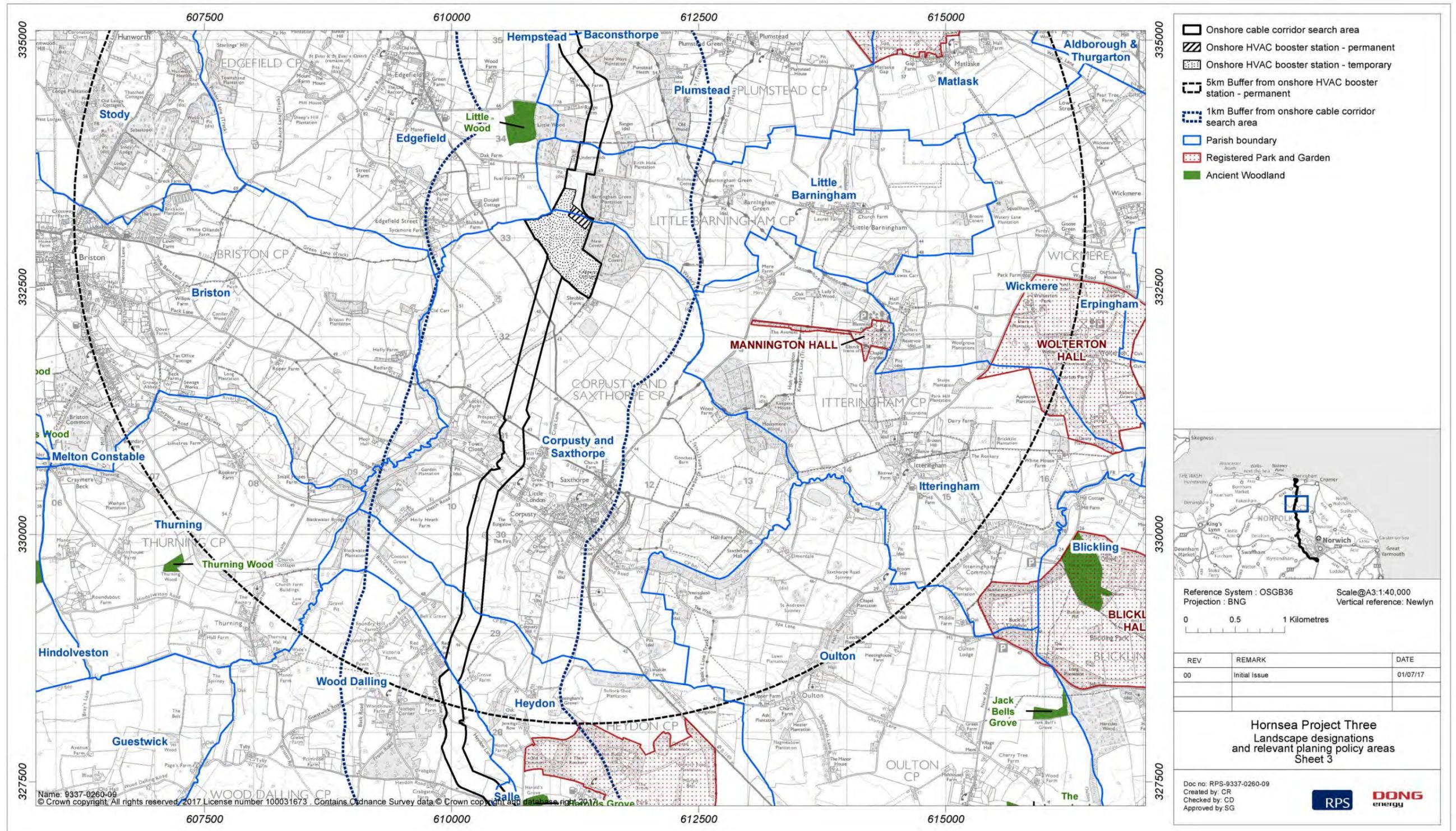


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 3 of 10.

