Appendix 12A: Heritage Desk Based Assessment

AECOM

Humber Zero

Environmental Statement Appendix 12A: Archaeological Desk Based Assessment

VPI Immingham and Phillips 66

Project number: 60668866

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Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position

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1. Introduction

1.1 AECOM has been instructed by VPI Immingham and Phillips 66 (the 'Applicants') to undertake a desk-based assessment (DBA) in support of two separate planning applications to develop land within the Humber Refinery and to the south of the VPI Immingham CHP Plant (the 'Sites') for post-combustion carbon capture (PCC) plants ('the Proposed Developments'). The applications pertain to the construction of a Post-Combustion Carbon Capture (PCC) scheme and the infrastructure necessary to support this initiative.

1.2 This DBA identifies all known designated and non-designated heritage assets within a defined study area of 1,000 m (1 km) surrounding the Sites and all designated assets (only) within 5,000 m (5 km) study area of the Sites, in order to assess the archaeological potential of the Sites and identify key archaeological constraints. It places the Sites within their wider heritage context to inform the assessment of significance of the heritage resource. Heritage resource in this context means the above and below-ground archaeological resource, built heritage, the historic landscape and any other elements which may contribute to the historical and cultural heritage of the area.

Site Location and Description

1.3 Taken as a whole, the Sites lie 1.6 km north of Immingham and 1.5 km west of the Humber Estuary. The Sites are located within the administrative boundary of the North Lincolnshire Council, in the ward of Ferry and Parish of South Killingholme. The 1 km study area also takes in North East Lincolnshire Council (Immingham Ward), whilst the 5 km study area additionally comprises West Lindsey District Council (part of Lincolnshire County Council). The centre of the Phillips 66 Site is NGR 515591, 416883. The VPI Site is centred at NGR 516764 417067. The nearest postcode is that of the Phillips 66, DN40 3DW.

1.4 At its closest points, the boundaries of the Sites are located *c.*1.5 km to the west of the Humber Estuary Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site and falls within the SSSI impact risk zone

1.5 ES Figure 1.1 illustrates the boundaries of the two Sites. The Phillips 66 Site is *c.* 15.54 ha and the VPI Site is *c.* 28.45 ha.

Phillips 66 Site

1.6 The Phillips 66 Site is largely within the operational Humber Refinery. The majority of area required for the proposed Phillips 66 PCC plant is currently used for open storage (and associated safety standoff areas) and temporary uses such as site cabins for maintenance contractors, which will be relocated to other parts of the Humber Refinery. There are also areas of exiting utilities (above ground pipelines on racks), internal roadways and to the east of the site, railway sidings and part of the National Rail operated railway line between Grimsby, Immingham and Ulceby. The proposed CO_2 pipeline will cross both the railway sidings and railway line. The westernmost part of the proposed Phillips 66 PCC plant area is used for car parking and whist this is not anticipated to be required for the Phillips 66 PCC plant, a proposed new access from Eastfield Road will pass through this parking area.

1.7 The topography of the Phillips 66 Site has been determined using LiDAR imagery. The Phillips 66 Site sits on somewhat of a mound. This means that the average height of the site is *c.*12 m above Ordnance Datum (AOD) but that is slopes down to *c.*10 m AOD towards the north and west, to *c.* 8 m AOD to the east and south, with a maximum heigh of *c.*17 m towards the middle of the site.

1.8 The proposed Phillips 66 PCC development area is located slightly further to the west than the VPI Immingham Site and thus is 2.2 km from the Humber Estuary SSSI, SAC, SPA and Ramsar, thought it does still fall within the SSSI impact risk zone. The proposed Phillips 66 PCC development area is entirely in Flood Zone 1 (low risk).

VPI Site

1.9 The topography of the Phillips 66 Site has been determined using LiDAR imagery. The VPI Site is within and to the south of the operational VPI Immingham CHP Plant site. The proposed VPI PCC development area currently comprises grassland with an open ditch running through the centre, areas of hardstanding and existing below ground utilities. The area was previously used for construction laydown during the construction of the CHP Plant. The VPI Site is located on a relatively gentle west (*c.* 7 m AOD) to east (*c.* 3 m AOD) slope with an average height of *c.* 5 m.

1.10 With the exception of minor areas, the VPI Site lies within Flood Zone 3 classified as having a 'high risk' of flooding from fluvial or tidal sources.

Proposed Developments

1.11 The layouts of the Proposed Developments are shown on ES Figures 3.1 and 3.2 and the Proposed Developments are described in ES Chapter 3 (Proposed Developments, Need and Alternatives Considered).

Aims

1.12 The requirement for this assessment and its scope is guided by policy contained within the National Planning Policy Framework (NPPF) 2021, specifically paragraph 194, which seeks an assessment proportionate to the asset's importance and sufficient to understand the potential impacts of development and to appraise the nature and extent of any impact upon setting and significance.

1.13 This report conforms to the requirements of the NPPF. It describes the Sites, including the cultural heritage assets within the Sites and the study area, and assesses their significance and how their setting affects this significance. It also places the Proposed Developments within the planning framework and identifies where significance may be affected by the Proposed Developments.

1.14 The aims of the assessment are:

- to identify designated heritage assets within the Sites and study area and assess components of their setting that contribute to their significance;
- to place the Sites within their historic/archaeological context through the collection of baseline information;
- to identify known non-designated heritage assets within the Sites;
- to identify the potential for previously unrecorded heritage assets within the Sites;
- to assess the significance of cultural heritage assets within the Sites and the likely significance of previously unrecorded archaeological remains that may be located therein; and
- to assess the impact of the Proposed Developments on the designated and non-designated heritage assets identified.

Structure

1.15 This report is structured in six sections, with illustrations and appendices at the end.

- the introductory section regarding the scope of assessment and Proposed Developments (this section);
- the legislative and planning policy framework is provided in Section 2 (Legislation and Planning Policy) which also includes an overview of Historic England policy and guidance;
- the methodology for assessment and determination of the study area is set out in Section 3 (Assessment Methodology);

- a description of the Sites' historical background is set out in Section 4 (Heritage Baseline);
- Section 5 provides an assessment of the significance of all cultural heritage assets likely to be impacted by the Proposed Developments. It also includes an assessment of the impacts of the Proposed Developments on known and previously unrecorded heritage assets within the Sites and study area known (Assessment); and
- Section 6 summarises the results of the assessment and makes recommendations for further work, if required to inform the baseline or to mitigate the impact of the Proposed Developments (Conclusion and Recommendations).

2. Legislation and Planning Policy

The Planning (Listed Buildings and Conservation Areas) Act 1990

2.1 The Planning (Listed Buildings and Conservation Areas) Act 1990 (the Act) sets out the principal statutory provisions that must be considered in the determination of any application affecting listed buildings and conservation areas.

2.2 Section 66 of the Act states that in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. By virtue of Section 1(5) of the Act a listed building includes any object or structure within its curtilage.

2.3 Section 72 of the Act establishes a general duty on a local planning authority or the Secretary of State with respect to any buildings or other land in a Conservation Area to pay special attention to the desirability of preserving or enhancing the character or appearance of a Conservation Area.

The Ancient Monuments and Archaeological Areas Act (1979)

2.4 The Ancient Monuments and Archaeological Areas Act imposes a requirement for Scheduled Monument Consent for any works of demolition, repair, and alteration which might affect a designated Scheduled Monument.

2.5 This Act is the central piece of legislation that protects the archaeological resource. The first section of the Act requires the Secretary of State for National Heritage to maintain a schedule of nationally important sites. For the purposes of the Act, a monument is defined as:

> "*a) any building, structure or work, whether above or below the surface of the land, and any cave or excavation; b) any site comprising the remains of any such building, structure or work or of any cave or excavation; and c) any site comprising, or comprising the remains of, any vehicle, vessel, aircraft or other moveable structure or part thereof which neither constitutes nor forms part of any work which is a monument as defined within paragraph a) above; d) and any machinery attached to a monument shall be regarded as part of the monument if it could not be detached without being dismantled' (Section 61 (7))*."

2.6 The Act further defines an ancient monument as:

> *"any Scheduled Monument; and any other monument which in the opinion of the Secretary of State is of public interest by reason of the historic, architectural, traditional, artistic or archaeological interest attaching to it' (Section 61 (12))."*

2.7 A set of criteria, defined as survival/condition, period, rarity, fragility/vulnerability, diversity, documentation, group value and potential, assist in the decision-making process as to whether an asset is deemed of national importance and best managed by scheduling.

Planning Policy

National Planning Policy Framework (2021)

2.8 The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government (MHCLG), 2021) sets out the Government's planning policies for England and how these should be applied to contribute to the achievement of sustainable development. The NPPF requires plans, both strategic and non-strategic, to make provision for the conservation and enhancement of the historic environment (paragraphs 15 - 23).

2.9 The NPPF sets out the importance of being able to assess the significance of heritage assets that may be affected by a development proposal. Significance is defined in Annex 2 as '*the value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting*'. The setting of a heritage asset is defined in Annex 2 as '*the surroundings in which a heritage asset is experienced*'. 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 asset's importance and no more than is sufficient to understand the potential impact of the proposal on their significance (paragraph 194). Similarly, there is a requirement on local planning authorities to identify and assess the significance of any heritage asset that may be affected by a proposal; and that they should take this assessment into account when considering the impact of a proposal on a heritage asset (paragraph 195).

Planning Practice Guidance (2019)

2.10 The Planning Practice Guidance (PPG) (MHCLG, 2019) is a government produced interactive on-line document that provides further advice and guidance that expands the policy outlined in the NPPF. It expands on terms such as 'significance' and its importance in decision making. The PPG clarifies that being able to properly assess the nature, extent and the importance of the significance of the heritage asset and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals (paragraph 008 Reference ID: 18a-008-20190723).

2.11 The PPG states that in relation to setting a thorough assessment of the impact on setting needs to take in to account, and be proportionate to, the significance of the heritage asset under consideration and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it (paragraph 009 Reference ID: 18a-009-20190723).

2.12 The PPG discusses how to assess if there is substantial harm. It states that what matters in assessing if a proposal causes substantial harm is the impact on the significance of the asset. It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed (paragraph 017). Generally, harm to heritage assets can be avoided or minimised if proposals are based on a clear understanding of the heritage asset and its setting (paragraph 008 Reference ID: 18a-008-20190723).

2.13 The NPPF indicates that the degree of harm should be considered alongside any public benefits that can be delivered by development. The PPG states that these benefits should flow from the Proposed Scheme and should be of a nature and scale to be of benefit to the public and not just a private benefit and would include securing the optimum viable use of an asset in support of its long term conservation (paragraph 020 Reference ID: 18a-020-20190723).

Hedgerow Regulations (1997)

2.14 Hedgerows of historic importance are afforded protection under The Hedgerow Regulations 1997, section 97 of the Environment Act 1995. The scheme came into effect on 1 June 1997 and any hedgerow, which is defined, at that date, as being of historical or ecological importance may require consent from the local planning authority prior to removal. Although afforded protection by statute, historically important hedgerows are not considered to be 'designated' assets.

Local Planning Policy

The North Lincolnshire Local Development Framework

2.15 The North Lincolnshire Local Plan was adopted in 2003 by North Lincolnshire Council (NLC) (NLC, 20011a). This was largely replaced by The North Lincolnshire Local Development Framework which was adopted in June 2011 (NLC, 2011b). The framework is a suite of Development Plan Documents (DPDs) which set out the local planning policy for the area. However, a number of the policy and policy directions contained within the North Lincolnshire

Local Plan (2003) were retained (where they did not become part of the Core Strategy or Housing and Employment Land Allocations Development Plan Documents, see below). The core documents of the Local Development Framework are then:

- http://www.planning.northlincs.gov.uk/planningreports/localplan/savedpolicies/direction.pdfSaved Policies Direction from the 2003 Local Plan, which includes much of chapter 12 "Landscape and Conservation" and Chapter 14 "Historic Environment";
- The Core Strategy;
- The Housing and Employment Land Allocations Development Plan Documents; and
- The Lincolnshire Lakes Area Action Plan (APP).

2.16 It is also worth noting that a new Local Plan is currently under review. Once complete this will be incorporated into the Local Development Framework, replacing the Saved Policies from the 2003 Local Plan. North Lincolnshire Council currently aim to adopt this new local plan at some point in 2023 (NLC, 2022). As things currently stand, with reference to heritage assets, the first two documents listed above are relevant for this assessment.

The North Lincolnshire Local Plan 2003 – Saved Policies Direction

2.17 The retained policy directions from Chapter 12 "Landscape and Conservation", which relate to Heritage assets include those set out below.

2.18 **LC13 - Parks, Gardens and Landscapes of Special Historic Interest.** The character and features of parks and gardens of historic or landscape interest will be preserved and enhanced. Development within or adjacent to those listed in the Register of Parks and Gardens of Special Historic Interest, which is maintained by English Heritage, will not be permitted if this would adversely affect their special historic character and appearance or their setting. Where development is permitted the use of conditions or planning obligations to ensure the protection and enhancement of special features will be sought.

> *"12.25 Historic parks, gardens and landscapes are an important part of the heritage and environment of North Lincolnshire. Nationally, English Heritage is currently updating the Register of Parks and Gardens of Special Historic Interest and PPG15 indicates the desirability of protecting such sites. In addition to these nationally important sites, there are other significant sites of regional or local importance which should be protected from harm and enhanced where possible. Work is underway to compile a list of the regionally and locally important sites, and this policy seeks to ensure their protection and where possible their enhancement. The conservation and restoration of their layout, landscape and architectural features will be encouraged and where appropriate will be secured through planning conditions or obligations."*

2.19 Chapter 14 "The Historic Environment" notes:

> *"14.1 The Local Plan aims to maintain and enhance the quality of the historic environment, through policies that control development and enable the promotion of schemes of enhancement and improvement throughout these areas. This heritage will be protected from harmful change, whilst allowing for sympathetic adaptation and re-use."*
>
> and
>
> *"14.35 Archaeological remains are a finite and non-renewable resource and form an important part of our national heritage, valuable for their own sake and for their role in education and tourism. They contain irreplaceable information about the past and are highly vulnerable to damage and destruction."*

2.20 The retained polices from this chapter are HE2, 3, 4, 5, 6, 7, 8, and HE9. Polices HE2-4 relate to conservation areas (which the Proposed Developments are not within or near) and HE7 to advertisement on Listed Buildings. Therefore, in relation to the Proposed Developments the most relevant retained polices are those set out below.

2.21 **HE5 - Development affecting Listed Buildings**. The Council will seek to secure the preservation, restoration and continued use of buildings of special architectural or historic interest. When applications for planning permission relating to a listed building or listed building consent are being assessed, the primary consideration will be the need to preserve or enhance the fabric and character of the building. Permission or consent will not be granted unless it has been demonstrated that the proposed works would secure this objective. The Council will encourage the retention and restoration of the historic setting of listed buildings. Proposals which damage the setting of a listed building will be resisted. Whenever appropriate, proposals which would entail the loss of historic fabric from a listed building will be conditional upon a programme of recording being agreed and implemented.

"14.28 Alterations and additions should not adversely affect the essential character of the building, should be in keeping with its architectural style and features and should harmonise with its surroundings. In particular such development will have to be of a high standard of design. The external appearance and materials will be expected to match, as near as possible those of the existing building in kind and in detail.

14.29 The setting of a building of special architectural or historic interest often contributes to its character. The setting could be its garden, grounds, open space or the general street scene. Developers are advised to contact the Council at an early stage to discuss the nature and extent of the setting. It is therefore important to consider the impacts of development and other proposals within the vicinity of listed buildings. Control over the quality of design of new development in close proximity to a listed building will be necessary to protect its setting. Conditions may need to be imposed on such development to achieve the quality required.

14.30 The best way of preserving the character and appearance of buildings of architectural or historic importance will be to keep them in their original use. Some listed buildings are no longer required for their original use and there is a danger that they could lie empty and fall into disrepair, causing an eyesore and increasing pressure for them to be demolished. Therefore, there is a need to be flexible in considering alternative uses for such buildings if that use holds the key to a building's preservation. For such a change of use to be acceptable, it should maintain the integrity of the building in terms of its appearance and character. This might include retaining the original interior layout and important architectural features. "

2.22 **HE6 - Demolition of Listed Buildings**. Consent for the demolition of listed buildings will not be granted other than in the most exceptional circumstances and only when the planning authority is satisfied that every possible effort has been made to continue the present use or find a suitable alternative use, and such efforts have failed. Whenever appropriate, proposals which would entail the loss of historic fabric from a listed building will be conditional upon a programme of recording being agreed and implemented.

"14.31 Before demolition can take place on Grade II listed buildings, or demolition or part demolition takes place on Grade II, Grade II or Grade I listed buildings, listed building consent must be given which entails consultation with the Secretary of State for the Environment who makes the final decision. Other interested organisations are also consulted. These include English Heritage, the Council for British Archaeology, the Ancient Monuments Society, the Georgian Group and the Victorian Society.*

14.32 Listed buildings are of recognised architectural or historic interest and their loss through demolition would be detrimental to the character and appearance of the surrounding area and to the overall heritage of North Lincolnshire. Demolition will therefore only be allowed in the most exceptional circumstances and only if this is the last feasible option. Following demolition of the listed building, the site may be of archaeological interest and Policy HE10 will apply. [Note that this policy (HE10) has not been retained]. *"*

2.23 **HE8 - Ancient Monuments.** Development proposals which would result in an adverse effect on Scheduled Ancient Monuments and other nationally important monuments, or their settings, will not be permitted.

2.24 **HE9 - Archaeological Evaluation.** Where development proposals affect sites of known or suspected archaeological importance, an archaeological assessment to be submitted prior to the determination of a planning application will be required. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them. Sites of known archaeological importance will be protected. When development affecting such sites is acceptable in principle, mitigation of damage must be ensured and the preservation of the remains in situ is a preferred solution. When in situ preservation is not justified, the developer will be required to make adequate provision for excavation and recording before and during development.

