

Race Bank Offshore Wind Farm Landfall Works near Sutton Bridge, Lincolnshire

Heritage Statement





**RACE BANK OFFSHORE WIND FARM
LANDFALL WORKS NEAR SUTTON BRIDGE
LINCOLNSHIRE**

HERITAGE STATEMENT

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Ref: 73504.03

December 2015

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Title:	Race Bank Landfall
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Origination date:	27-09-2012
Date of last revision:	18-12-2015
Version:	03
Wessex Archaeology QA:	C Budd
Status:	Final
Summary of changes:	Minor comments from Simon Gamage
Associated reports:	
Client Approval:	S Gamage

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Summary

Wessex Archaeology was commissioned by the RPS Group PLC on behalf of DONG Energy RB (UK) Limited to prepare a statement summarising the heritage constraints of land to the north of Sutton Bridge.

The proposed development seeks an amendment to approved sea defence crossing and installation of transition joint bays previously approved in 2013 under planning permissions HG18-0843-15 (South Holland District Council) and 15/0051/F (the Borough Council of Kings Lynn and West Norfolk). Previously the project sought the installation of 4 x No. Transition Joint Bays (TJBs) and 4 x No. cables through the sea defences. The project now proposes the installation of 2 x No. cables through the sea defences and 2 x No. TJBs.

The groundwork's within the Site are not expected to exceed a depth of 2.00m below present ground level.

The Site was formerly part of the Wash and is situated wholly within reclaimed land. The surrounding landscape within the wider area has been progressively reclaimed since the Romano-British period. The Site itself is positioned within the latter phases of this reclamation process, on land reclaimed or bounded by seawall, since 1951. The probability of terrestrial archaeology being present within the developmental zone within the Site is therefore considered to be very low.

Although the expected archaeological potential of the Site is extremely limited, the actual depths of known impacts within the Site, particularly within the greater northern portion of the Site, such as land reclamation, are not fully understood.

It is therefore considered that further archaeological works such as an archaeological watching brief, may be requested by the relevant planning archaeologist.

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Acknowledgements

This project was commissioned by RPS Group PLC on behalf of DONG Energy RB (UK) Limited and Wessex Archaeology is grateful Simon Gamage in this regard.

Caroline Budd managed the project on behalf of Wessex Archaeology. The report was researched and compiled by Stephen Beach and the illustrations were prepared by Kitty Foster.

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1. INTRODUCTION

1.1. PROJECT BACKGROUND

- 1.1.1. Wessex Archaeology was commissioned by the RPS Group PLC on behalf of DONG Energy RB (UK) Limited to prepare a heritage statement summarising the potential constraints on land to the northeast of Sutton Bridge, centred on National Grid Reference (NGR) 550438 326346, hereafter referred to as 'the Site' (**Figure 1**).
- 1.1.2. The proposed development seeks an amendment to approved sea defence crossing and installation of transition joint bays previously approved in 2013 under planning permissions HG18-0843-15 (South Holland District Council) and 15/0051/F (the Borough Council of Kings Lynn and West Norfolk). Previously the project sought the installation of 4 x No. Transition Joint Bays (TJBs) and 4 x No. cables through the sea defences. The project now proposes the installation of 2 x No. cables through the sea defences and 2 x No. TJBs. The works will enable the connection of the 580MW offshore wind turbine array, via marine export cables through the Wash and a 12km terrestrial cable system, to the National Transmission system at Walpole Marsh, via a new 220kV/400kV substation, currently under development.
- 1.1.3. The groundwork's in the field behind the primary sea defence will not exceed a depth of 2.00m below present ground level. The TJB's and the Cable Routes will not exceed 2m and 1.50m below ground level, respectively. The primary sea defence will be lowered temporarily from its current height (7.7mAOD) to 5.25mAOD. The cables will be installed approximately -0.75mAOD beneath it. In the salt marsh area cables will be installed at depths between -2mAOD and -5mAOD to ensure sufficient burial depth beneath any creeks and gullies in the area. Where the Cable Routes cross existing drainage ditches the depth of these excavations will increase to 2.00m below ground level.
- 1.1.4. This heritage statement is informed by a baseline review of the known and potential archaeology of the existing terrestrial cable route between landfall and the sub-station at Walpole undertaken by RPS Group Plc (Centrica Energy 2006, Volume 2: 73-80). Further works include a series of geotechnical test pit and boreholes conducted c.650 west, and a geophysical survey conducted to the west and south of the Site by Wessex Archaeology (WA) (WA 2008a and 2010a). In the wider area a programme of archaeological works were conducted at Walpole Electrical Substation (WA 2008b), and an archaeological evaluation was carried out along the cable route, 2.9km southeast of the Site (WA 2010b). In addition to these investigations a further archaeological watching brief (WA 2010c) was also conducted along the terrestrial cable route 6km to the south of the Site.