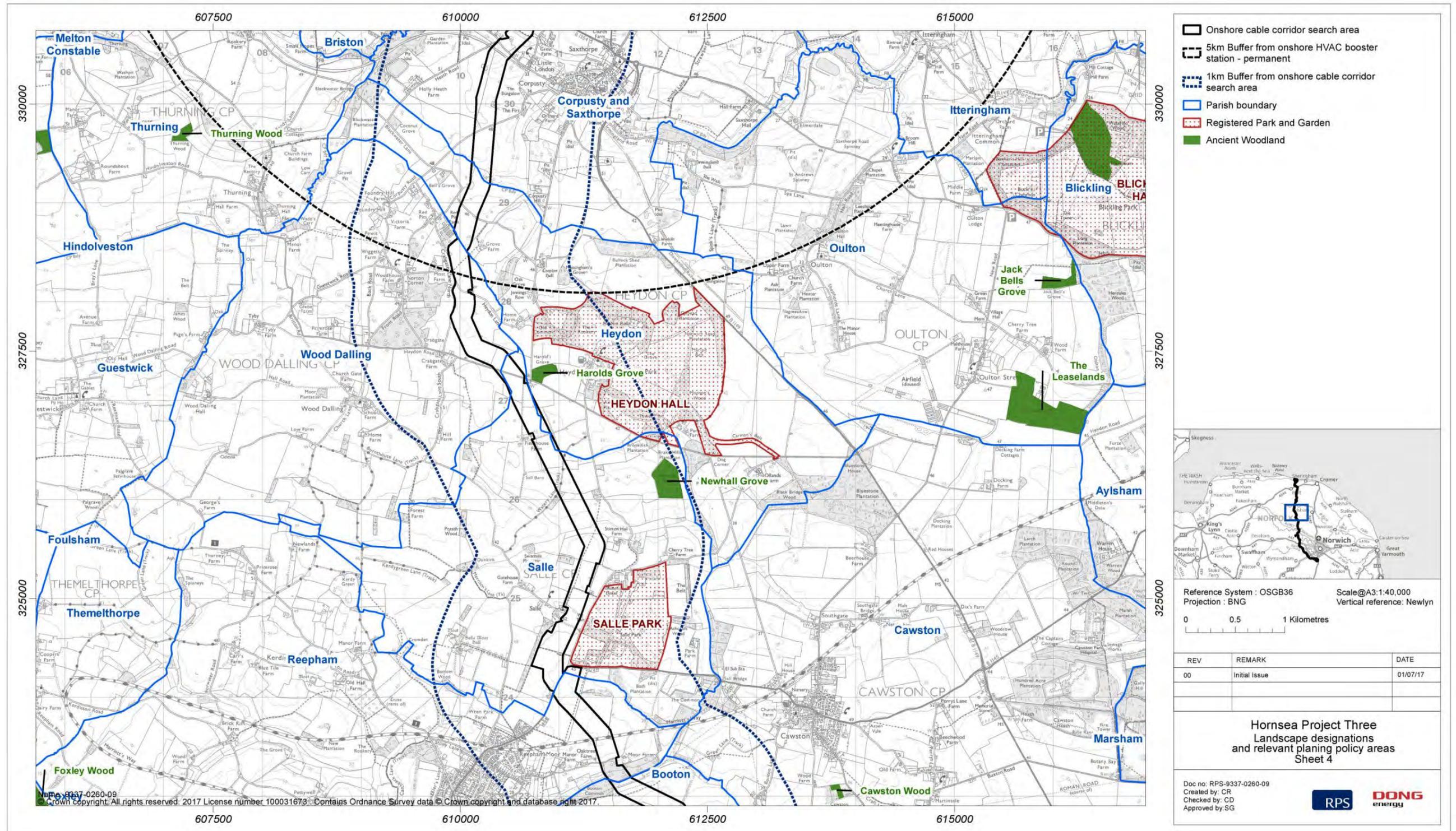


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 4 of 10.