"14.39 In accordance with PPG16, the planning authority will require sufficient information from applicants to assess the potential impact of their proposals on any archaeological remains and their settings. This will enable informed planning decisions to be taken. In some cases, an archaeological assessment will be required which may comprise a desk-based study, or fieldwork, including geophysical survey and limited trial trenching. To avoid potential delays in determining planning applications, developers are strongly recommended to include, as part of site feasibility research, an initial investigation to establish whether the site in question is known to contain or likely to contain any archaeological remains. SMR staff check all planning applications against the record in order to determine their potential effect on Scheduled Monuments or sites of archaeological importance and will advise the planning authority of the appropriate course of action.

14.40 Developers are therefore advised to consult the SMR at an early stage when considering development proposals to discuss the potential archaeological implications. Developers may wish to commission a professional archaeological consultant to undertake this consultation on their behalf. This early liaison allows developers to make financial and timescale provision for any archaeological requirements.

14.41 Where development sites are shown to contain significant archaeological remains which would be adversely affected, the planning authority will need to be satisfied that adequate mitigation measures will be implemented. The preferred option for important archaeological remains is preservation in situ; this may be achieved by modification of proposals, where appropriate, for example changes in site layout or redesign of foundation construction.

14.42 Where the preservation of the site in situ is not feasible, evidence will be required to demonstrate that the developer has made appropriate and satisfactory provision for the recording of the remains, in consultation with officers of the SMR who will advise the planning authority. Preservation by record can take place either in advance of or during development and may involve full excavation followed by post-excavation analysis and publication of results. Planning conditions or legal agreements will be used to secure this work."

The Core Strategy (2011)

2.25 According to this document:

"3.1 The Core Strategy sets out the long term spatial planning framework for the development of North Lincolnshire up to 2026 by providing strategic policies and guidance to deliver the vision for the area including the scale and distribution of development, the provision of infrastructure to support it and the protection of our natural and built environment with a strong focus on the principles of sustainable development. The spatial strategy set out in this document has been shaped by national and regional planning policy as well as the Sustainability Community Strategy. Other influences include extensive public consultation, the Sustainability Appraisal/Strategic Environmental Assessment and the evidence base."

2.26 It achieves this via identifying a number of Spatial Objectives and Core Strategies (CS). Of particular relevance to the Proposed Developments are:

"Spatial Objective 6: Protecting and Enhancing The World Class Environment

4.23 To conserve and enhance our world class environments of the Humber Estuary and Crowle Moors and improve our other natural, historic and built landscapes as well as guiding changes in a way which reduces and takes proper account of environmental impact, climate change and sea level rise.

4.24 North Lincolnshire's natural, built and historic environment makes the area very attractive as a place to live, work, visit and invest. The Local Development Framework will create a policy framework that safeguards, enhances, and promotes North Lincolnshire's internationally, nationally and locally recognised areas for nature conservation importance and biodiversity, including the Humber Estuary and Crowle Moors. The framework will pay particular regard to the maintenance, restoration and re-creation of priority habitats and species as well as the creation of new habitats and the development of a green infrastructure network.

4.25 The Framework will also support the need to tackle climate change and its effects by encouraging sustainable development. New development will be safe from flooding and the risks of flooding to existing development will be reduced and managed in a sustainable manner consistent with other spatial planning objectives.

4.26 The Framework will also work towards ensuring that the best of North Lincolnshire's built environment and townscapes are protected and enhanced to maintain the local scene and distinctiveness. Within this it will ensure the area's historic environment and assets are conserved, protected, enhanced and managed appropriately and to be better utilised to help deliver other objectives of the strategy.

CS1: SPATIAL STRATEGY FOR NORTH LINCOLNSHIRE

The spatial vision and the future development requirements will be delivered through the spatial strategy for North Lincolnshire as outlined below and on the key diagram.

The spatial strategy will focus on:"

2.27 There follow a number of delivery aims the majority of which are not relevant to the heritage aspect of Proposed Developments being examined as part of this DBA. Of relevance from this section is the following:

***"e)** Supporting the protection and enhancement of North Lincolnshire's world class natural and built environment to ensure the continued attractiveness of the area as place to live, work and visit.*

- *The internationally and nationally designated sites of nature conservation importance of the Humber Estuary and Thorne and Hatfield Moors will be protected and enhanced. In the Humber Estuary area, particularly where the expansion of the South Humber ports is likely to occur, a strategic approach to the creation of new habitats will be adopted. This will ensure that the collective impact of major developments are designed to secure positive environmental benefits from flood management and development proposals.*

- *North Lincolnshire's townscapes and historic landscapes will also be protected and enhanced and high quality design encouraged. In particular, the nationally significant historic landscapes of the Isle of Axholme and Crowle Moors will be conserved and their potential as a tourist and educational resource realised. The character and landscape setting of the area's historic market towns will be safeguarded (especially Barton upon Humber, Crowle and Epworth) and the rich archaeological heritage of North Lincolnshire will be preserved and enhanced. The value of regionally and locally important sites will be enhanced and opportunities to improve green infrastructure will be included in all new development.*

Where development unavoidably has an environmental impact adequate mitigation measures should be used for the development to be acceptable."

"CS5: DELIVERING QUALITY DESIGN IN NORTH LINCOLNSHIRE

All new development in North Lincolnshire should be well designed and appropriate for their context. It should contribute to creating a sense of place. The council will encourage contemporary design, provided that it is appropriate for its location and is informed by its surrounding context. Design which is inappropriate to the local area or fails to maximise opportunities for improving the character and quality of the area will not be acceptable.

New development in North Lincolnshire should:

[there then follow of number of aims which are not relevant to the heritage aspect of the Proposed Developments being examined as part of this DBA].

> ***Ensure it takes account of the existing built heritage from the earliest stages in the design process, in particular terms of scale, density, layout and access."***

"CS6: HISTORIC ENVIRONMENT

The council will promote the effective management of North Lincolnshire's historic assets through:

- ***Safeguarding the nationally significant Medieval landscapes of the Isle of Axholme (notably the open strip fields and turbaries) and supporting initiatives which seek to realise the potential of these areas as a tourist, educational and environmental resource.***
- ***Preserving and enhancing the rich archaeological heritage of North Lincolnshire.***
- ***Ensuring that development within Epworth (including schemes needed to exploit the economic potential of the Wesleys or manage visitors) safeguards and, where possible, improves the setting of buildings associated with its Methodist heritage.***
- ***Ensuring that development within North Lincolnshire's Market Towns safeguards their distinctive character and landscape setting, especially Barton upon Humber, Crowle and Epworth.***

The council will seek to protect, conserve and enhance North Lincolnshire's historic environment, as well as the character and setting of areas of acknowledged importance including historic buildings, conservation areas, listed buildings (both statutory and locally listed), registered parks and gardens, scheduled ancient monuments and archaeological remains.

All new development must respect and enhance the local character and distinctiveness of the area in which it would be situated, particularly in areas with high heritage value.

Development proposals should provide archaeological assessments where appropriate.

7.20 The aim of this policy is to ensure that North Lincolnshire's important sites and areas of historic and built heritage value are protected, conserved and enhanced in order that they continue to make an important contribution to the area's scene and the quality of life for local people.

7.21 In determining proposals for development affecting sites and areas of historic and built heritage value, a key consideration will be the need to ensure that development does not affect their character and setting but respects and enhances them.

Development should also contribute to the local distinctiveness. Consideration should be given to any relevant saved policies of the North Lincolnshire Local Plan and Conservation Area Appraisals."

2.28 Under 'CS16: NORTH LINCOLNSHIRE'S LANDSCAPE, GREENSPACE AND WATERSCAPE', there are a number of points made in relation to this policy – in relation to Heritage Assets is point 4:

"The council will protect, enhance and support a diverse and multi-functional network of landscape, greenspace and waterscape through:

4. Requiring the protection of trees, hedgerows and historic landscape to be specified where appropriate.

11.36 The aim of this policy is to ensure that the key strategic spaces are protected and enhanced, contributing to the formation of sustainable linked communities. Strategic landscape, greenspace, estuary and water environments and archaeology are of importance to North Lincolnshire as a whole in terms of its character, biodiversity value, recreation/sports value and its potential for improving and enhancing green tourism value."

Other Guidance

Historic England Guidance

2.29 Historic England has published a series of Good Practice Advice (GPA) of which those of most relevance to this appraisal are GPA2 - Managing Significance in Decision-taking (March 2015) and GPA3 - The Setting of Heritage Assets (2nd Edition) (December 2017).

2.30 GPA2 emphasises the importance of having a knowledge and understanding of the significance of heritage assets likely to be affected by the development and that the "first step for all applicants is to understand the significance of any affected heritage asset and, if relevant the contribution of its setting to its significance" (paragraph 4). Early knowledge of this information is also useful to a local planning authority in pre-application engagement with an applicant and ultimately in decision making (paragraph 7).

2.31 GPA3 provides advice on the setting of heritage assets. Setting is as defined in the NPPF and comprises the surroundings in which a heritage asset is experienced. Elements of a setting can make positive or negative contributions to the significance of an asset and affect the ways in which it is experienced. Historic England state that setting does not have a boundary and what comprises an asset's setting may change as the asset and its surrounding evolve. Setting can be extensive and particularly in urban areas or extensive landscapes can overlap with other assets. The contribution of setting to the significance of an asset is often expressed by reference to views and the GPA in paragraph 11 identifies those views such as those that were designed or those that were intended, that contribute to understanding the significance of assets.

2.32 Historic England's Advice Note 12 (HE 2019) outlines a recommended approach to assessing the significance of heritage assets in line with the requirements of NPPF. It includes a suggested reporting structure for a 'Statement of Heritage Significance,' as well as guidance on creating a statement that is proportionate to the asset's significance (heritage value) and the potential degree of impact of a proposed development.

Institute of Environmental Management and Assessment Guidance

2.33 Principles of Cultural Heritage Impact Assessment in the UK Principles of Cultural Heritage Impact Assessment in the UK (IEMA/IHBC/CIfA 2021) is a guide to good practice in cultural heritage impact assessment published jointly by the Institute of Environmental Management and Assessment (IEMA), the Institute of Historic Building Conservation (IHBC) and the

Chartered Institute for Archaeologists (CIfA). The document provides guidance on understanding cultural heritage assets and evaluating the consequences of change.

2.34 Understanding cultural heritage assets is split into three stages: Description, Significance and Importance. The description arrives at a factual statement that establishes the nature of the asset. The heritage values of the asset are then analysed (the guidance stresses that these include but are not limited to aesthetic, historic, scientific, social or spiritual values) and a statement of cultural significance given. Finally, the importance of the asset is assessed and a conclusion drawn as to the level of protection that the asset merits in planning policy and cultural heritage legislation. The guidance notes that unlike cultural significance importance is scaled and can be described as high, medium or low.

2.35 The process of evaluating the consequences of change is split into three stages: Understanding change, Assessing impact and Weighing the effect. All aspects of a proposal that have the ability to change a cultural heritage asset or its setting are first explained. If these changes affect the cultural significance of the asset the resulting impact, which could be positive or negative, and its magnitude is then assessed. The effect is a combination of the magnitude of the impact and the cultural heritage asset's importance, and the scale of the effect will determine by how much the issue should influence the design of the proposal and whether the proposal is acceptable and will be permitted.

Chartered Institute for Archaeologists

2.36 The baseline study has been undertaken in accordance with guidance published by the Chartered Institute for Archaeologists (CIfA), with specific regard to the Standard and Guidance for Historic Environment Desk-based Assessment (CIfA 2020) and the Code of Conduct (CIfA 2021).

3. Assessment Methodology

Study Area

3.1 The study area for the assessment of all heritage assets (designated and non-designated assets) is defined as a 1 km buffer surrounding the Sites. For designated heritage assets only, the study area extends to a 5 km buffer surrounding the Sites. The study areas have been defined based on the geographic and land use/ landscape contexts in which the Sites are located, in order to identify heritage assets, their setting and geographical extent.

Data Sources

3.2 The following sources of information have been reviewed and form the basis of the assessment:

- The Historic Environment Record (HER) data from –
  - NLC,
  - North East Lincolnshire Council (NELC), and
  - Lincolnshire County Council (LCC);
- Historic England's National Heritage List for England (NHLE); data including listed buildings, world heritage sites, scheduled monuments, registered battlefields and registered parks and gardens;
- databases of known archaeological sites, find spots, historic buildings and previous archaeological works, including Archaeology Data Service;
- geological records from the British Geological Society (BGS);
- aerial photographs obtained from the Landmark Envirocheck report and through Google Earth;
- North Lincolnshire Council's online Land, planning and development website and the planning and advice documents contained within;
- Historic Ordnance Survey and pre-Ordnance Survey mapping from online archives and the National Library of Scotland (NLS);
- various documentary and internet sources, including British History Online; and
- consultation with the Heritage Officer for NELC and the Historic Environment Officer for NLC.

Asset Identification

3.3 All assets identified within the 1 km study area, irrespective of whether they would be affected by the Proposed Developments, are listed in Annex A. Assets are identified within the text by unique identifiers, [**Ax**] for archaeological assets, [**BHx**] for built heritage assets both designated and non-designated, and [**RPGx**] for Registered Parks and Gardens. All heritage assets and events identified within the study areas are illustrated on Figures 12A.1-4 (Annex B).

Site Visit

3.4 A site walkover and visual appraisal was undertaken on 15th June 2022. Photographs of the Sites taken during the walkover survey are presented in Annex C (Figures 12A.5 – 25). The main considerations of the site walkover were:

- to visually inspect the area and assess the heritage assets, including their setting, that have the potential to be impacted by the Proposed Developments;
- to identify non-designated archaeological assets not identified during desk-based research; and
- to record current land use, ground conditions, and visible evidence of ground disturbance to assess how current and former land use may have affected the archaeological potential of the Site.

3.5 Assets in the vicinity of the Sites were viewed from publicly accessible areas or from areas accessed with the express permission of the landowner(s). The results of the site visit are incorporated in the baseline below.

Previous Ground Disturbance

3.6 The previous impact to buried archaeological remains caused by historic development has been assessed using a five-point scale of 'very high', 'high', 'medium', 'low' and 'very low', the definitions of which are set out below.

Table 12A.1 Level of previous ground disturbance.

Magnitude of previous disturbance	Description
Very High	Deep level basement/sub-basement excavated into the underlying natural geology resulting in the removal of all subsurface archaeological deposits.
High	Extensive and deep disturbance resulting in the removal of all but the deepest archaeological deposits such as wells or quarry pits, deep foundations, quarrying and large utilities.
Medium	Moderate previous disturbance which may extend to some depth, but where there remains the potential for archaeological remains to survive either between or beneath existing impact levels such as building foundations and utility trenches.
Low	Shallow previous disturbance such as areas of car parking and surfacing where archaeological remains may survive with limited truncation beneath the level of impact.
Very Low	No known historic development impacts to subsurface archaeological remains. Potential for the survival of archaeological horizons from Prehistory to the Post-Medieval period.

Archaeological Potential

3.7 Assessment of the archaeological resources draws on three factors:

1. An assessment of the potential for the survival of archaeological deposits within the Sites based on an evaluation of previous ground disturbance;
2. An assessment for the potential for archaeological deposits to exist within the Sites based on the results of the baseline study; and
3. An assessment of the significance of known and potential archaeological assets within the Sites, as well as within the defined study area.

3.8 The level of disturbance to buried archaeological remains caused by previous development has been assessed based on available data listed above, with particular attention paid to previous archaeological evaluations and excavations in the study area.

3.9 The potential for an area to contain archaeological remains is rated 'high', 'moderate, 'low', 'negligible', or 'unknown'. This rating is based on an understanding of the archaeological resource within the study area and its wider context. This includes the number, proximity and state of preservation of known and predicted archaeological/historical sites or find spots within the Site and its surrounding study area.

Significance of Heritage Assets and Setting

3.10 An assessment of the significance of assets, including any contribution made by their setting has been undertaken in consideration of guidance and good practice issued by Historic England (HE 2019a).

3.11 The NPPF (Annex 2: Glossary) defines significance as "*the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting*".

3.12 Significance is often established by statutory designations such as listed buildings, scheduled monuments and conservation areas. More particular advice as to what makes up significance is set out in Advice Note 12, which establishes a method for thinking consistently about the heritage values that can be ascribed to a place. When making an assessment of significance numerous aspects are considered including architectural interest, historic interest, group value, social value, former uses and local distinctiveness. These aspects are grouped into four values: evidential, historic, aesthetic and communal.

3.13 The terminology used in this assessment relates to the terminology used in the NPPF, referring to significance in terms of heritage interest and not heritage values. Whilst heritage interest and heritage values are not completely interchangeable, they are broadly similar.

Limitations

3.14 No significant limitation in gathering, understanding or presenting the information contained within this DBA were encountered during the course of the production of this document

Consultation

3.15 The Historic Environment Officer for NLC (Alison Williams) has provided comments in relation to expected pre application archaeological works following her receipt of the EIA Scoping document. These comments were provided on 16/02/2022 and state that;

"The Cultural Heritage EIA will need to comprise the following assessments:

1. *Desk based assessment*
2. *Archaeological field evaluation (non-intrusive and intrusive surveys)*
3. *Assessment of significance based on results of completed field evaluation and including the contribution of settings to significance*
4. *Impact of proposals*
5. *Mitigation proposals based on evaluation results"*

3.16 The comments regarding archaeological field evaluation (point 2 above) are further clarified within the comments – indicating what is expected from this work;

"Pre-Application Archaeological Field Evaluation

- *Archaeological monitoring and recording during geo-technical investigations on the site.*
- *Hand augering or machine drilled purposive coring to fill identified gaps in the deposit model, to identify and model the deposit sequence and former land surfaces, and provide an understanding of the development of the landscape; and/or to obtain*

appropriate samples for assessment of preservation potential and the potential for palaeo-environmental evidence to inform the archaeological record including all relevant palaeo-environmental indicators and provision for a programme of scientific dating of the deposit sequence as appropriate.