1.2. THE SITE, LOCATION AND GEOLOGY

- 1.2.1. The Site comprises a sub-rectangular plot of approximately 18ha, which includes a southern realignment of the Cable Route which extends for c.550m. The 18ha area described within this report represents a potential maximum extent of the planning application, and it is anticipated that the actual planning application area will have a smaller footprint. It is located along the present northern coastline to the south of Breast Sand, c.5km north of Sutton Bridge, and c.900m east of the River Nene (Tyco Wing's Channel). The Site is bounded to the north by the sea bank (Sir Peter Scott Walk) and to the south by the existing terrestrial cable route.
- 1.2.2. The Site is currently occupied by a mixture of agricultural land, Sea Banks and associated drainage channels.
- 1.2.3. The Site is situated on land wholly reclaimed during the 20th century, at an elevation of approximately 6m above Ordnance Datum (aOD).
- 1.2.4. The underlying geology of the Site comprises Kimmeridge and Ampthill Clays of the Upper Jurassic period; overlain by superficial tidal flat deposits of clays and silts (BGS 1978).

2. AIMS AND SCOPE

- 2.1.1. The aim of this study is to assess the known heritage resource of the Site, and the significance of this resource, as well as to establish the archaeological potential of the Site by making use of existing baseline resources. The Study will consider the Site's archaeological potential and assess the archaeological and heritage implications of the proposed development.

3. METHODOLOGY

3.1. THE STUDY AREA

- 3.1.1. The recorded historic environment resource within a 500m Study Area around the Site was considered in order to provide a context for the discussion and interpretation of the known and potential resource within the Site (**Figure 1**).

3.2. SOURCES

- 3.2.1. The baseline review of the known and potential archaeology of the existing terrestrial cable route between landfall and the sub-station at Walpole undertaken by RPS Group Plc forms the primary source of information consulted (Centrica Energy 2007, Volume 2: 73-80). A number of publicly accessible sources of primary and synthesised information were also consulted, including datasets from English Heritage (now Historic England) (Scheduled Monuments and Listed Buildings) and the British Geological Survey. Other information was synthesised from the previous work conducted by Wessex Archaeology (see above).

3.3. BEST PRACTICE

- 3.3.1. This assessment has been carried out in accordance with the Institute for Archaeologists' *Standard and Guidance for historic environment desk-based assessment* (CIfA 2014).

3.4. ASSUMPTIONS AND LIMITATIONS

- 3.4.1. Data used to compile this statement includes secondary information derived from a variety of sources, only some of which have been directly examined for the purposes of this Study. The assumption is made that this data, as well as that derived from other secondary sources, is reasonably accurate.