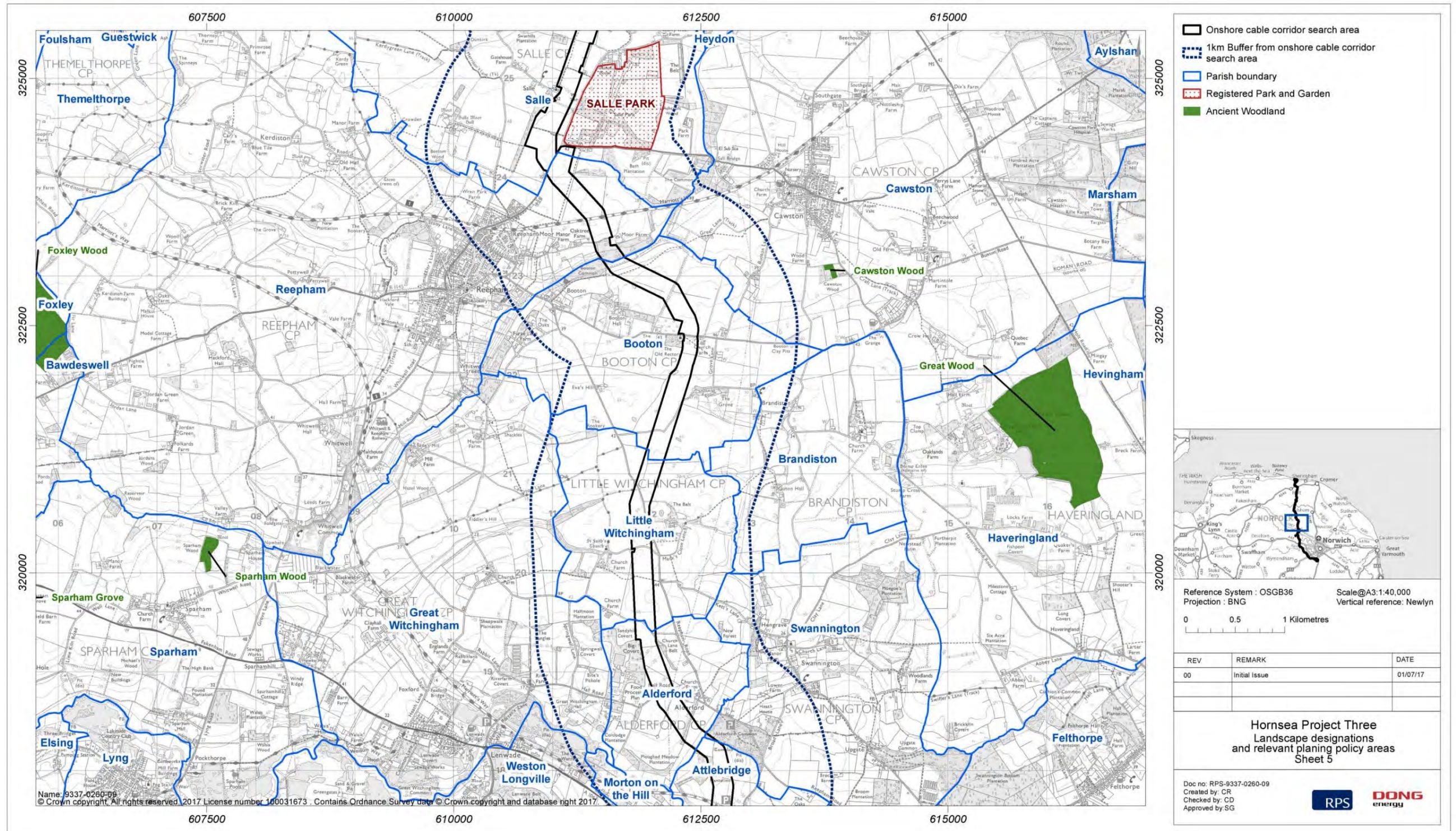


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 5 of 10.