- *Geophysical magnetometry survey of the proposed site to identify and plot anomalies of potential archaeological origin.*
- *Dependent on the results of the above survey/s, the excavation of sample trial trenches to determine the nature, extent, state of preservation and importance of any archaeological remains, such as those associated with the warping channels mapped in this area, the peat deposits and the pre-peat landscape.*
- *The archaeological field evaluation be carried out by a suitably experienced archaeological contractor, such as a Registered Organisation accredited by the Chartered Institute for Archaeology (see http://www.archaeologists.net/) or an organisation that can demonstrate that they have equivalent experience, capability and quality management systems in place. The appointed contractor must have access to appropriate geo-archaeological expertise. All fieldwork should be undertaken in accordance with CIFA's published Standards and Guidance for evaluation, and Historic England professional guidelines (https://www.historicengland.org.uk/images-books/publications) to written specifications that have been agreed with the HER prior to commencement."*

3.17 The Heritage Officer for NELC had no comment at this stage

4. Heritage Baseline

Site Conditions

Topography

4.1 The topography of the area comprises a low-lying estuarine landscape. This consists of extensive stretches of intertidal habitats containing mudflats, salt marsh, coastal dunes and wetland adjacent to the estuary.

4.2 The surrounding land-use is dominated by the large heavy industrial areas around the villages of Killingholme and Immingham. This industrial land-use is mixed with interspersed pockets of flat open farmland, woodland and natural coastal habitats. There is more sporadic development to the north of the Proposed Developments as the land-use becomes more rural with more isolated development.

4.3 The two Sites are described in Section 1 of this DBA at paragraphs 1.6-1.10.

Geology and Soils

4.4 According to the BGS Geology of Britain Viewer, the superficial deposit which underlies the eastern edge of the VPI Site is by tidal flat deposits comprising clay and silt. The Tidal Flats are described by the BGS as "*normally consolidated soft silty clay, with layers of sand, gravel and peat; characteristically low relief; from the tidal zone*". These Tidal Flat Deposits are designated as unproductive strata with low permeability; however permeable sands are likely to contain groundwater. A thin ribbon of this material also extends into the north eastern edge of the Phillips 66 Site.

4.5 The superficial deposit which underlies the remainder of the Sites is Till, Devensian deposits comprising diamicton. The Till is described by the BGS as "*unsorted and unstratified drift, generally over consolidated, deposited directly by and underneath a glacier without subsequent reworking by water from the glacier. It consists of a heterogenous mixture of clay, sand, gravel, and boulders varying widely in size and shape*." The Tidal Flat Deposits are designated as unproductive strata with low permeability; however permeable sands are likely to contain groundwater. The Till is classified as a secondary (undifferentiated) aquifer which is assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.

4.6 The underling bedrock geology beneath the Sites forms part of the Burnham Chalk Formation. The BGS describes this as "*white, thinly-bedded chalk with common tabular and discontinuous flint bands; sporadic marl seams*". The Burnham chalk formation is designated as a Principal Aquifer.

4.7 Soils across much of the VPI Site are described on Cranfield Soil and Agrifood Institute's Soilscapes mapping as "*loamy and clayey soils of coastal flats with naturally high groundwater*". Across the southern edge of the VPI Site, and all of the Phillips 66 Site, the soils are described as "*slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils*". These overlying soils are described as having a high leaching potential.

Previous Archaeological Investigations

VPI Site

4.8 The northern part of the VPI Site has already been developed for the CHP Plant. The remainder of the VPI Site is previously undeveloped although part of it was used as a construction laydown area during construction of the existing CHP Plant.

4.9 Previous archaeological work within the VPI Site have largely been associated with the construction of the existing power station, and include:

- The land was part of a larger aerial photographic survey in 1989 **[E1]** and 2009 **[E93]**;
- A field walking exercise carried out in 1999 which collected a number of Iron Age and Roman artefacts **[E87].** This was followed by a geophysical survey **[E88];**
- Following on from the above, series of excavation were carried out in the central area of the VPI Site between 1999 and 2002. This work identified an Iron Settlement consisting of several round houses and other features associated with an ancient creek identified by the below borehole survey, this settlement appearing to extend into the Roman period **[E83], [E84], [A20].** The remains were further encountered and recorded in a later watching brief **[E6]**;
- A borehole survey was carried out as part of the excavations in 2002, which identified foreshore deposits and a paleochannel which was connected to the River Humber **[E101];**
- A LiDAR topographic survey carried out between 1998 – 2006 (**[E72-E79]**);
- A watching brief carried out in 2007 towards the east edge of the VPI Site, which did not identify any archaeological finds or features **[E85]**; and
- A geophysical survey was carried out in the south-east quadrant of the VPI Site in 2009 which identified a number of possible archaeological anomalies **[E95]**.

Phillips 66 Site

4.10 The Phillips 66 Site has been previously heavily developed. There are no recorded, intrusive archaeological investigations within the bounds of the Phillips 66 Site (apart from those described above within the small area of the Phillips 66 Site that overlap with the VPI Site). Previous work within the Humber Refinery has been limited to non-intrusive surveys including aerial photographic surveys carried out in 1989 and 2009, **[E1]** and **[E93]** and a gradiometer survey in 2007 which did not identify any clear archaeological activity **[E81]**.

Previous Studies Within The Study Area

4.11 There have been a number of larger studies of the Lincolnshire costal region over the last two decades, notably the Rapid Costal Zone Assessment Survey (RCZA survey) carried by Humber Field Archaeology on behalf of English Heritage, and the Humber Wetlands Project.

4.12 Whilst the initial RCZA survey actually excluded the estuarine regions of the River Humber, and so the area of the Proposed Developments is not encompassed by this work, a more recent survey – the Inner Humber RCZA (2019 – 2021) did cover the area of the Proposed Developments. This work (Fleming and Royall 2021) illustrated that the Study area contain a number of monuments (often earthworks) dating from the prehistoric to medieval/ modern periods, with Iron age/ Roman, medieval and post medieval activity being particularly well represented.

4.13 The Wetlands Project (Van de Noort, 2004) ran from 1992 - 2000 with the aim of identifying and recording settlement, or other remains, on the wetlands which are currently, or may in the future, be subjected to damage or loss through development or modern agricultural practices. Their methodology comprised systematic fieldwalking surveys and transect coring. Several areas of fieldwalking survey (only) were undertaken to the east of the VPI Site (**[E7 – E37])**. The surveys record isolated find spots and small artefact scatters (mainly pottery), but no significant concentrations were identified.

Archaeological and Historical Background

4.14 Archaeological assets or events referred to throughout this section, are illustrated on Figures 12A.1 – 4 in Annex A.

4.15 The archaeological resource for North Lincolnshire now falls within fully within The East Midlands Research Framework, thus any archaeological work undertaken in relation to the Proposed Developments will need to reference the research objectives contained within this framework.

Prehistoric (*c.* 700,000 BC to AD 43)

Palaeolithic (*c.* 700,000 – 11,600 BC)

4.16 There is little evidence for the palaeolithic period in general across much of the Yorkshire and Humber areas, possible due to the damaging effects of the Devensian glaciation (Roskams and Whyam 2005). Cave sites such as Kirkdale cave and Victoria cave offer some insights, as do open sites such as Biselsbeck farm and Hotham – these sites appearing to be niches of surviving pre-Devensian activity (Roskams and Whyam 2005).

4.17 At around 27000 – 21000 BP (towards the end of the Palaeolithic period). The Sites would have sat under the North Sea Ice sheet, a little to the south of the great meltwater lake known as the "Humber Lake". As the ice receded the lake silted up and it, and the area around it, became a peaty woodland (Straw 2016) and over time marshland (Green 2015). This is important as recent studies have demonstrated that these peaty marshlands near the Humber estuary offered valuable resources to prehistoric - Medieval populations which made them attractive. This combined with the high degree of archaeological preservation afforded by this environment makes these locations archaeological very significant (Van der Noort, 2004).

4.18 Within a wider (10 km) area of the Sites a palaeolithic remains including flint scatters and hand aces have been found at Ken Hill Gravel pit and Kelsey Hill, whilst bog oaks possibly of this period have been found at Keyingham (all *c.* 10 km to the north east). Several flint flakes of a middle of Palaeolithic date were recovered from the "canon-shot" gravels and Kirmington gravel pit and Brickyard (*c.* 7.5 km south-west of the Sites) in 1931 (North Lincs HER 2260). An archaeological evaluation carried in in 2005 *c.* 3 km to the north of the Sits also uncovered a Palaeolithic scraper (MSL20439).

4.19 Within the 5 km Study Area there are no known Palaeolithic sites or find spots. The North Lincolnshire HER contains an entry for the historical position of the tidal high water mark, reflecting Holocene sea level change, prior to large scale drainage. The HER records this as being within the parish of North Killingholme, but its precise location is not recorded / known (HER20142, **[A1]**).

Mesolithic (*c.* 11,600 – 4,300 BC)

4.20 The natural environment changed dramatically during the Mesolithic period as temperatures rose and forest cover spread (typically mixed deciduous forest), however this did not occur uniformly, and some regions experienced retarded vegetation development (Allen and Gardiner 2009). The first areas occupied were often these areas where vegetation had not flourished, or where deliberate clearance had taken place. This is represented in the toolkits of the Mesolithic period, which contain specialist wood working/ tree felling equipment (transversely sharpened axes and adzes) and items suited to more mobile lifestyles and the hunting of game within more enclosed areas.

4.21 It also appears that at this time the coastline of North Lincolnshire / North East Lincolnshire lay *c.* 50 km to the east of its current position (Shennan *et al*, 2000) and what is now the North Sea was an area of dry land (known as Doggerland) which extended as far north as Shetland and, in places, connected the British Isles with continental Europe. This condition appears to have persisted until *c.*6000 BC, by which time the coastline was only a little to the east of its modern location. This flooding had a dramatic effect on the vegetation of the region, with the mature mixed deciduous forest that had once stretched out onto the North Sea plain being replaced by wetlands and a coastal landscape. The tree stumps and trunks that are revealed at very low tides and in excavations all along the Lincolnshire coast from Immingham to Ingoldmells have their origins in this lost prehistoric forest, which was first subject to waterlogging as the water-table rose and was then submerged by the rising tide (Berridge & Pattison, 1994). It is also possible that deforestation of upland areas at least partially contributed to the formation of

these coastal wetlands. Trees use up water and fewer trees means increased run off into rivers and low lying areas (Straw 2016).

4.22 Within the wider area, beyond the study area of the Sites, a number of Mesolithic finds have been made. This includes blades, flakes, and scrapers of Early Mesolithic to Late Bronze age date discovered during a trial trench evaluation near Killingholme in 2006 (*c.*1.6 km north of the Sites HER 20440). Similar items were found during field walking near Croxton in 2004 (HER 20258, 20261, 20293 *c.* 8 km to the west of the Sites) and Near Melton Ross in 2012 (HER 26052, .9.8 km to the south-west of the Sites). A watching brief at Humberside airport in 1995 also recovered Mesolithic flint implements (HER 19810, *c.* 8 km to the south-west of the Sites).

4.23 Mesolithic flint has also been found as isolated findspots near East Halton (HER19793 19795, *c.* 5.5 km north of the Sites) and near Barrow upon Humber / Gloxhill (HER 19763 19788, 19789 &19788 *c.* 8.5 km to the north-west).

4.24 There are no designated Mesolithic assets Within the 5 km study area or within the Red Line Boundary of the Sites. Within the 1 km study area, Mesolithic material has been recovered at 6 locations (**[A2 – A7]**). The most significant of these would appear to be **[A3]** located *c.*640 m to the south of the Phillips 66 Site, **[A4]** located *c.*490 m north of the VPI Site and **[A5]**, located *c.*900 m south of the Phillips 66 Site. These are more significant as they not isolated finds, but rather locations where groups of flint / flint scatters have been found and so possibly indicating locations of *in situ* Mesolithic activity / occupation.

4.25 **[A7]** is the only asset which sits within the bounds of one of the Sites (VPI Site). Fieldwalking in the area in 1999 uncovered 233 pieces of flint over the walked area. Many of these were undiagnostic and possible natural in origin. However diagnostically Mesolithic, Neolithic and Bronze Age material was recovered, and the assemblage suggested that local flint was being collected and knapped at this site.

Neolithic (*c.* 4,300 – 2,200 BC)

4.26 The Neolithic period marks the adoption of agriculture associated with more widespread tree clearance and associated changes in flint tools. With this people adopt a more settled lifestyle – which is more visible in the archaeological record. Pottery appears and it is also when the first monuments are constructed, in Lincolnshire it is notable that the long barrows which typify this period are located on the eastern side of the Wold. The institution of these impressive monuments represents a major investment of resources and a significant landscape event, their presence on the Wolds is presumably an indication of the significance of this environment to Neolithic communities, especially when the virtual absence of long barrows and other monuments in central and western Lincolnshire is noted (Jones 1998, Drury and Allen 2020).

4.27 In the Humber region, during the Neolithic and Early Bronze Age the sea level continued to rise, albeit at a now significantly slower rate. This appears to have caused coastal areas to be submerged by the rising tide, and by *c.* 2000 BC the Lincolnshire coastline lay significantly inland of its current position. It is also possible that the offshore coastal barrier had been divided up into several smaller islands by this point. Whether these offshore islands were inhabited or visited by people in this era is unclear due to their subsequent destruction by the sea in the Medieval period (Berridge & Pattison, 1994).

4.28 In terms of the vegetation of the region, the continued sea-level rise led to further water-logging and submersion of the coastal woodland on sites that had been too elevated to be affected by this during the Later Mesolithic, with the drowned trees preserved at Cleethorpes and Chapel St Leonards dying off sometime around 2950–2250 BC and 3370–3020 BC respectively. The Mesolithic forest inland of the coastal zone also saw significant losses in this era. These losses appear to have begun on the high ground of the Lincolnshire Wolds, with the Mesolithic deciduous oak and hazel woodland of the Wolds cleared at Skendleby by *c.* 3500 BC and an open grassy landscape with indications of at least local arable agriculture having developed at Swinhope by *c.* 3900–3650 BC. On the lower ground, just inland of the coastal zone, the wooded landscape may well have survived a little longer, but it too was eventually lost. For example, at Butterbump (Willoughby), on the eastern edge of the dry Lincolnshire Middle Marsh (within the wider region, beyond the study area of the Sites), the available pollen cores indicate that the Mesolithic forest there survived the Early Neolithic through until perhaps 2900 BC, but was apparently largely cleared in the Late Neolithic/Early Bronze Age, with subsequent eras

then having low levels of tree and shrub pollens and high levels of herb and cereal. Similarly, in Holderness a degree of sustained clearance began around 3600 BC, but the landscape of this area also wasn't properly opened up until the end of the Neolithic (*c.* 2500 BC), and only from the end of the Bronze Age (around 800 BC) did agricultural land start to dominate (Green 2012, Green 2015, Green 2011).

4.29 Within wider region, beyond the study area of the Sites, significant Neolithic activity is present. A watching brief on the Skitter – Hatton had pipeline in 1992 (*c.*7 km north of the Sites) appeared to uncover an area of significant Neolithic/ occupation sites. There were numerous linear ditches and ring ditches containing pottery and flint tools of this period as well as what appeared to be a Neolithic quarry and the remains of a Neolithic Long Barrow (Bonner and Griffiths 1994). In the same area Pollen evidence from two boreholes drilled just to the south of East Halton as part of the Humber Link Pipeline Project in 2000 (HER 21153) appeared to demonstrate the presence of a significant peat layer dating to the Neolithic period and Bronze Age periods. Deposits of alluvium immediately above this layer suggested later marine transgression. Fragments of a stone axe were also found as part of these same works (HER 1600).

4.30 As well these sites there have been numerous finds of Neolithic flint implements within the wider area these are typically small to moderate scatters of lithic material which includes tools, cores and debitage – such as the assemblages found as part of fieldwalking at East Halton in 2010 (*c.* 3.4 km north of the Sites, HER 21470) and at North Killingholme in 2001 (2.25 km north east of the Sites, HER 19805, 19800, 19801, 19803 &19802). More high status finds are also known - including a polished Greenstone Axe identified as findspot in 1950 at Barrow upon Humber (*c.* 8.5 km north-west of the site, HER 389), a small hand axe found in the mud flats at Gloxhill in 1990 (*c.* 9 km north of the Sites HER 19306) and two stone hand axes (discovered as change surface finds in 1934) at North Killingholme 2 km north-west of the Sites (HER 1622).

4.31 The only possible long barrow in the immediate region of the Sites is a now unknown long barrow recorded in 1856, and thought to be somewhere in the Barrow Upon Humber 11 km to the north-west of the Sites (HER382).

4.32 There are no designated Neolithic assets within the 5 km study area or within the Sites. Within the 1 km study area, there are three assets with a Neolithic component to them, **[A8 – A10]**. These sites are broadly similar in nature to the ones mentioned above and are clustered towards the north-east of the Sites – generally towards the Killingholme area suggesting that this location may be a significant focus for Neolithic activity. Asset **[A8]** (*c*. 890 m north-west of VPI Site) consists of a significant flint tool assemblage, as does asset **[A10]**, *c.*960 m north of the VPI Site. Asset **[A9],** *c.* 650 m north of the VPI Site indicated the possibility of the activity in this area having some element high status to it as it represents the discovery of partially complete polished stone axe.

4.33 There are no Neolithic assets within the bounds of the Sites themselves.

Bronze Age (*c* 2,200 – 750 BC)

4.34 Centralised, permanent, settlement and associated agricultural practices intensify during this period with more and more land being cleared. The environment, generally, takes on a much more open aspect and field systems begin to emerge although the regular occurrence of deer bones and antler in the archaeological record suggest that there are still significant areas of woodland. There is, generally, a picture of the widespread accumulation of colluvial material in the archaeological record at this time, presumably derived from human agricultural activity.