3.5. COPYRIGHT

- 3.5.1. This statement may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which we are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferrable by Wessex Archaeology. You are reminded that you remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

4. PLANNING

4.1. POLICY FRAMEWORK

- 4.1.1. There is national legislation and guidance relating to the protection of, and proposed development on or near, important archaeological sites or historical buildings within planning regulations as defined under the provisions of the *Town and Country Planning Act 1990 (as amended)*. In addition, local authorities are responsible for the protection of the historic environment within the planning system.
- 4.1.2. These policies identify the historic environment resource as a non-renewable, fragile and finite resource, the conservation of which accords with the principles of sustainable development, and a priority is placed on its conservation including the setting out of tests to ensure any damage or loss is permitted only where it is properly justified.
- 4.1.3. The overarching national policy covering the effects of development on the historic environment is the *National Planning Policy Framework (NPPF)*. The requirement for heritage effects to be assessed is set out in paragraph 128 of the NPPF.
- 4.1.4. The relevant planning document for South Holland District Council is currently the *South Holland District Council Local Plan* (adopted 2006)

(<http://www.sholland.gov.uk/localplan/text/00cont.htm>).
- 4.1.5. On 5th July 2011, the South East Lincolnshire Joint Strategic Planning Committee Order 2011 came into force, creating the South East Lincolnshire Joint Strategic Planning Committee. This is a new, separate, statutory local planning authority covering Boston Borough and South Holland District, which will be responsible for the production of a new local plan for the area. However, a draft Local Plan is not due to be published until early 2016 and as such policies from the 2006 *South Holland District Council Local Plan* still remain in force.
- 4.1.6. The national and local policies relevant to the present scheme are outlined in full in **Appendix 1**.

5. HERITAGE RESOURCE

5.1. INTRODUCTION

- 5.1.1. The following section provides a brief summary of the archaeological and historical development of the Site and the Study Area, compiled from sources listed above. The aim is to establish the known and potential resource which could be affected by the development.

5.2. DESIGNATED HERITAGE ASSETS

- 5.2.1. There are no Scheduled Monuments located within the Site or the Study Area, with the nearest Scheduled Monument located 9.4km to the southeast of the Site.
- 5.2.2. There are no Listed Buildings within the Site or the Study Area. However, two Grade II* Listed early 19th century Lighthouses, East Lighthouse (**SM No.1281069**) and West Lighthouse (**SM No.1064537**), are situated with 760m of the Site.
- 5.2.3. There are no Protected Wreck Sites within the Site or the Study Area.

5.3. PREVIOUS STUDIES

- 5.3.1. A series of six boreholes excavated into the 1951 bank drain, which forms the northern boundary of the Site, identified surface deposits of clay merging into sand and sandy silts. One of these boreholes identified deposits of soft black organic clay between 1.32m and 2.29m below ground level (Centrica Energy, 2007).
- 5.3.2. A series of geotechnical investigation have been conducted along the entire extent of the terrestrial cable. Of these only one test pit (**TP05**) was located immediately adjacent to the southern edge of the Site (**Figure 1**). No archaeological features or deposits were identified within **TP05**, which was excavated to a depth of 2.20m below ground level. As only made ground, alluvial silts and marine deposits were identified within this test pit (**TP05**) and within other test pits and borehole situated to the west of the Site, it was concluded that '**there was very little potential for terrestrial archaeological remains**' (WA 2008a).
- 5.3.3. The geotechnical log which describes the stratigraphic sequence identified within test pit **TP5** can found in **Appendix 2**; its location is depicted on **Figure 1**.
- 5.3.4. A geophysical survey conducted by Wessex Archaeology along the terrestrial cable route identified a number of anomalies (WA 2010a) (**Figure 1**). All of these anomalies were considered to be ferrous in origin and unlikely to be of archaeological origin.

5.4. HISTORICAL DEVELOPMENT AND ARCHAEOLOGICAL BASELINE

- 5.4.1. A baseline review of the known and potential archaeology of the terrestrial cable route was previously undertaken by RPS Group Plc (Centrica Energy 2007). This section derives from this research along with the written scheme of investigation produced prior to the previous evaluation (WA 2010b).
- 5.4.2. The Site was formerly part of the Wash and is situated wholly on reclaimed land. The land within the wider area has been progressively reclaimed since the Romano-British period (AD43 onwards). The Site itself is positioned within the latter phases of this reclamation process, on land reclaimed or bounded by a seawall, since 1951.