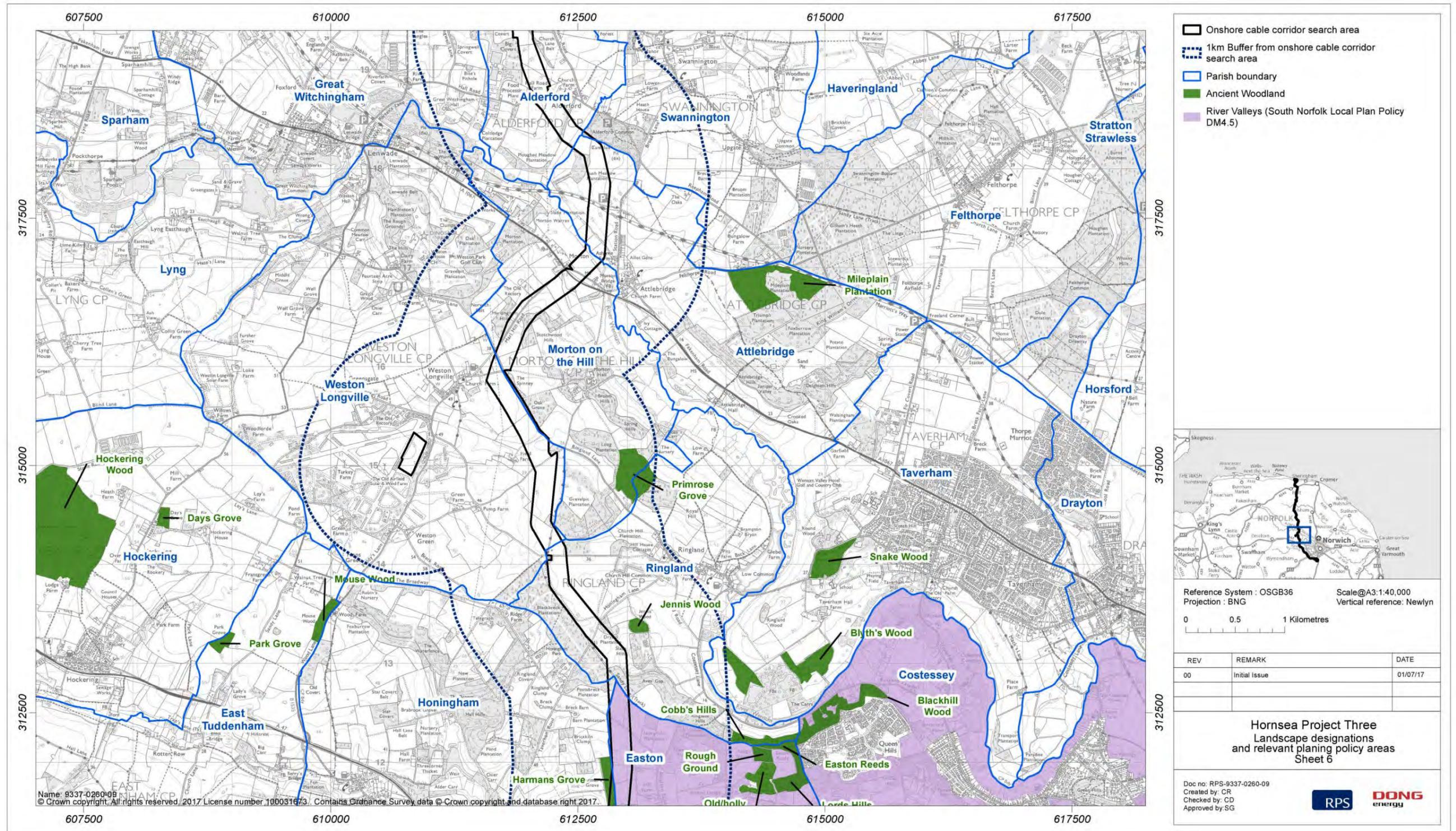


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 6 of 10.

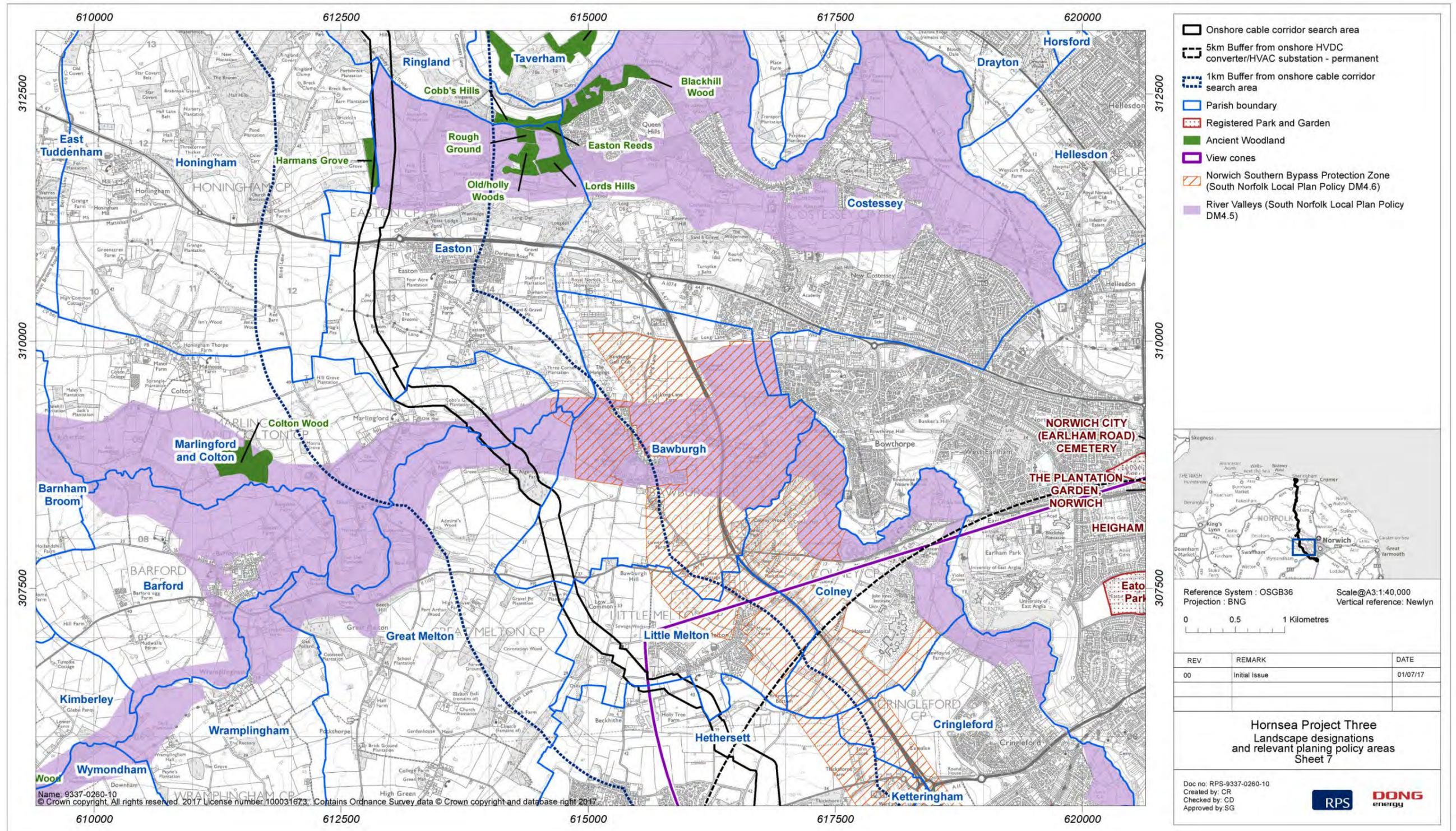


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 7 of 10.