4.35 Material culture reflects these changes; new pottery forms emerge (Renfrew and Cherry 1986) and metal tools also emerge for the first time, although flint tools are still commonly used, albeit with changed forms (Humphrey 2003; 2007). Ritual activity also changes, the long barrows of the Neolithic period being replaced with round barrows, these also being more common than their predecessors and seemingly having a territorial, as well as funereal, function (Roskams and Whyman 2005).

4.36 During this period the coastline remains relatively static, although there are minor eastwards and westwards movements and much of the area inland of the coast would have been dominated by coastal wetland saltmarsh (Green 2015).

4.37 Within the wider region of the Sites the recovery of significant Bronze Age flint scatters at the afore mentioned Neolithic sites around East Halton (HER 19725), North Killingholme (HER 22737) and along the route of the Halton to Skitter pipeline (HER 20085) appear to indicate that these sites saw continued, likely seasonal use, during the Bronze Age periods also.

4.38 An excavation in advance of the Runway extension at Humberside airport in 1991 (HER 12498, 19823 10 km south-west of the Sites) uncovered a scatter of bronze age flints and number of pit groups which contained Bronze Age pottery and other material which suggested that the pits were near/ on the edge of a low density Bronze Age settlement.

4.39 A Bronze age fish trap – made of wood and conical in nature, was discovered in a palaeo gully within a peat shelf in the estuarine environment near New Holland, 10 km to the north of the Sites (HER 19722).

4.40 Near Goxhill (8 km to the north of the Sites) a series of three ring ditches (varying in size from 11 m – 47 m in diameter) can be seen in crops marks in aerial photographs (HER 26227, 26246, 26245). A watching brief on a watermain near these sites in 2003 uncovered a single urned cremation, which contained two individuals (HER 20072).

4.41 A designated Round Barrow (Howe Hill, NHLE 1009346) is located 8.5 km to the west of the Sites, whilst further round barrows are located near Ulceby (Galley Hill Round Barrow) 6.9 km to the west of the Sites (HER 2290) and near Kirmington (Micklow Hill), 10 km to the south-west of the Sites (HER 2259).

4.42 A little to the south of the Neolithic site at Halton (East Halton, *c.* 6 km north of the Sites) a group of 3 possible subcircular barrows (all *c.* 10 m in diameter) are visible as earthworks on aerial photographs (HER 26259, 26260 & 26261).

4.43 Barton Street, one of three major prehistoric routes across the Wolds dates to this period. It follows the eastern edge of the Wolds for 70 km, from Barton upon Humber to Alford, and perhaps also to Burgh-le-Marsh. At its closest point the route lies 8 km to the west of the Sites (HER15492).

4.44 There are no designated Bronze Age assets within the 5 km study area or within the Red Line Boundary of the Sites. Within the 1 km study area there are five Bronze Age Assets, **[A10 – A14]**.

4.45 As previously mentioned, **[A10]** consist of a significant scatter of flint tools collected during fieldwalking. Whilst these had a Neolithic component, there was also a Bronze Age element to the assemblage.

4.46 Assets **[A11], [A12]** and **[A13]** represent the results of an archaeological evaluation carried out in 2009 at near South Killingholme (260 m south-east of the VPI Site). The work identified various deposits (including burnt stone and charcoal) which were found in association with other features such as ditches. The finds (and the scientific dating of the charcoal) dated the site to the later Bronze Age. The site did not appear to be domestic in nature but rather appeared to be associated with exploitation of the estuarine environment, with semi-permanent industrial and marine resource exploitation activities being present

4.47 Asset **[A14]** represents another borehole survey (*c.* 530 m to the north-west of the VPI Site) which identified former stream beds of Bronze Age to Iron Age date and which appeared to be related to marine transition.

4.48 There are no assets within the bounds of the Sites that are a definitively of this period, though one asset **[A24]** (see below) may be of this period.

Iron Age (*c.* 750 BC – 43 AD).

4.49 The concentration of intensification of settlement and agriculture seen in the Bronze Age period continues throughout the Iron Age period, cremation becomes the main burial custom and

material culture continues to develop, not the least of which is the introduction of the new forms of metal working. Occupation centres become more visible as Hillfort settlements are established. In Lincolnshire Hillforts tend to be small in both size and number and as a result cannot be seen as functioning as the citadels of chieftains. The scarcity of these contributes perceived invisibility of this period in this region – undefended settlements are less easy to find and more difficult to plan. However, lack of forts does not necessarily equate to less numerous or advanced communities (May 1976).

4.50 By the end of the Iron Age / start of the Roman period the Humber coastal zone had moved back eastwards from it earlier westward maximum, this resulted in some of the earlier Lincolnshire marshes further to the west draining and drying out, whilst new marshlands became established in previously flooded areas (Caitlin 2015). Salt making appears to become a significant industry at this time (though it may have been practised earlier) and salterns are seen at a number of sites.

4.51 Within the wider region of the sites a number of Iron Age settlement sites are present. An Iron Age Occupation sites near Kirmington Airfield (HER2268, 8.5 km south-west of the Sites) has been subject to a number of survey type investigations over the years. This site appears to consist of a number of rectilinear ditches (in some instances double ditched) enclosures with number of linear / curvilinear features within them. Finds from this site have included pottery, metalwork (brooches, and horse tack) of Iron Age date as well as animal bone. The site is located near to the south Ferriby road (modified and improved by the Romans when it became known as the 'High Street') and, by this route, linked to the occupation site at Yarborough camp 1 km to the north.

4.52 Yarborough Camp is a scheduled monument (NHLE 1016427, 9.3 km to the south-west of the Sites). Gaining prominence during the Roman Periods this (like many Roman sites) appears to have a (late) Iron Age origin. The main element of the site is a substantial enclosure ditch, this is nearly square in plan, being 80 m east-west and 60 m north-south internally, and formed by a substantial earthen and chalk bank with a mainly infilled ditch approximately 10 m wide immediately around the outside. Although subject to a number of non-intrusive surveys there has been almost no intrusive work at the site. The exception to this was an evaluation carried out in 1999 in connection with a proposed quarry extension. One of the trenches of this work was located over the eastern edge of the enclosure ditch. This work late Iron Age material (pottery) as well as Roman material. The site is situated on the line of a prehistoric track making for the Humber at South Ferriby (later Roman 'High Street').

4.53 The area around North Killingholme appears to become a focus for occupation at this time, with a number of sites be noted. A square enclosure, 50 m x 50 m in size (2 km north-west of the Sites) was recorded during a geophysical survey west of Eastfield Road in 2011. When investigated by trial trench evaluation in 2012 the enclosure was seen to contain a number of internal linear features. The fill of these contained mid Iron Age pottery, as well as fuel ash slag, animal bone, burnt animal bone, fuel material, fire-cracked stones and fired clay. An environmental sample from the later ditch also contained some fired clay and fuel material, along with spelt wheat, barley grains and other plant remains from various habitats. This mixture of finds appeared to suggest that the enclosure was occupied by humans rather than livestock, and that metalworking and crop processing took place during that occupation (HER 22604).

4.54 A series of D shaped enclosures are also seen in this area (HER 20441 and 2 km to the north of the Sites) and a little over 400 m to the north-west of this site a is another, small, occupation site consisting of two large enclosures each containing one roundhouse, with a third roundhouse located outside of the enclosures (HER 20140). To the south of these a series of sub square enclosures containing ring gullies is also present (HER 17461, 3.5 km north-west of the Sites).

4.55 Another D shaped enclosure and associated field system as well as series of unenclosed ring gullies identified as round houses have been found at East Halton (3.5 km north of the Sites, HER 20700).

4.56 A large number of crops marks and geophysical survey anomalies appear to be indicative of probable Iron Age field systems. These include the ones at South Killingholme 1.85 km south-west of the Sites (HER 21318).

4.57 Just over 4 km to the west of the Sites, near Ulceby a 'hoard' of items was discovered during the excavation of a railway cutting in 1847. The items consisted of two gold torcs or necklets, a torc-like length of twisted gold rods, a gold bracelet, and portions of three bronze and iron horse-bits. It has been interpreted as metal workers hoard (HER2284).

4.58 There are no designated Iron Age assets within the 5 km Study Area. Within the 1 km Study area there are 11 non designated assets of this date **[A14 – A22]** and **[A25-A26].** Asset **[A14]** had been mentioned above and need not be discussed again here. Of these, assets A20 and A25 are located within the Phillips 66 and VPI Sites respectively.

4.59 Asset **[A15]** is an apparent Iron Age field system identified via archaeological trial trench evaluation in 2006, located 59 m to the north of the VPI Site. **[A19]** may also represent the remnants of an Iron Age field system, aerial photography indicated that linear features and sub circular features should be present. However trial trench evaluation in 2006 discovered only a small number of Iron Age linear ditches. The circular features, whilst targeted, were not present. This asset is located 98 m north of the VPI Site

4.60 Asset **[A21]** is a large Iron Age ditch, identified via geophysical survey in 2009 and excavated in 2011, located 685 m to the west of the Phillips 66 Site. The size of the feature (>2 m wide and >1 m deep) as well as the large quantity of material recovered suggest that it is not a field division / boundary ditch but rather part of an enclosure ditch for an area of occupation. Asset **[A26]** (also **[E140]**) consist of similar features – two large linear ditches which contain notable quantities of late Iron Age pottery. Again, is it is suggested that these features are part of an occupation enclosure rather than a field system. The asset was originally believed to be located 16 m south-east of the VPI Site, however more recent work (Lopez, 2015) suggests that the site may in fact extend into the VPI Site.

4.61 Asset **[A22**] (also **[E146]**) was identified as a ditched enclosure covering and area of 50 m x 50 m and containing a number of sub divisions via geophysical survey in 2011. Subsequent trial trench evaluation in 2012 confirmed this layout whilst the material assemblage recovered demonstrated domestic, mid-late Iron Age use of the site. Further work was undertaken at the site in 2020 (Tuck 2020). The asset is located 900 m of the Phillips 66 Site.

4.62 Asset **[A25]** is another crop mark site identified in aerial photographs dated in 1958. A rectilinear enclosure measuring c.30 m by 20 m and a small L-shaped feature lying just to the north were seen. However, this site lies within the current confines of the Phillips 66 Site and has thus likely been destroyed by the construction of this refinery. This asset may have been associated with asset **[A24]** (see below).

4.63 Asset **[A16**] was noted via geophysical survey and subsequent trial trench evaluation in 2009. The asset is located 215 m south-west of the VPI Site. The work identified an Iron Age occupation site that appeared to last until the early Roman period. It consisted of a number of sub square enclosures which contained curvilinear feature (possible ring gullies) linear ditches and discrete pit type features, at least one of which was a hearth. Domestic occupation appeared to be concentrated to the west of the site. There was also some evidence for salt making being carried out towards the wetter eastern part of the site. This asset may represent a continuation of use of the land from earlier assets **[A11- A13]**.

4.64 Asset **[A17]** (also **[E151]**) is a major settlement site which has been examined via geophysical survey (2011 and 2012) fieldwalking (2012) and trial trench evaluation (2012). The results of this work present a complex site which covers *c.* 6ha. The site began life in the mid / late Iron Age and was in use until the Mid / late Roman period. The sites, broadly, consists of a multi-phased arrangement of interconnected, rectangular, ditched enclosures orientated on and N-S axis. Within these enclosures are numerous features representing structures, animal enclosures, and the sub division of land plots and fields. Evidence from this period demonstrates that crops and being grown and processed, animals and being reared and that iron is being worked. The asset is located 820 m north of the VPI Site.

4.65 Asset **[A18]** (also **[E153]**) is another significant occupation site, subject to geophysical surveys in 2011 and 2012, trial trench evaluation in 2012 and excavation in 2013. The site covers around *c.* 1.5ha and featured two large enclosures, a large sub-rectangular enclosure in the southern portion of the site and an elongated enclosure located in the northern part of site. Both enclosures featured internal sub-divisions, with the southern enclosure displaying evidence of six ring gullies and other structural elements. A date range of between the mid to late Iron Age and early 1st century AD has been assigned to them. The asset is located 370 north east of the VPI Site.

4.66 Asset **[A20]** is a further, significant occupation site with Iron Age origins. Archaeological investigations were undertaken on the site of a proposed combined heat and power plant (CHP) at North Killingholme, west of Rosper Road, between 1999 and 2000. They comprised of a desk-based assessment fieldwalking, geophysical survey auger survey, watching briefs, trial trenching, and open area excavation. The work revealed that an original early Iron Age settlement was located in the south of the site, on the lower ground near a the former creek on the shore of the River Humber. There then appears, on the basis of the pottery sequence, to have been a hiatus in the mid to late Iron Age. The late Iron Age and Romano-British settlement developed on higher ground further north, centred around a droveway and a pattern of enclosures. The environmental evidence from the site reflected a mainly pastoral landscape, with some evidence of cereal cultivation and the possibility of hedge-lined ditches supporting semi-aquatic flora and fauna, including sticklebacks and water voles. Excavations and bore hole surveys suggested that during some periods the shoreline was more inland than previously though and actually within the confines of the southern part of excavation area itself. The creek or channel was east-west aligned with a broad opening onto the River Humber which then narrowed by two thirds west of the site. Generally, the environment on the Humber shoreline and in the Lincolnshire marsh was a mixed landscape of alder carr, with areas of phragmites reeds. Other data from the area suggests an increase in grass, herb and cereal pollen probably correlating with woodland clearance just prior to the Iron Age, more particularly analysis of samples taken from various features excavated on the site has provided evidence for grassland habitats, including saltmarsh and rough grazing land. The presence of early pottery makes the Killingholme site significant in Lincolnshire, where relatively few early to mid-Iron Age settlements have been investigated. The northern part of the settlement appeared to have been unenclosed: although the single roundhouse from this period was found between two boundary ditches, these appeared to represent the subdivision of an open area, as opposed to the enclosure of smaller compounds. The nature of the pottery, the general lack of artefacts, and the environmental evidence from the site all suggested a rural, pastoral settlement. Moreover, given the presence of a droveway, ponds, and enclosures interpreted as pens or corrals for livestock, it appeared that the settlement was mainly dependant on raising cattle and sheep/goats. The pottery evidence for the later Iron Age and Romano-British periods suggested that until the mid-2nd century there was a scarcity of imports, and it is likely that at this time the site was of a relatively low status. This asset is located within the VPI Site, at its northern extreme, partially under the extant buildings, partially within the (potentially less disturbed) area of the car park on the north east edge of the site and partially within the southern open area of the Proposed VPI Development.

Undated / Uncertain prehistoric Evidence

4.67 Within the 1 km area of the study area there are a number of prehistoric sites recorded in the HER which, whilst known to be prehistoric, cannot be definitively placed into any specific period. One of these, asset [A24] sits within the Phillips 66 Site.

4.68 Asset **[A23]** and **[A24]** are find spots of mixed material a possible Neolithic flint scraper and 3rd – 4th century greyware pottery from **[A23]** (300 m south of the Phillips 66 Site) and a probable bronze age flint knife and similar greyware pottery from **[A24]**. This material is located within the Phillips 66 Site and as a result any local archaeological context from which they may have originated may have been removed or truncated during the construction of the refinery.

4.69 Asset **[A27]** is the site of double-ditched penannular enclosure, visible on aerial photograph. The feature is clearly of prehistoric date, likely Neolithic to Bronze Age and located 840 m to the north-west of the VPI Site. An archaeological evaluation at this location in 2014 recorded Roman pottery and features, but these prehistoric ring-ditches were not located (**[A35]**).

Romano British (AD 43 – 410)

4.70 During the pre-Roman Late Iron Age period, North Lincolnshire was occupied the by Corieltauvi tribe (according to Ptolemy's 2nd century *Geography*) whose capital was Ratae Corieltauvorum (now Leicester). The Roman Ninth Legion *Hispana* arrived in Lincoln (Roman *Lindum Colonia*) sometime between 50-60AD and established a major fort, it becoming the functional capital of the region. Other major forts were built at Ancaster, Louth, Stamford, Tattershall and nearest to the Proposed Developments at Caistor (although this is still 15 km to the south-west of the Sites).

4.71 Three main Roman Roads were established in Lincolnshire, crossing at Lindum. This includes Ermine street joined (Connecting London to York via Lincoln),. the Fosse Way (Exeter to Lincoln), r. Tillbridge Lane (linking Lincoln with the small town of *Segelocum* (Littleborough on Trent). More locally to the Sites the afore mentioned 'High Street' (more correctly the 'Caistor High Street') was a pre-existing prehistoric trackway which ran along the eastern edge of the Wold linking settlements at Horncastle, Ludford, Caistor and the afore mentioned Yarborough Camp near Kirmington/Croxton before heading on to South Ferriby and Winteringham.. The study area lies outside of this major road communication network, although is very likely that the smaller settlements of the region were connected to larger settlements and that these were both interconnected and connected to the major road network (see below).

4.72 Salt production continued to be a major industry and the significance of salt as a trade item, as well as other produce of a costal location (fish, shellfish etc) in linking this area with the wider communication network of the region should not be underestimated.

4.73 There is now broad agreement that, beyond military fortifications and the main urban centres, anything which might be termed 'Romanisation' impinged but little on the wider landscape of the region for the first century or so after Rome sought to exert its control. It appears that it is only in the late 2nd and early 3rd centuries AD that Rome began to make its mark (Roskams 1999). This suggests that traditional patterns of community and social organisation may have continued from the Late Iron Age into the mid - late, Roman periods. From the 3rd century onwards, there are indications that the rural landscape beyond the main routeways was changing, with villas beginning to make their appearance, and seemingly growing in numbers and elaboration (if not greatly in size) through the late 3rd and 44th century.