- 5.4.3. The probability of terrestrial archaeology being present within the Site is therefore very low. However, there remains the extremely limited possibility of the presence maritime remains within Site.
- 5.4.4. The palaeoenvironmental potential of the Former Wash Estuary is considered to be limited, and differs from the higher potential of the near-by Fens (Centrica Energy 2007).

6. IMPACTS

6.1. INTRODUCTION

- 6.1.1. The management and mitigation of change to heritage assets resulting from development is based on the recognition in Government planning objectives that *heritage assets are irreplaceable* (NPPF, para. 12.132). Impacts upon the historic environment and its associated heritage assets arise where changes are made to their physical environment by means of the loss and/or degradation of their physical fabric or setting, which in turn leads to a reduction in the significance of the historic environment record and its associated heritage assets.

6.2. PREVIOUS IMPACTS

- 6.2.1. Previous adverse impacts such as land reclamation, which have occurred within the Site have reduced the potential for buried terrestrial or marine archaeological features to have survived intact. In the unlikely event of any such features being present and surviving the reclamation process, these features are likely to be buried and sealed under a layer of modern made ground.

6.3. PRELIMINARY IMPACT ASSESSMENT

Designated Heritage Assets

- 6.3.1. This study has identified two Grade II* Listed Buildings approx. 700m outside the Study Area.
- 6.3.2. There will be no direct physical effect to any Listed Building as a result of development of the Site. Due to distances involved, it is also considered highly unlikely that completed development would cause any adverse effects greater than a negligible adverse impact (neutral significance) to the setting of the above designated heritage assets. It is however, considered likely that the construction works have the potential to cause a temporary minor adverse impact to the setting of these designated heritage assets, which would be reduced to a negligible magnitude once the works were complete.

Undesignated and Potential Buried Heritage Assets

- 6.3.3. Given the 20th century land reclamation works conducted within the entire Site it is considered unlikely that any intrusive groundworks carried out within the Site would have any potential to cause direct adverse effects, partially or entirely to any archaeological remains, which may have been present or have survived within the Site.
- 6.3.4. Furthermore it is considered that the potential for archaeological remains to be present within the marine deposits below the modern made ground layers are extremely limited; although the potential for earlier prehistoric remains may increase

lower in the sequence, these layers are unlikely to be reached or disturbed by this development.

7. CONCLUSION

- 7.1.1. The aims of the Study were to assess the known heritage resource of the Site and its significance, as well as to establish the archaeological potential of the Site by making use of available resources. The Study has identified no overriding heritage issues which are likely to prove a barrier to the development of the Site.

7.2. MITIGATION

- 7.2.1. Given the extremely low archaeological potential of the Site and potential previous impacts from 20th century land reclamation activities it is assessed that any deeply buried heritage assets, if present, are unlikely to be adversely impacted by the limited scope of this development. However, previous archaeological or geotechnical investigations conducted within the immediate vicinity of the Site are limited to one archaeologically monitored geotechnical test pit (**TP05**) and the geophysical survey conducted on the existing terrestrial cable route, located to the south of the Site. Although the expected archaeological potential of the Site is extremely limited, the actual depths of known impacts within the Site, particularly within the greater northern portion, such as land reclamation, are not fully understood.
- 7.2.2. It is therefore considered that further archaeological works such as an archaeological watching brief, may be requested by the relevant planning archaeologist. The need for, scope and timing, of any further archaeological works should be agreed in consultation with the Planning Archaeologist for Lincolnshire County Council.