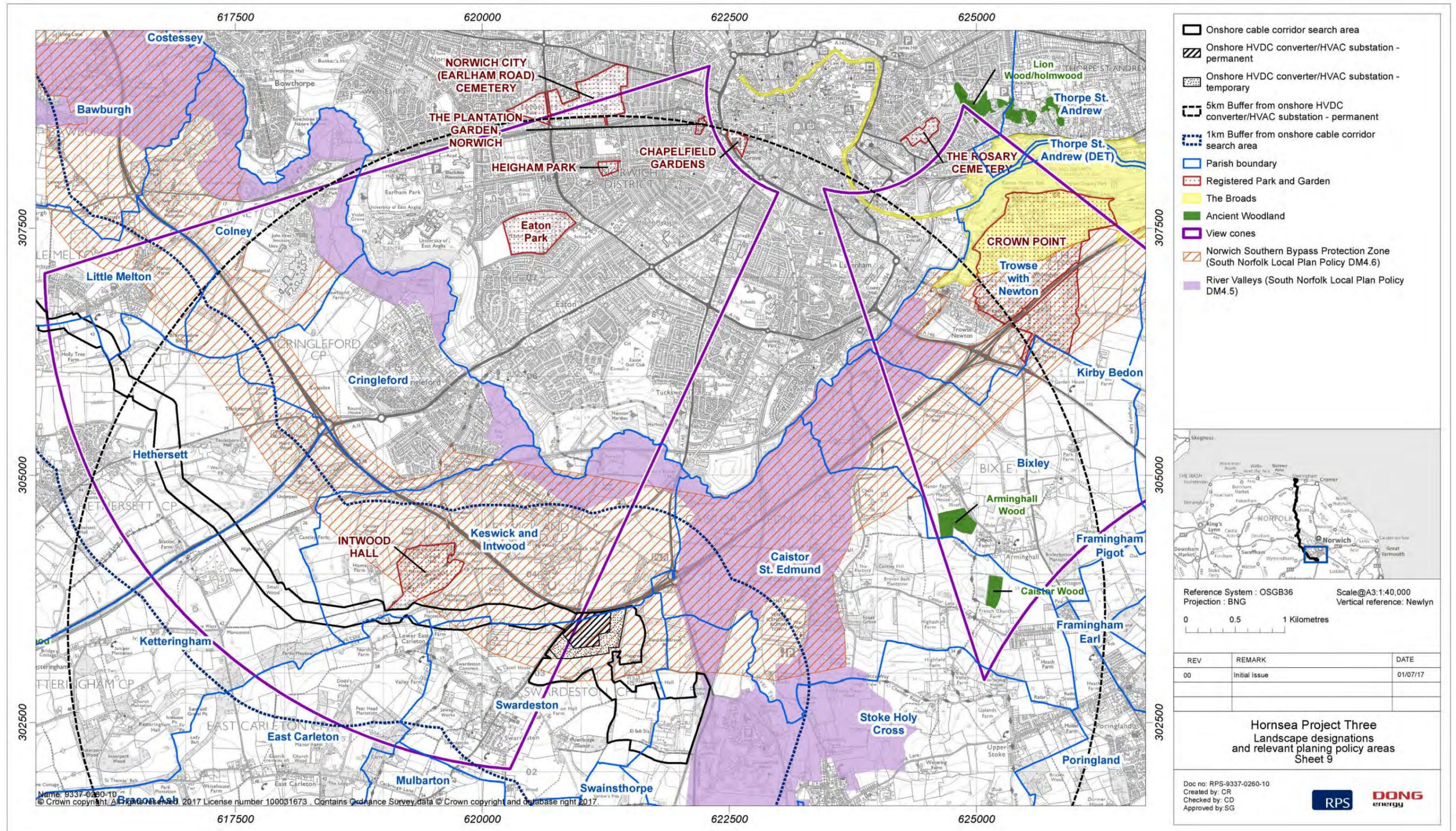


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 9 of 10.