4.74 The North Lincolnshire coastline continued to regress eastwards in the early Roman period with a subsequent increase in coastal wetlands. However, during the later Roman /early Medieval period (4th – 6th centuries) the coast appears to have moved westward once again, with Roman costal sites such as Scupholme and Ingoldmells being buried under 2-3 m of alluvium (Green 2014).

4.75 Within the wider region of the Sites the previously mentioned Iron Age sites at Kirmington airfield (HER 2268) and North Killingholme (HER 17461) continued to be used in the Roman period, although at both sites use appeared to diminish from the 2nd century AD onwards, with the sites being largely abandoned by the 3rd century AD.

4.76 The site at Killingholme becomes particularly large and complex at this time and appears to be a foci for Roman activity in this area, during the 2nd century it appears that a Road (HER 20965) it constructed at the site which seems to head west, linking the settlement with Ermine street. This would expand the communication network at this site, it already being near to the 'High Street' and linked to Yarborough Camp.

4.77 It is notable that these two locations – Kirmington Airfield and North Killingholme appear to Roman foci, as two further, large, occupation sites develop during this period. This includes a 'ladder type' Roman settlement at Chase Hill Farm, North Killinghome (HER1496), 3.4 km to the north of the Sites and 200 m south of the earlier site (HER17461). A further, complex, site consisted of a number of double ditched rectangular enclosures containing a number of internal divisions and surrounded by and associated field system was seen at Kirmington (HER 2265), just to the west of the airport, 700 m south of the earlier site (HER2268).

4.78 The settlement at East Halton (HER 20700) also continues through this period, with the earlier roundhouses being replaced with a series of small enclosures either side of a trackway. Sporadic Saxon and Medieval artefacts suggest that this site saw some level of continuous

occupation right through these periods, although the settlement is not mentioned in the Domesday book so may have been largely abandoned by the late Saxon period.

4.79 Yarborough Camp became more complex during this period. By this time the hillfort was nearly square in plan, being 80 m east-west and 60 m north-south internally, and was now formed by a substantial earthen and chalk bank with a mainly infilled ditch approximately 10 m wide immediately around the outside. The eastern was slightly bowed outwards, the other three sides being straight. The northern rampart diverged slightly from the southern rampart so that the interior measured approximately 55 m north-south on its western side and 65 m on its eastern side. However, the interior of the hillfort is level, and appears to have been built up on the southern eastern side to at least 1m. The central portion of the eastern rampart was slightly flattened and has been identified as the entrance to the hillfort. The entrance was on the middle of the south side. Finds from this period include large quantities of animal bone and pottery but also thumb scrapers and a hoard of coins, including coins of Licinius (AD 307-324).

4.80 Associated with this Camp is another small site 300 m to the north-west (HER22782). A series of rectangular enclosures along a metalled trackway are suggestive of agricultural plots outlining Yarborough. It is also possible that a quarry was present. The evidence suggest that this area saw intensive use during the early / mid Roman period, but that it may have had an origin in the late Iron Age (as with Yarlborough itself). The alignment of the road suggests a connection with Yarlborough to the south-east.

4.81 In addition to the new occupation sites at Kirmington and North Killingholme a complex site consisting of multiple linked enclosures and trackways is present at East Halton Skitter (HER20086, 6 km to the north of the Sites) whilst another occupation site, consisting of two square enclosures and associated field boundaries is seen at East Halton (HER 1599, 5.4 km to the north-west of the Sites).

4.82 Other sites are visible as square or rectangular crop mark enclosures such as a further site at East Halton (Her 20079) and Gloxhill (HER22722, 7 km to the north-west of the Sites, or have been identified through geophysical survey again at East Halton (HER 12458).

4.83 Numerous find spots of Roman material, made as chance find, part of field walking exercises or during archaeological monitoring, have been discovered in the area. This includes material found along the foreshore near Goxhill 7 km to the north-west (HER 1591), where finds of roman pottery and a Roman Whestone were made. Also, near Baron Upon Humber, 10 km to the north of the Sites, where Roman pottery was found on the foreshore (HER 1588).

4.84 There are no designated Roman sites within the 5 km Study area. Within the 1 km study area there are 16 Roman sites, these are assets **[A16 – A18], [A20 – A21]** and **[A28 – A38]**.Of these a single asset (**[A20]**) sits within the boundary of the VPI Site.

4.85 Assets **[A16], [A17], [A18], [A20]** and **[A21]** are occupation sites which have all been previously discussed (See Iron Age section). These sites simply continue in use into and throughout the Roman period. Roman occupation of these sits appears to reach its peak during the 2nd century. Where dates can be certain, the use of these sites appears to continue into the 3rd – 4th Century AD (assets **[A17], [A20]** and **[A21]**). During the latter part of its life (late 2nd century onwards) **[A20]** appears to have become more affluent (as represented by the cultural material, including foreign imports) and could be seen as a more moderate to high status site. It is worth re-iterating that this asset is located within the VPI Site, partially under the extant buildings, partially under the extant car park west of Rosper Road and partially within the open area of the Proposed VPI Development.

4.86 Assets **[A28]**, **[A30], [A31], [A32]** and **[A34]** are all find spots of Roman pottery (and in the case of **[A28]** a coin of Constantine II) located 200 m – 800 m from the Sites.

4.87 Asset **[A29]** (820 m north of the Phillips 66 sits) is simply recorded as an occupation site found during the construction of Lindsey oil refinery.

4.88 Asset **[33]** is Romano-British ladder settlement, recorded by geophysical survey and a metal detecting survey, 605 m south of the Phillips 66 Site. A complex series of rectangular ditches were conjoined to either side of a trackway, in a square area measuring at least 130 m by 140 m. The ditches of the western side defined by triple. Some of the positive anomalies within

the settlement were, suggestive of wall footings and arranged in such a way to suggest buildings. A metal detecting survey found 16 3rd and 4th century coin, two Roman brooches of the 1st or 2nd century. A Roman lock bolt fragment, 32 sherds of greyware, 30 lead fragments and 14 copper alloy fragments (including part of a vessel) were also recovered. When plotted, it was clear that most of the finds came from the west of the trackway, including all but one of the coins.

4.89 Asset **[A35]** is a settlement site comprising of a large main sub-rectangular enclosure, which contained several ring gullies and other fragmentary structural elements. The main enclosure had several sub-enclosures appended to it and a short stretch of double ditched trackway was recorded. The features displayed evidence of being re-worked and adapted from the mid to late Iron Age through to the early 2nd century AD, with artefactual evidence supporting the chronology. Located 850 m north-west of the VPI Site.

4.90 Asset **[A36]** is another ladder type Roman settlement, possibly consisting of one or more farmsteads. The pottery was largely utilitarian shell-gritted ware, typical of the Late Iron Age - Roman transition in North Lincolnshire. One sherd in a cream fabric was thought to originate from a 1st century AD kiln at Lincoln, whilst other material was more distinctively late Roman (3rd-4th century AD). There was also evidence for metalworking residue, fired clay fragments, oyster shells, and animal bone, an assemblage typical of a Roman settlement. Located 330 m north-west of Phillips 66 Site.

4.91 Asset **[37]** consist of a series of ditch features were recorded within evaluation trenches. The material recovered from these ditches suggested a Romano-British date and that domestic and / or industrial activity was taking place in the in the vicinity of them. Located 310 m north-west of Phillips 66 Site.

4.92 Asset **[38]** was another group of later Roman ditches, was recorded during trial excavations in 2012 and 2013. The ditches appeared to be a continuation of a field system associated with a farmstead or settlement recorded within the VPI Site on the west side of Rosper Road (asset **[A20]).** Very small quantities of Roman pottery were recovered from the fills of the features. It is also worth noting that all of the archaeological features in these trenches was sealed with a thick layer of flood-deposited alluvium, up to 0.90 m deep, lying below the topsoil. The features either side of Rosper Road are likely to represent a farmstead or settlement situated on a small promontory on the palaeo-shoreline. Asset **[A38]** Is located 40 m west of the VPI Site.

Early Medieval (AD 410 – 1066)

4.93 North Lincolnshire formed part of the Anglo-Saxon Kingdom of Lindsey until the 7th century when it was absorbed into Northumbria. The period witnesses marked changes in mortuary practice and settlement form. These have been summarised by the contributions of Loveluck (2003) and Hall (2003) and point towards increasing social stratification, with the advent of richly-furnished or prominently-located individual burials, and settlements which have been identified as trading emporia, ‘estate centres’ and monasteries. These changes relate to the growth of aristocratic power and its expansion and consolidation across the regions. Such development underlies the creation of the kingdom of Northumbria, and the royal and ecclesiastical institutions to which our historical knowledge of the post-Roman centuries in this region is largely owed.

4.94 Within the wider region, beyond the study area of the Sites, a Saxon *Burh* (a fortified, typically walled, settlement) is known at Stallingborough (6.6 km to the south-east of the Sites). The monastery of 'Ad Baruae' in Lindsey - generally identified with Barrow on Humber - was founded by St. Chad, who obtained from Wulfere, King of Mercia, the land of 50 families at Barwe. It was likely founded about the middle of the 7th century, probably between 669 and 672 and said to have been the seat of a Saxon Bishop. It was destroyed by the Danes and never rebuilt. The exact location of the monastery has never been established but excavation around Chesney House uncovered a stone coffin (possibly of the Bishop) a number of burials (possibly of the monks) and gold rings (HER377). The Church of St. Chad is located a short distance north of the suppose site of the monastery and like associated with it (HER 376). Excavation in 1978 revealed the foundations of an apsidal church the layout of which appeared to be Saxon in nature. A number of burials (HER 22415) were stratigraphically associated with the building and these placed the construction of the church in the early / mid 800s.

4.95 Anglo-Saxon pottery has been found within a ditch at pit during a trial trench evaluation at Goxhill (HER 26095, 5.6 km north-west of the Sites). There is also some evidence to support the fact that the Roman settlement sites at East Halton (HER 20700) and Kirmington Airfield (HER2268) continued in at least some form into the Saxon period.

4.96 There are no designated assets of this date within the 5 km Study area or within the Sites. Within the 1 km Study area there are three assets **[A17], [A39]** and **[A40]**.

4.97 There is some evidence to support the fact that occupation of settlement site **[A17]** continued into the Saxon period. Asset **[A39],** a find spot of a single sherd of *possible* Saxon ware was made 700 m to the north-west of the Phillips 66 Site.

4.98 A single Coin (an Anglo-Sceatta of 7th - 8th Century data) was recovered from the Iron Age / Roman occupation site of **[A20]** (within the VPI Site) during the 2002 excavations. This single coin is likely indicative of general low level Saxon presence in the area, rather than continued use of the site at this time.

4.99 Asset **[A40]** is a moated site 177 m to the west of the Phillips 66 Site. Whilst largely of Medieval date both fieldwalking over the site in 2011 and trial trench investigation in 2012 produced quantities of sherds of a late Saxon date, suggesting an earlier origin for the site.

Medieval (1066 – 1540)

4.100 The wider region within which the Proposed Developments sit appears likely to have been largely underdeveloped until the early 1900s when the Great Central Railway began developing Immingham Dock. It is likely that the region was dominated by agricultural land interspersed with hamlets and villages. Archaeological and historic evidence demonstrate that the modern villages of East Halton, North Killingholme and South Killingholme may have had Medieval predecessors. There is a strong probability that these Medieval centres represented the movement and centralisation of populations which were already in these locations during earlier (Roman and Iron Age) periods. The same is true for population centres further afield such as Kirmington and Croxton which were also foci of Iron Age and Roman settlement.

4.101 The most populated centralised settlement in this region during the Medieval period would have been Immingham, 2.5 km to the south of the Sites, and Stallingborough 6.6 km to the south-east of the Sites. This is somewhat surprising as whilst Stallingborough is known as a population centre in the Saxon period, there is no archaeological evidence for early (or indeed much Medieval) occupation at Immingham, other than the Church of St Andrew, which dates to the 13th century (with 15th century alterations), which would have been the focus for a community based around it. However, the Domesday book (1086AD) records that Immingham was held by William of Percy and consisted of 39 households (12 villagers, 13 freemen and 14 smallholders) and that there were 4 ploughlands and 80 acres of meadow. Stallingborough is recorded as being a smaller settlement. It was held by Herbert (Son of Aubrey) and tenanted by the Archbishop of York. There were 8 households (5 villagers, 3 freeman and 1 smallholders) with 2.5 ploughlands, 80 acres of meadow as well as half a mill and 2 salt houses.

4.102 North and South Killingholme are also recorded in the Domesday book. The land is split amongst four lords and a number of tenants but in total appears to support 67 households, making it one of the largest settlements recorded in Domesday, however this population would not have been as centralised as Immingham. Indeed it is likely these were classic ‘row’ villages extending along a north-south spine road. Although the detailed topography of the pre-enclosure landscape cannot be recovered, its general principles are clear, not only from later maps, but also from documents, particularly a 1585 survey of East Halton and Killingholme with 18th century transcriptions. The villages cultivated large tracts of arable in a two open field system, East and West fields, which were separated by the spine road along which the farmsteads and other dwellings lay. The Proposed Developments sit within what is recorded as the “East Field” on the edge of “Summergates” – which sits to the east of what is now Rosper Road.

4.103 East Halton is not mentioned in the Domesday Book but is known to have been occupied both during the early Saxon Period and in the Medieval period, suggesting that its omission is an

error, or that the village underwent a period of abandonment from the late Saxon to early/mid Medieval period.

4.104 It is also likely that saltworking continued to be major industry in this area at this time (Pawley 1984) with salterns being known at East Halton and Stallingbrough.

4.105 Within the 5 km study area of the Sites there are 6 designated assets – **[A41 – A46]** and 24 non designated assets within the 1 km study area **[A40]** and **[A47 – A69]**. Of these one asset ([A53]) sits within the bounds of both Sites.

4.106 Assets **[A41], [A42], [A43]**. Are all enclosed, moated, manor / farm sites, the closed areas being roughly rectangular in nature. Assets **[A41 – A43]** all consist of a single enclosure ditch 5 m – 10 m wide and 2-3 m deep enclosing an area of 12,000 m^2 (**[A41]**), 800 m^2 (**[A42]**) and 36,000 m^2 (**[A43]**). All present at least some evidence for bank on the internal side of the moat with ditch divisions internal to the area described by the moat and all have associated earthworks and features around them (likely the remains of field boundaries and a ridge and furrow ploughing regime). Asset **[A41]** is also associated with a smaller secondary moat to its west (enclosing an area of 3000m^2) and earthworks that would appear to represent two fishponds. Non contain any surviving structural evidence. It is possible that **[A41]** the "Baysgarth farm" moated site and **[A42]** the "North Garth" may represent the remains of the Medieval village of Lopinheham, recorded in the Domesday book and believed to be in this rough location. The village is recorded as consisting of 75 households, which would have made it a village of significant size. **[A43]** "Manor Farm" is likely associated with the Medieval development of East Halton.

4.107 Assets **[A41 – A43]** all sit to the north-west of the Phillips 66 Site at distance of 1.5 km – 3.6 km.

4.108 Asset **[A44]** (also recorded as non-designated asset **[A48]**) is another site with two rectangular moat enclosures a larger one (43,200 m^2) which, in its north-west corner contains a smaller one (50m^2). Again, the moat ditch is 10 m wide and 2 m deep with an internal bank. Again, internal divisions are seen within the enclosed area and earthworks representative of a field system surround it. The chief difference is the \presence an extant buildings within the confines of the enclosure – Manor Farm, a grade II* listed building dated to the 16th Century (NHLE 1346854) and an associated stables /granary (NHLE 1214980), dated to the 18th Century. It is likely these assets (excluding the stables) relate to the Medieval origins of North Killingholme. The site is 990 m north-west of the Phillips 66 Site.

4.109 Asset **[A45]** lies just within the 5 km study area, to the south of the Sites. It is the site of the remains of the Medieval nunnery of Nun Cotham, a priory of Cistercian nuns founded in the mid-12th century and dissolved in 1539. The remains of the nunnery are overlain by those of a post-Dissolution house, garden, farm buildings and other later features. Also associated with the site are a pair of fishponds and a post-Medieval windmill mound. None of the structural remains are standing, surviving now only as low earthworks, many of which are only visible from the air.

4.110 Asset **[A46]** (3.7 km to the north-west of the Phillips 66 Site) is the site of Thornton Abbey. This was an Augustinian monastery founded as a priory in 1139 by William LeGros, Count of Aumale, and raised to the status of abbey in 1148. It was colonised by twelve black canons from the Augustinian priory at Kirkham in North Yorkshire and became one of the richest Augustinian houses in the country. It was fortified in 1382, this included the construction of a large moat which fed at least two groups of fishponds. After the Dissolution of the Monastery (1539), Henry VIII re-founded the abbey as a college of secular priests and a school for fourteen boys, re-using buildings of the former monastery. This college was suppressed by Edward VI in 1547 and demolished by Sir Vincent Skinner in 1610. Out of the remains, Skinner built a stately house which subsequently collapsed. The site of this house lies within the inner precinct. The site of the cloister ranges was excavated by Charles, first Earl of Yarborough in the 1830s. Much of the ground-plan was uncovered and a typical monastic layout revealed. However, excavation was not carried out below the level of the latest remains and so details of the layout of the first cloister and church, built at the monastery's foundation, are, at present, not understood. The Abbey precinct covers an area of some 29 hectares. A number of extant ruins exist within the precinct which represent the remains of the Abbey and its associated outbuildings. The best preserved of these standing remains are of the abbey gatehouse.

4.111 Non-designated asset **[A51]** is the site of possible Medieval farmstead (Enchetun's Toft) which may have sat on the edge of "summergates" 580 m to the south-east of the VPI Site.