8. REFERENCES

- Centrica Energy, 2007, LINCS Offshore Wind Farm, Environmental Statement Volume Two: Onshore.
- Wessex Archaeology, 2008a, LINCS Offshore Windfarm, Nr Sutton Bridge, Norfolk, Archaeological Watching Brief Report on Geotechnical Investigation Works, unpublished client report ref 69820.01
- Wessex Archaeology, 2008b, Walpole Electricity Substation, Walpole St. Peter, Norfolk; Report on a Programme of Archaeological Works, unpublished client report ref 69821.03
- Wessex Archaeology, 2010a, LINCS Offshore Windfarm, Lincolnshire Cable Route Onshore Section, Caesium Vapour Magnetometer and Archaeological Rapid Landscape Assessment Survey, unpublished client report ref 73501.03
- Wessex Archaeology, 2010b, LINCS Offshore Wind farm, Lincolnshire Cable Route Onshore Section, Lincolnshire, Archaeological Evaluation Report, unpublished client report ref 73502.03
- Wessex Archaeology, 2010c, LINCS Offshore Wind farm, Norfolk Cable Route Onshore Section, Archaeological Watching Brief Report, unpublished client report ref 73503.03

APPENDIX 1: NATIONAL AND LOCAL HISTORIC ENVIRONMENT POLICIES

National planning policy

Policy Ref.	Title	Scope
n/a	Ancient Monuments and Archaeological Areas Act 1979 (as amended)	Scheduled Monuments and Archaeological Areas of Importance (AAIs or their equivalent) are afforded statutory protection and the consent of SoS (DCMS), as advised by Historic England (formerly English Heritage), is required for any works.
n/a	Planning (Listed Buildings and Conservation Areas) Act 1990	Works affecting Listed Buildings and Conservation Areas are subject to additional planning controls administered by Local Planning Authorities (LPAs). EH are a statutory consultee in works affecting Grade I or II* Listed Buildings.
NPPF	Conserving and enhancing the historic environment. Para. 128	In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.
NPPF	Conserving and enhancing the historic environment. Para. 129	Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.
NPPF	Conserving and enhancing the historic environment. Para. 132	When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be.
NPPF	Conserving and enhancing the historic environment. Para. 141	Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible.
n/a	Hedgerow Regulations 1997 (amended 2002)	Under the Hedgerow Regulations 1997, as amended by The Hedgerows (England) (Amendment) Regulations 2002, hedgerows are deemed to be historically Important if they are over 30 years old and if:

Policy Ref.	Title	Scope
		A hedgerow incorporating, or associated with, an archaeological feature or site which is: a) Included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979; or b) Recorded at the relevant date in a Sites and Monuments Record c) A hedgerow that forms an integral part of a pre-1845 field system, or a pre-1870 enclosure field system In practice hedgerows are deemed Important under the above regulations if they can be demonstrated to exist on the appropriate pre-1845 parish tithe or enclosure map.

Local planning policy: Holland District Council Local Plan 2006

Policy Ref.	Scope
EN4	Development Affecting Listed Buildings - The District Council will protect listed buildings in order that the historic fabric of the area is retained. Planning permission for development affecting a listed building or its setting will only be granted where the proposal preserves or enhances the character and appearance of the building and its setting. The following criteria will be applied in determining proposals: 1) The development should respect the character of the listed building in terms of size, form, positioning, scale, design, roofscape, materials, colour, fenestration, detailing and its setting in terms of materials, landscaping and street furniture. 2) The development should ensure that important views and closures, including through views, and ancient street patterns are restored or maintained. 3) The development should preserve features of special architectural or historic interest which the building may possess. 4) The development should preserve or enhance the historic form and structural integrity of the building.
EN12	Scheduled Monuments - Development proposals that adversely affect scheduled monuments and other nationally, regionally and locally important archaeological sites or their settings will not be permitted.

APPENDIX 2: TEST PIT AND BOREHOLE SUMMARY TABLES

The following soil description has been taken from the Harrison Group geotechnical logs.

TEST PIT 5		TP05
Dimensions (length x width x depth): 2.5m x 1.6m x 2.2m		Coordinates: 550139.00E 325551.00N
501	Topsoil – Firm dark grey locally slightly sandy silt. Occasional organic material.	0.00-0.40
502	Firm brown slightly sandy silt with occasional mottles of light orange brown fine sand. Becoming silty from 1.20m.	0.40-1.60
503	Soft dark grey locally sandy silt. Occasional organic material.	1.60+



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FS 606559

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