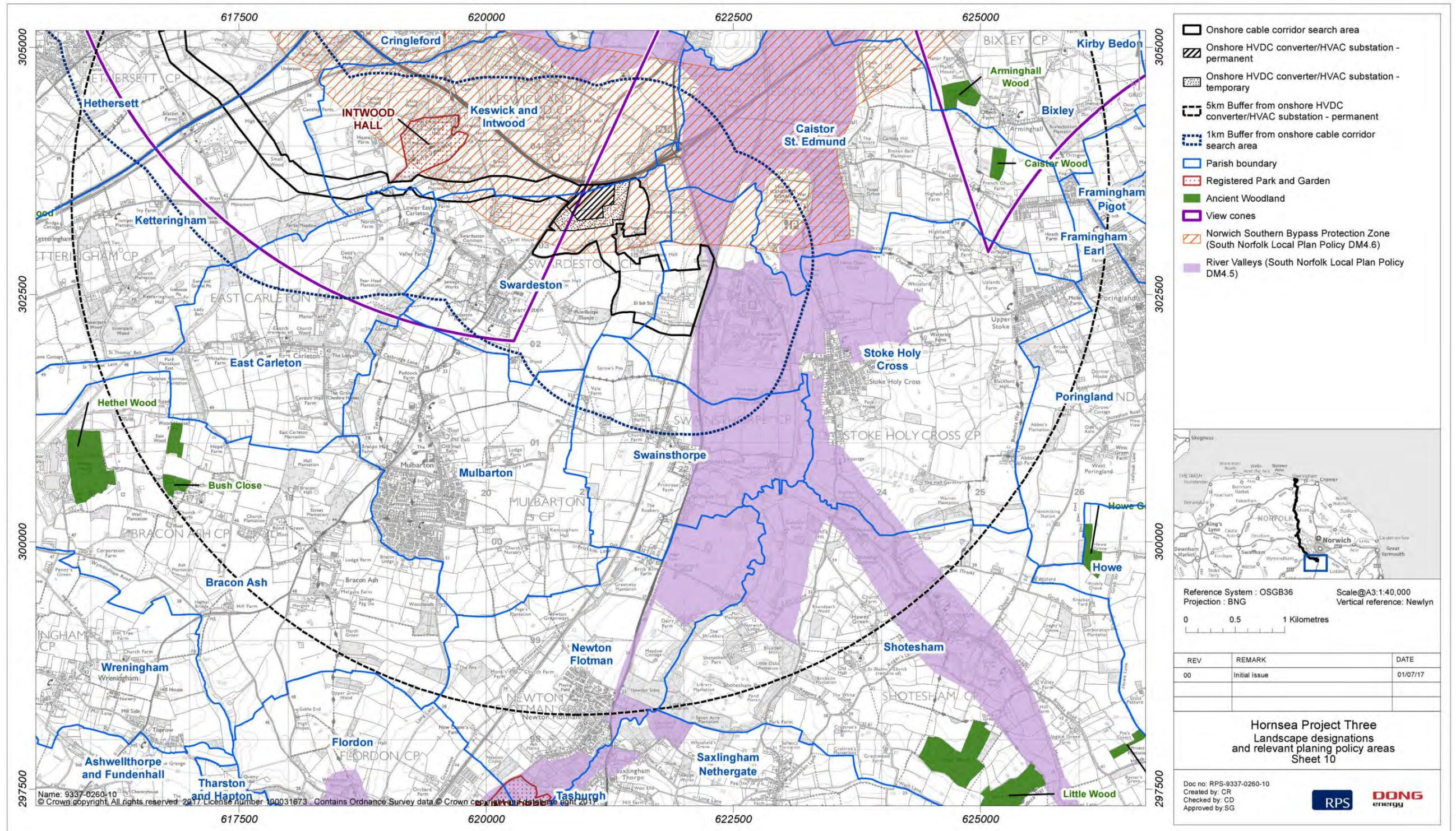


Figure 4.4: Landscape Designations and relevant planning policy areas Sheet 10 of 10.