4.112 The remaining non-designated assets can be discussed in a number of groups. Assets **[A52], [A53], [A58], [A59], [A60],** and **[A61]** represent the remains of ridge and furrow activity. These are sometimes visible as extant earthworks and in other instances have been plotted during fieldwalking, geophysical surveys and as crops marks / earthworks during aerial photographic surveys. These assets demonstrate that the land around the site of the Proposed Developments has a heavy coverage of ridge and furrow remains which appear to come right up to the west side and south-west corner of the Phillips 66 Site and the south and east side of the VPI Site.

4.113 Asset **[A53]** consisted of the mapping of ridge and furrow using pre-existing aerial photographs from the 1940s and 1970s as well as new data collected during 2011 (geophysical survey).This work demonstrates that, somewhat unsurprisingly, ridge and furrow extends underneath what is now the existing Phillips 66 / Humber refinery site. It is doubtful that any of this survives. Perhaps more significantly the ridge and furrow activity also seen to cover the location of the current VPI Immingham CHP Plant buildings *and* the potentially undisturbed parts of the VPI Site, where there is the potential for preservation.

4.114 Assets **[A54], [A55], [A56]** and **[A57]** are all Medieval ditches noted during various investigative archaeological works, thought to represent field boundary or drainage features. The closets, **[A54]**, is located 75 m to the north of the VPI Site. The remainder are grouped together 225 m to the west of the Phillips 66 Site.

4.115 Assets **[A66], [A67],** and **[A68]** all appear to represent historic field boundaries identified via aerial photographs and (in the case of **[A68]** a trial trench evaluation). In all cases these boundaries appear to consist of a ditch and bank which is also overlain by an extant, historically important, hedgerow in the case of **[A68]**. Asset **[A66]** has since been destroyed by the modern Coal terminal. Asset **[A67]** has likely suffered the same fate. Asset **[A68]** lies 570 m to the north of the VPI Site. Whilst the archaeological work on this asset confirmed its Medieval origin, it lies along the line of a parish boundary (recorded as a ditch) between North and South Killingholme as seen on an enclosure map of 1776-1779.

4.116 Assets **[A63], [A40], [A47]** and **A62]** are earthworks noted in aerial photographs which appear to represent traces of the shrunken Medieval villages of North (**[A63])** and South Killingholme (**[A40], [A47]** and **[A62]**). These remains intermittently span a "ribbon" *c.* 2.5 km long to the north-west and west of the Proposed Developments area. At their closest point to the Proposed Developments the remains sit 175 m to the south-west of the Phillips 66 Site (**[A62]**).

4.117 Asset **[A64]** and **[A49]** are a findspots of Medieval pottery, made 630 m to the south and 830 m to the west of the Phillips 66 Site, respectively. **[A65]** were the earth work remains of a possible Saltern, now destroyed by the modern coal terminal.

4.118 Asset **[A69]** refers to the currently unlocated asset of "Stukeley's Great Castle". The antiquarian William Stukeley mentioned 'a great castle' at Killingholme. It may have been a substantial manor house on one of the moated sites in North or South Killingholme. He also recorded 'occasional finds of Roman pottery and coins'. William Stukeley's mention is short: "A mile east of Thornton are the ruins of another great castle called Kelingholme".

4.119 Asset **[A50]** is in a similar situation, A manorial chapel at Killingholme is mentioned in *c*.1320, the abbot and convent of Newhouse were licenced to celebrate in a chapel there. This chapel could have been in either North or South Killingholme, its location is currently unknown.

4.120 It is notable that the evidence for ridge and furrow and field enclosure appears to indicate that the land in use for arable agriculture tends to stay above or around the 4 m contour – seemingly indicating that as this time land below this height was unsuited to arable agriculture and either unusable or put to pastoral use. This reflects what is known from the pre-enclosure mapping where the areas to the east of Rosper Road are largely recorded as being "marsh".

Post Medieval (1540 – 1900)

4.121 Throughout the Medieval period the coastline of the region was in slight flux, largely moving east from the inland position reached towards the end of the Roman / early Saxon periods. Towards the early / middle part of this period it reaches a position which broadly resembles the modern coastline (Catlin 2012).

4.122 A map of the North and South Killingholme area post-enclosure (1776 – 1779) shows that what was once the "East Field" is now subdivided into numerous smaller parcels of land (including the area of the Sites). It also shows that the area which was labelled as "Marshes" has now also been parcelled up and enclosed, suggesting the retreat of the water and the subsequent drying of the coastal wetlands had made these areas usable for arable agriculture. The 1887 Ordnance Survey (OS) map demonstrates that by this time a number of the earlier smaller land parcels have been subsumed into fewer, larger fields, and that the costal (previously marsh area) is still in apparently arable use. A number of land boundaries apparent on this map can still be seen today (see below).

4.123 There are no designated Post-Medieval archaeological assets within the 5 km study area. There are 26 non designated archaeological assets, **[A70-A95]** within the 1 km study area. Of these three assets ([A70], [A71] and [A72]) sit within the bounds of the VPI Site.

4.124 A number of assets are visible on the OS map of 1887, but have subsequently been destroyed. This includes assets **[A79]** and **[A84 – A95]** which represent the sites of now demolished 19th century farmhouses once associated with North and South Killingholme. These are scattered all around the Sites, the closest being **[A91]** located 30 m to the north east of the VPI Site and **[A88]**, 160 m to the west of the Phillips 66 Site. Asset **[A78 – A82**] are all structural assets other than farms (an inn, a church and two smithies) which were also present on the OS map of 1887 and which have also subsequently demolished and replaced by modern housing developments. With the exception of **[A81]** (the now demolished smithy) the site of which sits within what is now an open field. The closest of these is **[A82]** which sits *c.*115 m to the west of the Phillips 66 site. None of these (now demolished) assets sat within the bounds of the Sites.

4.125 Asset **[A77]** is the site of an extant modern farm (Manor Farmhouse). Present on the OS map of 1887, less than 50% of the original buildings remain. **[BH19**. None of the extant buildings are listed.

4.126 Asset **[A74]** is a burial ground associated with a Baptist chapel dated to 1792 **[BH22]**, sitting *c.*580 m to the south the Phillips 66 Site.

4.127 Asset **[A70]** and **[A71]** represent the remains of historically important hedgerows that appear as field boundaries on pre 1840 maps. Between them the assets consist of 15 hedgerows, however now only eight survive / partially survive the rest have been removed by the alteration of field boundaries over time and modern constructions. One concurrent length of Hedge which forms part of **[A70]** and **[A71]** currently runs along the eastern perimeter of the VPI Site.

4.128 A number of other assets are visible as cropmarks or known from other works none of which have any significant relationship with the Proposed Developments. Asset **[A75]** is another linear ditch (dated to the 16th – 18th centuries AD), noted during a watching brief on the construction of a new house, the asset was removed as part of these works. **[A83]** is a small pinfold noted on the OS maps of 1887 and 1907 which currently forms part of a residential garden. **[A76]** is a pond noted in OS maps of 1887, modern works have since levelled the asset, but it can still be seen on LiDAR imagery.

4.129 **[A72]** is an exception to this - a linear cropmark (possibly a ditch) thought to be a Medieval / post Medieval field boundary, noted in aerial photography and aligning with a field boundary noted on the OS map of 1887. This asset sits within the VPI Site but is not visible as an earthwork from the ground.

Modern (1900 – Present)

4.130 The region remains largely unchanged until 1912 when the Immingham Docks are constructed (following the passing of the Humber Commercial Railway and Dock Act in 1904), at which point the region undergoes significant industrialisation, including a network of rail to transport

goods between Immingham and Grimsby. This includes an extant freight line linking Grimsby, Ulceby and Immigham docks, which and a passenger line linking Goxhill, Ulceby and Grimsby as well as the Barton and Immingham light railway which linked Goxhill to Immingham doc and Grimsby via North Killingholme. This light railway closed, in stages, between 1963 and 1969.

4.131 The extant freight link between Ulceby and Imminghaco docks divides the Phillips 66 and VPI Sites – sitting again the north east boundary of the Phillips 66 Site and the south-west corner of the VPI Site.

4.132 The area of the Proposed Developments remains as open agricultural land until the construction of the Humber Refinery in 1966 and the construction of VPI Immingham CHP Plant in 2004.

4.133 There are no designated archaeological assets of this period within the 5 km study area. Within the 1 km study area 23 non-designated assets are known. Of these, two ([A116], [A101]) sat within the bounds of the Phillips 66 Site and one, asset [A110] sits within the bounds of the VPI Site.

4.134 A number of assets relating to World Wars I and II are present around the Sites, **[A97], [A98], [A101], [A102], [A107-A109]** and **[A111-117]**. These include such things as mission hall, barrage balloon anchorages, anti-aircraft batteries, aircraft obstructions, RAF sites, the site of a WWII prisoner camp, a fuel storage site and a number of bomb craters. The majority of these assets sit some distance from the Proposed Developments. However, **[A116]** (a WWII searchlight emplacement) and **[A101]**, the site of a prisoner of war camp are present within the bounds of the Phillips 66 Site. The camp was used to house 'low category' German prisoners of war. Locally, it was called 'Monkey Camp' after its army code of 'M for Monkey'. The prisoners worked on farms in the area. No army buildings are visible on Ordnance Survey 6" map of 1947 and the site was not listed in a national survey of POW camps produced by English Heritage in 2003.

4.135 A number of, now demolished, buildings lie on the east side of Rosper Road, close to the east edge of the VPI Site. The most northerly of these, Asset **[A120]** is the site of a house called ‘Myrtle Villas’, constructed at some point between 1907 and 1932 the building is also present on maps of 1968 but gone by 1975. The site of the building lies 25 m to the east of the VPI Site. Asset **[104]**, is the site of a Christian Mission Room. Constructed in 1910 and present on the 1968 map, but gone by 1975 this building was located 35 m to the east of the VPI Site. Near to this is the site of a day school and school house **[A105]**, constructed at some point between 1907 and 1932 the school is also present on the 1968 map but gone by 1975. The site of this school lies 70 m to the south-east of the VPI Site.

4.136 The site of the village hall (built 1887, **[A119]**) is now a roundabout in South Killingholme 135 m to the west of the Phillips 66 Site.

4.137 Seen for the first time in the 1932 map, but gone by the 1968 map, asset **[A110]** was a chapel which sat on the west side of Rosper Road, *within* the Proposed VPI Development.

4.138 The (extant) Humber commercial railway line which bisects the two sites is recorded as asset **[A100]**. Sections of the (now redundant) Barton to Immingham light railway and the site of the now demolished Killingholme station along this line, are recorded as assets **[A100], [A103], [A118]** and **[A106]**.

4.139 The remaining assets consist of the site of terraced house (Marsh Row) **[A99]**, built between 1905-1932 and demolished by 1975, *c.* 380 m to the east of the VPI Site and a geophysical anomaly discovered to be a modern service trench during an evaluation in 2006 (**[A96]**).

4.140 Asset **[A122]** relates to what may be the maximum extent of the foreshore in this region. Various pieces of work over the last two decades have surveyed this area, and when mapped the deposits give an approximate indication of where the foreshore may have been during the late Roman / early Saxon period, before it began to recede. This is significant as the work appears to demonstrate that at section of this foreshore may be present within the bounds of the VPI Site.

Undated

4.141 There 16 non-designated assets of an unknown or uncertain date within the 1 km study area, assets **[A119 – A134]**, of which two – **[A128]** and **[A129]** - sit within one of the Sites (VPI Site). In the main these relate to cropmarks or other earthworks noted through aerial, LiDAR or geophysical survey. Only three of these assets have any potential importance due to their proximity to the Proposed Developments.

4.142 **[A128]** is a tentative geophysical anomaly identified in 2009, sat between Humber Road and Rosper Road 16 m to the south-west of the VPI Site, near to asset **[A26]**. Asset **[A129]** was noted as a (undated) linear feature in an evaluation of 2002 (**[E84]**) but seen to be possibly part of a larger square enclosure by aerial mapping in 2009. The feature sits within the VPI Site and is likely part of the Iron Age / Roman site present here – **[A20]**.

4.143 **[A126]** is a possible enclosure with double ditched trackway seen as a crop mark on early aerial photography. It also sits between Humber Road and Rosper Road *c.*20 m to the south-west of the VPI Site. However, A geophysical on the site in 2011 detected neither enclosure nor trackway

Historic Landscape Characterisation

4.144 The North Lincolnshire Historic Landscape Characterisation (NLHLC) data is formed of an assessment of historic and current mapping that separated blocks of landscape into types and then subtypes based on either morphology or land use. A total of six NLHLC types encompassing 25 subtypes are present within the 5 km study area and listed in Table 12A.2.

4.145 The GIS data for the NLHCL was obtained from North Lincolnshire HER and is presented in Figure 3 (Appendix B). The NLHLC data has been used in this study to establish the existing time depth of the historic landscape of the Sites and to examine how the surviving historic landscape of the Sites relates to that of the surrounding areas; this enables an assessment of the sensitivity of the historic landscape to change. The NLHLC types can also be used to examine the evolution of the Sites in the post-Medieval and modern periods.

Table 12A.2 North Lincolnshire Historic Landscape Character types and sub types within the 5 km study area.

Type	Subtype	Period
Communications	Cuttings and Embankments	Modern
Communications	Junction	Modern
Communications	Sidings	Post Medieval to Modern
Communications	Sidings	Modern
Fields and Enclosed Land	Ancient Enclosure	Medieval to Modern
Fields and Enclosed Land	Ancient Enclosure	Post Medieval to Modern
Fields and Enclosed Land	Modern Fields	Modern
Fields and Enclosed Land	Parliamentary Planned Enclosure	Post Medieval to Modern
Industry	Car Storage	Modern
Industry	Chemical Works	Modern
Industry	Derelict Industrial Land	Modern
Industry	Other Industrial Works	Modern
Industry	Warehouses and Distribution	Modern
Recreational Open Space	Golf Course	Modern
Settlement	Detached Housing (C19th)	Post Medieval to Modern
Settlement	Detached Housing (C20th)	Modern

Type	Subtype	Period
Settlement	Historic Settlement Core	Early Medieval to Modern
Settlement	Isolated Farmstead	Post Medieval to Modern
Settlement	Isolated Farmstead	Modern
Settlement	Planned Residential Development	Modern
Settlement	Pre 1960s Semi Detached Housing	Modern
Settlement	Pre 1960s Semi Detached Housing	Modern
Settlement	Village Farmstead	Post Medieval to Modern
Woodland	Other Woodland	Modern
Woodland	Plantation Woodland	Modern

4.146 Figure 12A.3 demonstrates that the majority of the Phillips 66 Site and the northern half of the VPI Site lie within the NLHLC subtype 'Chemical Works '(modern). The southern half of the VPI Site and the extreme western section of the Phillips 66 Site lie within the subtype 'modern fields' (modern). To the east of the VPI Site the land is noted as 'Parliamentary Planned Enclosure (post Medieval to modern). To the south of both, the land is 'Chemical works' (modern). To the west of the Phillips 66 Site the land is characterised primarily as 'Fields and Enclosed Land' (modern) although areas of 'Warehouse and Distribution' (Modern) are also seen. To the north of both sites is the Lindsey oil refinery ('Chemical works, modern).

4.147 In addition to the above data, the region of and around the Sites was also part of the Lincolnshire Historic Landscape Characterisation Project, which commenced in 2008 and completed in September 2011. It used GIS mapping to categorise and characterise the landscape of the county over time. The process involved the definition of landscape types which were used to categorise all portions of the landscape. These were then grouped into 'character zones' of coherent landscape blocks which were, in turn, grouped into larger 'character areas', the largest landscape components of the study.

4.148 The area of the Proposed Developments, as well as the areas to the east, south and immediate north of it falls into **NOM2: The Northern Marshes (Immingham Costal Marshes).** This is broadly defined as a zone dominated by industrial activity (comprising 36% of the character zone) and which, prior to enclosure in the 18th century, was mainly comprised of saltmarsh grazing land. The zone is largely modern in character although historic elements can still be identified in the landscape.

4.149 The area to the west of the Sites, as well as the area further to the north of the Sites (beyond the Lindsey Oil Refinery) fall into **NOM1: The Northern Marshes (The Humber Bank).** This zone is primarily rural (open fields) with small towns, villages and isolated farmsteads. The area was active since the Domesday survey and whilst much of costal area comprised low lying coastal march, this area was generally higher and (from relict ridge and furrow) part of an open farming regime. The Medieval landscape is still visible in this area – some settlements retain their historic cores and earthworks represent the sites of former monasteries and other buildings.

5. Assessment of the Baseline

Potential Archaeological Remains

Previous Ground Disturbance – VPI Site

5.1 The northern half of the VPI Site has been industrially developed (Immingham VPI power station) and the ground underneath was heavily disturbed as part of these works. The exception to this may be the car park area in the north-west edge of the extant VPI Site. These works were minimally invasive, and it is highly likely that archaeological remains survive intact / largely intact beneath it. The southern half of the VPI Site appears to be open, undisturbed, land.

5.2 A bore hole survey conducted in 2000 by Humber Field Archaeology (Buglass and Bradley 2006), **[E101]**, placed two borehole transects (runs 1 and 2), across the north half the VPI Site, the boreholes extending to a depth of *c.* 3.5m. Run one was placed along what a prior geophysical survey had tentatively identified as a silted up paleochannel whilst run two was placed along what appear to be the mouth or tidal inlet of the same channel in order to try and establish the ancient shoreline. Run one was successful in identifying and characterising width of the channel and the sediments within appearing to demonstrate that the foreshore sands were present on the edge of the paleochannel at depth of *c.*0.50m. This deposit was *c.* 0.25 m thick and overlay clay sediments interpreted as glacial washout. Run two also identified the inlet mouth and the more complex sequence of sediments associated with this. There appeared to be a number of phases of sediment deposition and erosion (as would be expected at a tidal inlet), the sediments associated with this beginning at a depth of *c.* 0.70 m and continuing to a depth of *c* 1.5 m. Towards the edge of the run the foreshore sand were seen at a depth of *c.* 0.35 m.