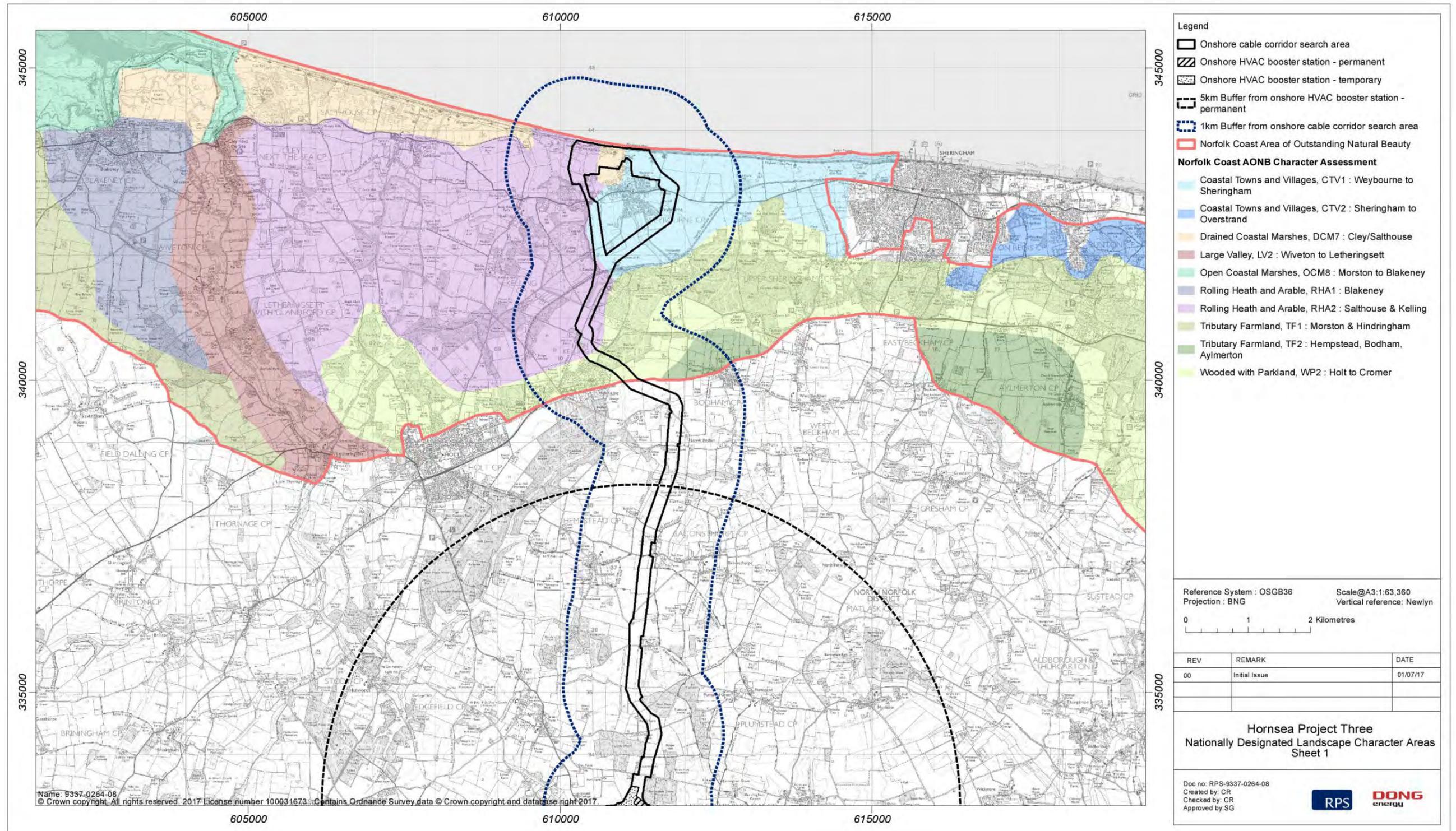


Figure 4.5: National Designated Landscape Character Areas Sheet 1 of 2.