5.3 This work demonstrates two things

1. The foreshore appears to extend into the VPI Site.
2. The southern half of the VPI Site appears to be (largely) undisturbed by modern intrusions or work which may have damaged any below ground archaeological assets.

5.4 Allen Archaeology (Rackham and Clay 2016, Rackham and Clay 2013) conducted a paleoenvironmental survey (borehole survey) on land immediately to the east of the VPI Site in 2013 (**[E126]**), which was then extended in 2016 (not yet in the HER data). Two of the transects excavated, E and C come within 120 m of the east edge of the VPI Site. The paleo soils recovered by this work were able to, broadly, map the western most extent of the foreshore and demonstrate periods of inundation and regression, followed by a final inundation in the Roman period and subsequent gradual regression. The work concluded that pre-Iron Age deposits may be encountered towards the eastern extent of the transects (the modern shore line), buried under alluvium at a depth of 1-2 m but that later archaeological remains (Iron Age – Roman) would likely only be encountered towards the western end of the transects due to a combination of erosion during periods of indication and regression, and the general inaccessibility of the more easterly areas at these times due to flooding. The land would have been marsh during the Medieval period.

5.5 These two pieces of work formed the basis for the mapping of the foreshore, detailed as **[A122]** (see 4.140 above).

Previous Ground Disturbance – Phillips 66 Site

5.6 There is no work which provides any evidence for the presence / extent of ground disturbance at the Phillips 66 Site. However, given the date the site was constructed (1966) and the heavily industrialised nature of the site it is very likely that there has been significant ground disturbance at the Phillips 66 Site. This, combined with the relatively shallow depth of archaeological remains at nearby sites (e.g. noted at a *c.*0.30 m during the archaeological excavations in the neighbouring VPI Site, **[A20]**) means that it is likely that very little survives, in term of below ground archaeological assets, within the Phillips 66 Site. However, although

the nature and extent of the assumed ground disturbance at the Phillips 66 Site will need to be assessed to confirm this.

Archaeological Potential

5.7 This section assesses the potential for unrecorded buried archaeological remains and surface artefacts to be present within the Sites. The assessment of archaeological potential is based on the data available at the time of writing and takes into consideration the known archaeological assets within the Sites and study areas, and the historical and cartographic evidence presented in the baseline. The lack of instances of particular archaeological periods within the Sites and study areas may reflect limited archaeological investigation to date, rather than a real absence of activity.

Prehistoric (Palaeolithic – Neolithic)

5.8 The lithic periods are relatively well represented in the region, likely due to the extensive woodlands present in Doggerland in the early / mid parts of these periods and the marshes and coastal regions more prevalent later.

5.9 Whilst no Palaeolithic evidence has been recovered from within the 1 km study area, a number of Mesolithic and Neolithic finds (tool find spots) have been made in the study area and within the VPI Site itself (a Mesolithic flint scatter of over 233 pieces - **[A7]**). The majority of these finds – including the asset within the VPI Site - appear to sit within former foreshore deposits (as mapped by **[A122]**). Flint tools of a 'prehistoric' date were also recovered during excavations within the VPI Site, which identified an Iron Age / Roman settlement (**[A20]**), in association with a paleochannel.

5.10 Given the fact that the VPI Site has had Mesolithic material found within it, and that the foreshore appears to extend into it, the potential to encounter Mesolithic or Neolithic activity is deemed to be **moderate.**

5.11 Mapping and photographic evidence demonstrates that before the construction of the Phillips 66 Site, the ground was open agricultural fields – it is therefore far from impossible that the paleochannel "tributary", noted in the VPI Site, may once have extended further westwards into the Phillips 66 Site. However, the lack of finds from within or near the site - and the likely more disturbed nature of the ground here - means that the potential to encounter Mesolithic or Neolithic activity is deemed to be **low.**

Prehistoric - Bronze Age

5.12 Within the wider region the Bronze Age is fairly well represented, with Bronze age settlements at the Killingholmes and East Halton (all over 2 km away). Within the 1 km study area there are a number of Bronze Age tool find spots which again appear to be associated with the foreshore. However, there is also evidence for a possible Bronze Age occupation site, along the margins of the former foreshore, 260 m south-east of the VPI Site (**[A11], [A12] & [A13]**).

5.13 Given the proximity of the possible Bronze Age settlement to the VPI Site, along with the presence of the foreshore within the bounds of the VPI Site and possible Bronze Age material recovered from **[A20]**, the potential to encounter remains of this date at the **VPI Site** is deemed to be **moderate**.

5.14 A single flint tool, **[A24]**, was recovered from within the bounds of the Phillips 66 Site, prior to the construction of the refinery and may be associated with the possible paleochannel within the Phillips 66 Site. The potential presence of a paleochannel within the site (and the attendant depths of alluvium) means that there is a possibility that archaeological material may be present at depth below the refinery. However, it is likely that this artefact was not recovered *in situ* but had been transported from the VPI Site where a far more significant flint assemblage is present. This combined with the lack of any other evidence from the Phillips 66 Site and the likelihood of substantial ground disturbance means that the potential to encounter remains of this date at the **Phillips 66 Site** is deemed to be **low.**

Iron Age

5.15 The Iron Age period is also well represented in this region with the areas around East Halton, North Killingholme and slightly further afield, Kirmington all being centres of Iron Age occupation. There is also substantial Iron Age presence within the 1 km study area, with settlement sites (**[A16], [A17], [A18]**) being clustered to the east of the VPI Site along the edge of the ancient foreshore - as predicted by Rackham and Clay (Rackham and Clay 2013 & 2016 and section 5.4 above). Crop marks to the north (**[A15] & [A19]**) and south (**[A26]**) of the VPI Site (also just beyond the foreshore) may be indicative of further Iron Age settlement and / or field systems.

5.16 More significantly a known Iron Age settlement site, **[A20]**, is present within the bounds of the VPI Site itself. Whilst crop marks see in aerial photographs from 1958, hint at the presence of Iron Age use of the Phillips 66 Site. It is entirely possible that the sites seen clustered around the VPI site (above) and the site within the VPI Site are all one linked landscape of use, with the various settlement and other activities overlapping into each other.

5.17 The presence of the *in situ* remains of a substantial Iron Age settlement within the bounds of the VPI Site, the limits of which have not been completely defined by previous work (**[E83] & [E84]**), as well as possible Iron Age activity around its edge, which may extend into the Site – particularly sites **[A16]** and **[A26]** - means that the potential to encounter remains of this date within the **VPI Site** is deemed to be **high**.

5.18 Whilst aerial photography indicates that Iron Age activity may have been present with middle of the Phillips 66 Site (**[A25]),** possible rectilinear enclosures) this asset was noted prior to the construction of the refinery and has not been seen by any aerial photographic surveys since – being covered in industrial buildings as the site now is. The archaeological work within the VPI Site demonstrated that the Iron Age / Roman archaeological horizon sits at *c.* 0.30 m below ground level. This relatively shallow depth for the archaeological horizon, combined with the likelihood of significant ground disturbance within most of the bounds of the Phillips 66 Site, means that the potential to encounter remains of this date within the **Phillips 66 Site** is deemed to be **low**.

Roman

5.19 The Roman use of the region largely represents a continuation of the sites established during the Iron Age, with many expanding and new sites developing around them.

5.20 This pattern is reflected in the study area. The previously mentioned Iron Age sites continue in use and many appear to become more complex, whilst new settlement sites such as **[A35], [A36]** and **[A37]** appear.

5.21 Asset **[A20]** within the VPI Site continues in use during this period, becoming more complex and increasing in status, as does **[A16]** just to south-east of the site. Roman field enclosure ditches (**[A38]**) possibly associated with **[A20]** also appear, adjacent to the eastern edge of the VPI Site. As a result, the potential to encounter remains of this date within the **VPI Site** is deemed to be **high**.

5.22 A single Roman pottery sherd, **[A24]**, was recovered from within what is now the developed area of the Phillips 66 Site, prior to the construction of the refinery. Whilst this may be associated with crop mark **[A25]**, is more likely that it was transported from the VPI Site. Asset **[A36]** is a Roman settlement site (identified via archaeological investigation) 330 m to the north-west of the western edge of the Phillips 66 Site – at this distance it is unlikely that remains of this settlement extend into the western edge of Phillips 66 Site, certainly no finds have been made to hint at this. This, combined with the lack of any other evidence from the Site and the likelihood of substantial ground disturbance means that the potential to encounter remains of this date at the **Phillips 66 Site** is deemed to be **low.**

Early Medieval

5.23 There is relatively little evidence for the Saxon period within the wider region, although there is some evidence that Roman sites at Goxhill, East Halton and Kirmington some at least some level of continuation into this period.

5.24 Again, this pattern is reflected within the study area. Asset **[A17]** may continue in use into this period and moated site **[A40]** may represent continued occupation of the Killingholme area. There is no evidence for Saxon use of either of the Sites – asset **[A20]** appears to fall out of use towards the end of the 3rd century AD as does site **[A16]**.

5.25 Whilst it is not impossible that the earlier settlement sites, and field systems, seen in and around the VPI Site continue into this period, there is no direct evidence for this. Accordingly, the potential to encounter remains of this date within the **VPI Site** is deemed to be **low**.

5.26 It is possible that the moated site to the west of the Phillips 66 Site (**[A40]**) was associated with a wider farmstead and / or field system which extended far enough west to encroach upon the western edge of the Phillips 66 Site. However, the likelihood of substantial ground disturbance across the Phillips 66 Site means that the potential to encounter remains of this date at the **Phillips 66 Site** is deemed to be **low**.

Medieval

5.27 During this period the immediate region of the Sites would have been dominated by a row of villages and farmsteads running north to south from East Halton to South Killingholme, along a spine road – the evidence for this encompassing a number of earthwork sites including five designated assets. The pre-enclosure land around these villages was dominated by a ridge and furrow plough regime as evidenced in the relict earth work remains of these (**[A52], [A53], [A58], [A59], [A60],** and **[A61]**) with field boundaries being defined by ditches (**[A66], [A67],** and **[A68]**).

5.28 There is no indication of any Medieval settlement activity within the immediate vicinity of the VPI Site, indeed the land to the east of the site would have been marsh land at this time. However, there is substantial ridge and furrow activity (**[A53]**) recorded in and around the VPI Site. As a result, the potential to encounter remains of this nature and date within the **VPI Site** is deemed to be **high**.

5.29 Sections of the East Halton to South Killingholme row villages (**[A40], [A62]** and **[A63]**) sit within 200 m of the Phillips 66 Site, and it is possible that elements of these villages and their surrounding field system may have once sat on the Phillips 66 Site. Indeed, ridge and furrow activity - **[A53]** is, theoretically, mapped as having extended into the Phillips 66 Site at one time. However, this activity is no longer visible (due to the industrial nature of the Phillips 66 Site) and it is likely that this industrial development has removed all traces of this activity of this period. Accordingly, the potential to encounter remains of this date within the **Phillips 66 Site** is deemed to be **low**.

Post Medieval

5.30 The region of the Proposed Developments sees the row of villages between East Halton shrink and nucleate and the site of a number of now demolished 19th century farmhouses are scattered around the study area. At some point between the initial enclosure of the fields around the Sites in 1776 and the production of the first ordnance survey map in 1887 the fields system is re-organised and many of these field boundaries are still visible as earthworks, cropmarks or extant hedgerows today.

5.31 Both the post enclosure map, and the OS map of 1887 demonstrate that the Sites would have been crossed by a number of field boundaries.

5.32 Within the **VPI Site** it is likely that elements of these field boundaries may still be preserved, **[A72]** is a crop mark which appears to be a linear ditch that aligns with field boundaries seen on the 1887 map, and which sits within the bounds of the VPI Site (towards its, undisturbed, central / southern end). Assets **[A70]** and **[A71]** include elements of a historically important hedgerow that is also recognised as aligning with a ditched boundary on the pre 1840 maps, and which form the eastern boundary of the VPI Site. For these reasons the potential for encountering remains of this date at this site is deemed to be **high**.

Modern

5.33 The region of the Proposed Developments changes significantly in the modern era, road and rail develop in the area and the region becomes heavily industrialised – including significant industrial development at both Sites.

5.34 However, this development is relatively well understood in terms of its extent – the areas of the Sites which have been, and have not been, affected by it. Accordingly, the potential for discovering *unknown* archaeological assets of this date is deemed to be **negligible** for **both Sites**.

Statement of Significance

5.35 The NPPF stresses the importance of identifying and assessing the significance of any heritage asset and its setting that may be affected by a Proposed Developments. Once significance has been established, the impact of any proposal can be appropriately assessed. Again, archaeological assets and events are shown on Figures 12A.1 - 4.

Conservation Areas

5.36 Neither the Sites, or the study areas, are located within a conservation area.

Listed Buildings

5.37 The 5 km study areas contains a total of thirty-three listed buildings, within the 1 km study area there are four listed buildings **[BH7, BH21-22 & BH33]**.

5.38 The Church of St Denys **[BH7]** (NHLE: 1103701) is a grade I parish church located approximately 930 m north-west of the Phillips 66 Site. The Church dates to the 12th century with multiple phases of extension and alteration throughout the Medieval, post-Medieval and modern periods. The Church is constructed in squared limestone, ironstone and chalk, chalk rubble and flint and has 18th century slate roofs. The immediate setting of the Church is comprised by the churchyard which is defined by a low-hedge boundary with a stone arch gateway, the wider setting extending to include the parish of North Killingholme. The significance of the Church lies in its archaeological interest as a structure which contains 12th, 13th and 14th century fabric, with later phases of alterations. The architectural interest lies in its architectural detailing including a wide Romanesque tower arch with scalloped capitals and geometric tracery extensively restored within the 19th century. The historic interest lies in the church's role as the centre of religious and administrative life within the parish of North Killingholme during the Medieval and post-Medieval periods.

5.39 The Old Vicarage **[BH33]** (NHLE: 1214966) is a grade II former vicarage, now a private residence, located approximately 950 m from the Phillips 66 Site. The structure comprises two storeys plus attics in yellow brick on an L shape plan with pitched slate roof. The architectural interest of the vicarage lies in the range of decorative features including stucco plait band, Doric doorcase and stucco window arches and projecting sills. The historic interest of the Old Vicarage lies in the former functional relationship with the Church of St Denys **[BH7]**.

5.40 The Nook **[BH21]** (NHLE: 1215113) is a grade II house located approximately 450 m west of the Phillips 66 Site. The house is dated to the 17th century, extended during the 19th century with the addition of a 20th century porch. The Nook comprises of one and a half storeys in white-washed brick with a pitched pantile roof with rendered brick chimney stacks and a projecting dormer. Windows are a mixture of timber casement and sash. The Nook is on a north-south alignment with the gable-end facing the road, suggesting it pre-dates the current layout of the road. The architectural interest lies in the largely unaltered vernacular construction methods and materials.

5.41 The Baptist Chapel **[BH22]** (NHLE: 1346858) is a grade II former Chapel located approximately 570 m south of the Phillips 66 Site. The Chapel is dated 1792 with 19th an 20th alteration and restorative works, constructed on a rectangular plan in red brick with a pitched pantile roof. The Chapel has one storey plus attics, the interior contains a now boarded over baptismal tank. The Baptist Chapel gives its name to the street 'Baptist Chapel Lane', however is now obscured

from the public realm by foliage and appears to be in a state of dereliction. The historic interest of the structure lies in its historic religious function, which is evidenced by the survival of the baptismal tank although not evident from the exterior in its current state.

5.42 Of the remaining twenty-nine listed buildings identified within the extended 5 km study area, five are designated grade I and two are grade II*.

5.43 Thornton Abbey gatehouse and wing walls, precinct walls and barbican **[BH1]** (NHLE: 1346859) grade I are located approximately 4.3 km north of the Phillips 66 Site. The listing comprises the gatehouse, sections of the precinct walls and barbican associated with the ruins of Thornton Abbey **[BH4] [A46].** The structures are of considerable archaeological interest derived from the considerable survival of original Medieval materials and partially extant structures, including 14th century material in the gatehouse for Abbot Thomas Gresham and the 15th century barbican. The historic interest stems from the historic religious and political influence of Thornton Abbey as a monastic institution as a whole. There is also significant architectural interest in the gatehouse, as one of the largest and most richly ornamented examples in England.

5.44 The remains of Thornton Abbey **[BH4]** (NHLE:1215139) grade I are located approximately 4.3 km north of the Phillips 66 Site. The abbey was founded as a Priory in 1139, the ruins now comprising of late 12th or early 13th century dormitory vault, largely rebuilt mid-13th and late 14th century. The abbey ruins have archaeological interest in survival of the 12th and 13th century masonry with 14th century rebuilding. The historic interest stems from the historic religious and political influence of Thornton Abbey as a monastic institution as a whole. The ruins retain architectural interest in the survival of fine geometrical tracery.

5.45 The Church of St Andrew **[BH6]** (NHLE: 1310011) grade I is located approximately 1.7 km south of the Phillips 66 Site. The Parish Church was established in the 11th or 12th century with the nave surviving from this period, the majority of the Church is later Medieval with 19th and 20th century restorations. The immediate setting of the Church is comprised by the churchyard which contains a Medieval cross base [BH5], the wider setting extending to include the parish of Immingham. The significance of the Church lies in its archaeological interest as a structure which contains 12th and 13th century fabric. The architectural interest lies in its architectural detailing The historic interest lies in the church's role as the centre of religious and administrative life within the parish of Immingham during the Medieval and post-Medieval periods.

5.46 Abbot's lodge **[BH9]** (NHLE: 1103713) grade I is located approximately 4.3 km from the Phillips 66 Site. The asset comprises of a 17th century house by Sir Vincent Skinner which incorporates materials from and the former monastic range of Thornton Abbey which date to the 13th and 14th centuries. The house has archaeological interest stemming from the reuse of Medieval masonry. The historic interest stems from the historic religious and political influence of Thornton Abbey as a monastic institution as a group of assets. Architectural interest lies in the complex range of architectural detailing from various periods including the Tudor arch inserted in the ground floor.