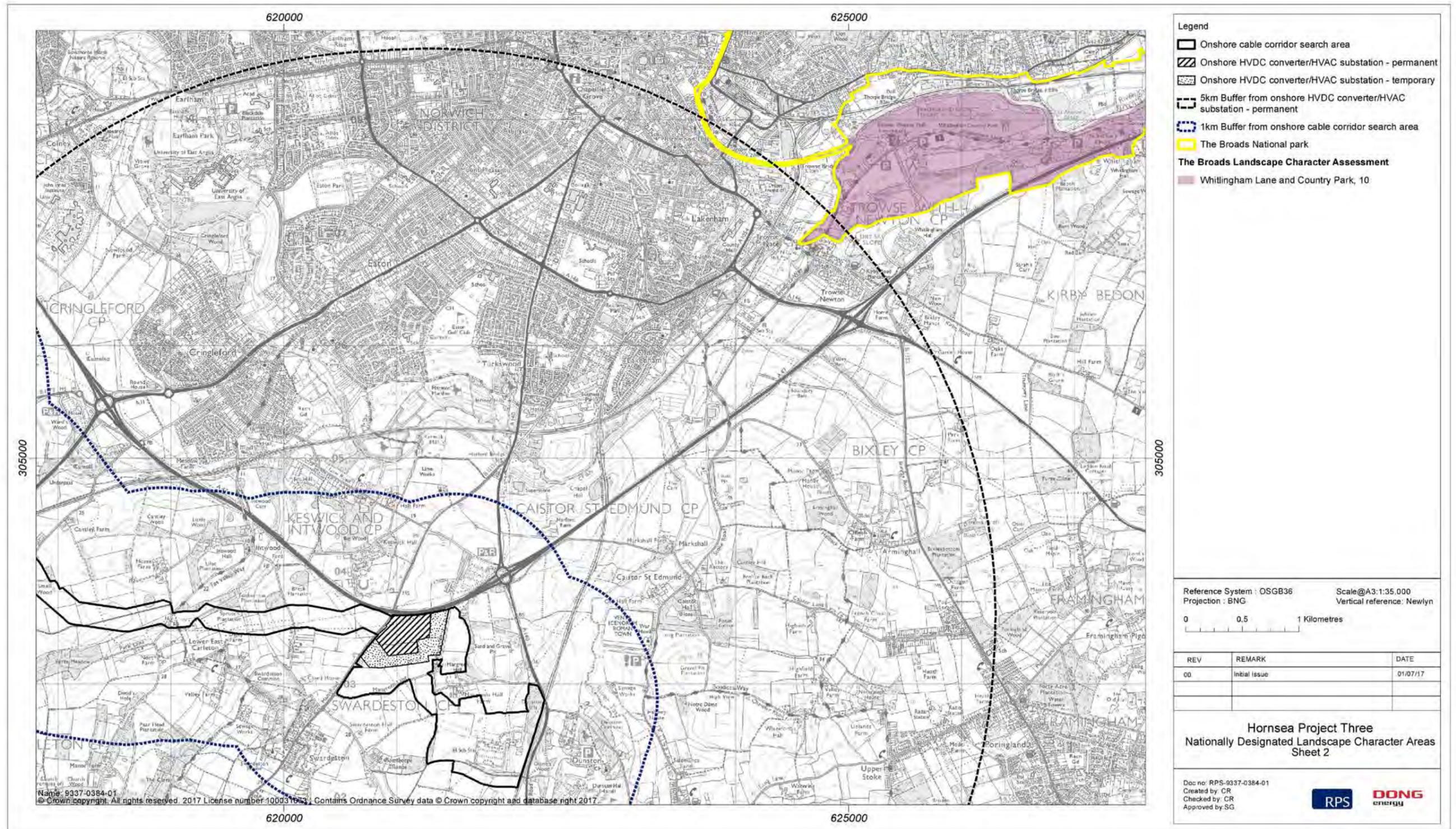


Figure 4.5: National Designated Landscape Character Areas Sheet 2 of 2.

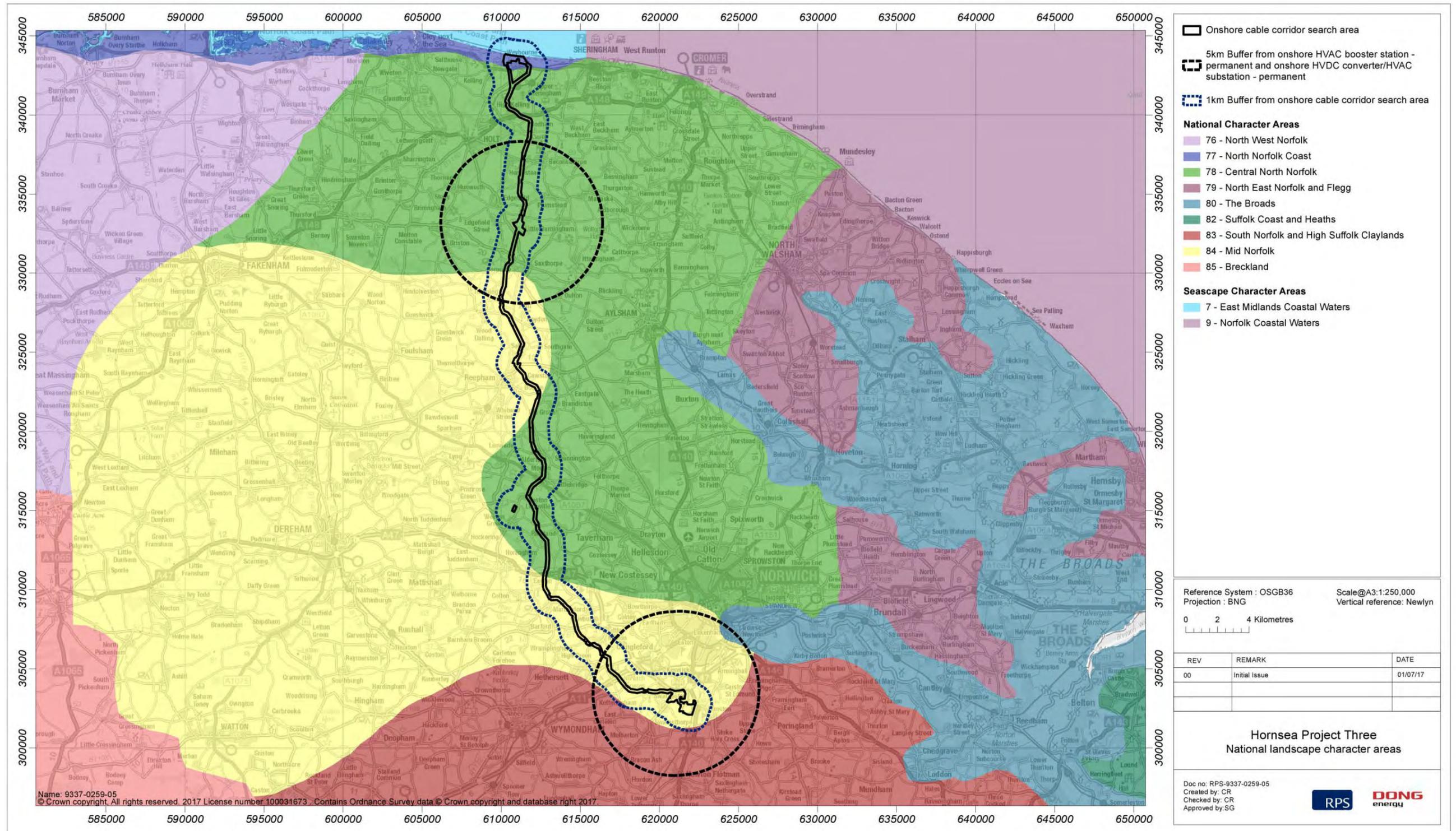


Figure 4.6: National Seaside and National Landscape Character Areas.