5.47 The Church of St Peter **[BH10]** (NHLE: 1103729) grade I is located approximately 1.9 km north of the Phillips 66 Site. The Church dates to the 14th century, reusing some earlier 12th and 13th century sections of masonry with an extensive scheme of restoration in the mid-19th century by J. Fowler The immediate setting of the Church is comprised by the churchyard which contains a Medieval cross base [BH5], the wider setting extending to include the surrounding parish of Townside, East Halton. The significance of the Church lies in its archaeological interest as a structure which contains 12th, 13th and 14th century fabric. The architectural interest lies in its architectural detailing. The historic interest lies in the church's role as the centre of religious and administrative life within the parish during the Medieval and post-Medieval periods.

5.48 Manor Farmhouse **[BH19]** (NHLE: 1346854) grade II* is located approximately 1.2 km from the VPI Site. The farmhouse is constructed on an L shape plan in brick with a pantile roof, dated to the 16th century with a 17th century extension and 19th century porch. Manor Farmhouse is located on an island within a moated site [**A43**] from which archaeological interest is derived and forms a group of assets alongside **[BH20]** stables/granary. The historic interest lies in the agricultural function of the farmhouse, evident in the setting of agricultural land.

5.49 Newsham Lodge **[BH26]** (NHLE: 1166070) grade II* is located approximately 4.7 km south-east of the Phillips 66 Site. The gate lodge dates to the 19th century and features an arched gateway and a two and three storey faceted tower in ashlar. Newham Lodge is located within Brocklesby Park **[RPG1],** the context of the parkland and the monuments and structures including Brocklesby Hall (NHLE 1359800) grade I which fall outside of the 5 km study area, form the context of the asset. The architectural interest of the lodge lies in the Gothic style and decorative features by J. Wyatville, as well as in the role of the lodge as a highly effective entranceway to the **[RPG1]**. The historic interest of Newsham Lodge is derived from association with the parkland influenced by the Grand Tour of Baron Yarborough.

5.50 Newsham Bridge **[BH27]** (NHLE: 1063419) grade I is located approximately 3.8 km south-west of the Phillips 66 Site. The bridge is located within Brocklesby Park **[RPG1]** over Newsham Lake and is attributed to Capability Brown, circa 1772. The bridge comprises of seven unequal ashlar arches in the Romanesque style, also referring stylistically to the 4th century to pay homage to the nearby monastic site. Statues depicting religious figures is also used to make associations with historic monasteries. The architectural interest of the bridge lies in the fine masonry detailing and sculpture and association with landscape architect Lancelot Capability Brown.

Designated Parks and Gardens

5.51 One designated Park and Garden is included within the 5 km study area comprising Brocklesby Park **[RPG1].**

5.52 Brocklesby Park (NHLE 1000971) grade I [**RPG1**] is located 3.5 km from the VPI Site boundary at its most northerly point. The park was first landscaped in 1603 when Sir William Pelham established a house at Brocklesby. Much of the grounds, follies and structures were laid out by Baron Yarborough on return from his Grand Tour in the 18th century. These schemes include the works of Capability Brown, Thomas White and Jeffrey Wyatville. New gardens were laid out by Reginald Bloomfield in 1898 and again in 1991. Brocklesby Hall remains the principal building of the park, others include a monumental mausoleum, stable ranges, gate lodges and an estate office. Gardens and pleasure grounds include sunken gardens, a formal lake, lawns, bowling greens and arable parkland. The architectural and historic interest of the park lies in the multiple phases of landscaping by influential architects and he volume of listed structures for which the park provides an effective setting.

Designated Archaeological Assets

5.53 There are no designated archaeological assets (Scheduled Ancient Monuments) within the Sites. There are six, **[A41 – A46]**, within the 5 km the study area (the extreme south-west corner of one of these, **[A44]**, impinges upon the north east edge of the 1 km study area). All Scheduled Ancient monuments are considered, by definition to be of **national** significance.

5.54 Assets **[A41-A44]** (described above, sections 4.106 - 4.108) are all substantial earthworks which represent the remains of moated manor / farm sites associated with what was once an extensive row of Medieval villages running between East Halton and South Killingholme. Specifically, East Halton, **[A43]**, the possible lost Medieval settlement of Lopinheham – **[A41]** and **[A42]**, and North Killingholme, **[A44]**.

5.55 All of the assets sit in open fields, along the east edge of the north – south aligned “spine” of East Road, present on both the OS map of 1887 and the post enclosure map of 1776. This road, and so the sites along it, rises gently from the south (*c.* 12 m AoD at East Halton) to the north (*c.*18 m AoD at North Killngholme).

5.56 The immediate setting of these assets includes the fields / field systems which sit around them – many of which are unchanged from the Medieval / post Medieval period, and the ditches and hedges which form these field boundaries. It also includes the modern elements of the villages, hamlets and farmsteads in the area, which sit around and adjacent to all of the assets.

5.57 The wider landscape of the assets is more heavily industrialised including the Port of Killingholme and the Lindsey oil refinery to the east. The Philips 66 refinery to the south-east and a logistics site supporting the ports to the south-west. There may also be some

intervisibility between all of these assets and designated asset **[A46]** (the site of Thornton Abbey). This occupies a relatively lower point in the landscape (*c.*8 m AoD) and so is potentially overlooked by these assets.

5.58 The evident archaeological remains of these assets, placed within a setting which still has surviving Medieval / post Medieval elements (field layout/ boundaries), contribute toward **historic** and **archaeological** interest of all of these assets.

5.59 The site of the remains of Thornton Abbey (NHLE 1011198, **[A46]**) – discussed in section 4.110, sits 3.7 km to the north-west of the Phillips 66 Site. It is the site of an Augustinian monastery founded in 1139 and dissolved in 1539, a subsequent abbey college – demolished in 1610 and then a stately house which collapsed in the late 1600's. The site consists of both below ground archaeological remains and extant ruins, the best preserved of which are the abbey gatehouse. The abbey sat in grounds encompassing some 29 ha (these also forming part of the designation). The setting of this asset takes in the fields / field systems surround it – many of which are unchanged from the Medieval / post Medieval period, and the ditches and hedges which form the boundaries of these field, as well as a river – Halton East Beck – which bounds the asset to its east and pond which sits just to the east of the river almost opposite the abbey ruins.

5.60 The evident archaeological and extant remains of this assets, placed within a setting which still has surviving Medieval / post Medieval elements (field layout/ boundaries) contribute toward the **architectural, historic** and **archaeological** interest of this asset.

5.61 Asset **[A45]** (NHLE 1008686) lies just within the 5 km study area, to the south of the Sites. It is the site of the remains of the Medieval nunnery of Nun Cotham, a priory of Cistercian nuns founded in the mid-12th century and dissolved in 1539. The remains of the nunnery are overlain by those of a post-Dissolution house, garden, farm buildings and other later features. Also associated with the site are a pair of fishponds and a post-Medieval windmill mound. None of the structural remains are standing, surviving now only as low earthworks, many of which are only visible from the air.

5.62 The setting of this asset takes in the fields / field systems surround it – many of which are unchanged from the Medieval / post Medieval period, and the ditches and hedges which form the boundaries of these field, as well as a river – The New Beck – which bounds the asset to its east and large area of woodland (Roxton Wood) which sits just beyond this to the east.

5.63 The potential archaeological remains of this assets, placed within a setting which still has surviving Medieval / post Medieval elements (field layout/ boundaries), contribute toward the **historic** and **archaeological** interest of this asset.

Non-Designated Buildings

5.64 No non-designated built heritage assets have been located either on or within the Sites boundaries. A total of 16 non-designated buildings have been identified within the 1 km study area, comprising of two non-conformist chapels, a school, a monument and thirteen historic farms.

5.65 Killingholme Primary School **[BH36]** (MLS22326) is a school located approximately 750 m west of the Phillips 66 Site within a built-up suburban area. The church has two storeys on a 'C' shape plan with gables facing the street in red brick with a pitched slate roof. The gables have decorative timber bargeboards and ribbed arches above modern sash windows. The school has multiple phases of extension to the rear. The school has architectural interest in its decorative features.

5.66 A number of non-designated agricultural buildings and farmsteads **[BH37-BH49]** have been identified within the 1 km study area, some of which are still in use as working farms whilst others have been converted for private residential use. These agricultural structures have historic interest relating to the historic landscape character type 'Fields and Enclosed Land' and subtypes 'Ancient Enclosure' and 'Modern Fields'. The assets have the potential to yield information about historic agricultural practices.

5.67 A memorial stone [BH50] (MLS21706) is located approximately 930 m north-west of the Phillips 66 Site within the churchyard of the Church of St Denys. The memorial stone commemorated the men of the parish who died in service during the First and Second World Wars collectively, a roll of honour is located inside of the Church. The stone has communal interest as a memorial to local casualties of war.

5.68 The remaining assets are not considered to have potential to be impacted as they are sufficiently distant or shielded from the Sites by other development, and the Sites do not form a part of their setting nor contribute to the ability to appreciate significance.

Non-Designated Archaeological Assets

5.69 A number of non-designated archaeological assets sit within the 1 km study area of the Sites (see Archaeological Assets Gazetteer Annex A). This section will focus on those assets which sit *within* the red line boundary of the Sites or which sit outside of the boundary, but which have the potential to be significantly impacted by the Proposed Developments.

5.70 Assets **[A7]** and **[A24]** represent finds spots of prehistoric flint and Roman pottery found within the VPI Site and Phillips 66 Site respectively. As find spots rather than archaeological sites they only have **local archaeological** interest.

5.71 Asset **[A20]** is a significant Iron age to Roman period settlement site located within the VPI Site and located just beyond (to the west of) the ancient foreshore – placed so as to take advantage of the estuarine / marsh environment to the east and the drier more arable land to the west. This is one of very few substantial, known, sites at this type of location, which spans these periods and that is still in substantive use throughout much of the Roman period. As such it can be considered to have **regional archaeological** interest.

5.72 Asset **[A25]** is located within the Phillips 66 Site. It is an enclosure seen as a crop mark in aerial photographs taken before the development of the refinery. It is one of a number of such crop mark enclosures seen in the area (likely of Iron Age / Roman date) and is unlikely to have survived the development of the site. Accordingly, is can only be seen as having **local archaeological** interest.

5.73 Asset **[A53]** represents earthworks visible via a number of survey techniques which appear to represent relic ridge and furrow activity. This activity covers much of the 5 km study area, and beyond, and is also mapped as present within both Sites. The nature of ridge and furrow activity is well understood, and its extent in this region has been well mapped by a variety of studies and surveys. These demonstrate how land use changed over time e.g. from pastoral marshland to cultivated arable fields. As a result, these assets can be considered to have **local archaeological** and **historic** interest.

5.74 Asset **[A72]** is a crop mark present in the VPI Site that appears to demonstrate the presence of a Medieval / post Medieval field boundary within the site, which forms part of a wider setting of such assets. Such boundaries are common in the region and have been extensively examined by both survey and intrusive works. Such work has also mapped how these assets relate to each other and the wider Medieval / post Medieval landscape, in order to understand how field organisation changed over time. As such these assets can be consider as having **local archaeological** and **historic** interest.

5.75 Assets **[A70]** and **[A71]** include a stretch of extant hedgerow categorised as historically important. It acts as the current eastern boundary of the VPI Site (and so is deemed as sat within it). Comparative mapping of the asset as well as archaeological excavation demonstrates that it sits on top of a ditch that is present as a field boundary on the 1776 and pre 1840 maps. The significance of these boundaries has been noted above however, the designation of this asset as historically important means that the hedge must be seen as **nationally** significant, and to be of **archaeological** and **historical** interest. The underlying ditch boundary is of **local archaeological** and **historic** interest.

5.76 Asset **[A122]** is somewhat unique as it represents where the ancient foreshore is hypothesised to be based on excavation, borehole survey, and mapping studies. The work appears to indicate that the foreshore extends into the VPI Site and that an east to west aligned paleochannel, running into a tidal inlet on the foreshore, extended into the VPI Site and

possibly as far west as the Phillips 66 Site. This is significant as it aids in understanding where archaeological assets of certain dates may or may not survive / be located. However, the work only covers a small stretch of the Killingholme to Immingham shoreline. Accordingly, it can be considered to have **local archaeological** interest.

5.77 Assets **[A11], [A12], [A13], [A16]** and **[A26]** appear to represent the remains of a major focus of Bronze Age to Iron age and potentially Roman activity located within the foreshore to the south-east of the VPI Site (ranging from 0 m - 260 m away). The Bronze Age activity appears to be non-domestic in nature (associated with the exploitation of the estuarine environment) whilst the later activity is a mix of both industrial (salt making), exploitation of estuarine resources and domestic. There is the potential that these assets may extend into the VPI Site – possibly being associated with settlement site **[A20]** - and so may be affected by the Proposed VPI Development, hence their inclusion here. Few Bronze Age, Iron age or Roman foreshore sites have been thoroughly investigated in the region, and the number of those sites which are so long lived and non-domestic in nature is even smaller. For this reason, these assets are considered to have **regional archaeological** interest.

5.78 Asset **[A40]** is a moated site which appears to be associated with Medieval South Killingholme, elements of which are also recorded as earthwork assets **[A62]** and [**A63].** Whilst largely of Medieval date, archaeological investigation at **[A40],** which consisted of fieldwalking over the site in 2011 and trial trench investigation in 2012, produced quantities of sherds of a late Saxon date, suggesting an earlier origin for the village. The setting of each of these assets includes views to the visible remains of the other assets in the group (earthworks), the modern village of South Killingholme (to the immediate south of **[A40]** and **[A63]** and the immediate north of **[A62]**) and the landscape of open fields and associated ditch and hedge boundaries which surround them - many of which date to the Medieval / post Medieval period. To the east this includes the open land at the extreme west edge of the Phillips 66 Site – which sits 177 m to the east of **[A40]** and **[A63]** and 190 m to the east of **[A62]**. This area of the Phillips 66 Site has the potential to be altered by the Proposed Phillips 66 Development. It is also possible that archaeological remains associated with these assets (field systems etc) may extend into this area of the Phillips 66 Site and for these reasons the assets are included here. Taken as whole, assets **[A40], [A62]** and **[A63]** can be considered to have **local archaeological** interest.

Potential Archaeological Remains

5.79 The significance of potential archaeological assets is based on the analysis and key issues presented in the Yorkshire Archaeological Research Framework: Research Agenda (Roskam and Whyman 2007) and the East Midlands Historic Environment Research Framework (now an online resource).

5.80 Also considered were Historic England guidelines and thematic research strategies.

5.81 The assessment identified the following potential for the discovery of archaeological remains within the Sites:

Table 12A.3 Archaeological potential by period.

Period	Potential – VPI Site	Potential – Phillips 66 Site
Palaeolithic	Moderate	Low
Mesolithic	Moderate	Low
Neolithic	Moderate	Low
Bronze Age	Moderate	Low
Iron Age	High	Low
Romano-British	High	Low
Early Medieval	Low	Low
Medieval	High	Low
Post Medieval	High	Moderate

Modern	Negligible	Negligible

5.82 Evidence for the lithic Prehistoric periods is likely to take the form of finds of flint tools and possibly pottery for the Neolithic period. Such would be considered of **local** and **regional archaeological** interest based on their capacity to inform on the nature of and variations local cultural assemblages as well as the economy and subsistence / agricultural practices.

5.83 Bronze age evidence may be more substantial, possibly including negative archaeological features associated with structures and the division, drainage and exploitation of the land (such as the fish trap seen near New Holland). Additionally, deposits of waste and processing material (as seen at **[A11], [A12]** and **[A13]**) may be encountered. Such remains may represent areas of estuarine exploitation as well as industrial and settlement activity. The remains likely to be encountered would be considered of **local** and **regional archaeological** interest based on their capacity to inform on the nature of and variations local cultural assemblages as well as the economy, industry, and subsistence / agricultural practices of the period.

5.84 Iron Age and Roman activity are likely to present in much the same way as Bronze activity but with the potential for there to be more of these features and for them to be somewhat better preserved. Activities associate with exploitation of the estuarine environment are likely to be present, as are those related the agricultural use of the land, industry (in particular salt making) and settlement. Routeways may also be seen (particularly associated with the Roman period). The remains likely to be encountered would be considered of **local** and **regional archaeological** and **historical** interest based on their capacity to inform on the nature of and variations local cultural assemblages as well as the economy, industry, trade, agricultural practices and local communication networks.

5.85 Evidence of Medieval activity is likely to take the form of agricultural activity (remnant ridge and furrow, field boundary ditches, post holes from fence lines, drainage ditches etc), and rubbish disposal (pits). It is possible that structural evidence may be present, again most likely associated with agriculture (storage / livestock barns, pens etc) and probably related to the moated sites within the vicinity of the Proposed Developments. The remains likely to be encountered would be considered of **local** and **regional archaeological** and **historical** interest based on their capacity to inform on Medieval society, economy, agricultural practices and the changes in the Medieval landscape from Medieval to modern times (shrinkage of Medieval settlements, for instance).

5.86 Evidence of Post Medieval activity is likely to include all of the elements detailed for Medieval activity. Such remains would be considered of **local** and **regional archaeological** and **historical** interest based on their capacity to inform on Post Medieval society, economy, agricultural practices and changes in the Medieval / post Medieval landscape.

5.87 The significance of any remains that are compromised by poor preservation or truncation is assessed as very low. The significance of any previously unknown remains that may survive within the Sites would derive from their evidential value and their potential to contribute to our understanding of past human activity guided by local, regional, and national research priorities.

Historic Landscape

5.88 As Figure 3 shows, the majority of the Phillips 66 Site and the northern half of the VPI Site lies within the NLHLC subtype ‘Chemical Works ‘(modern). The southern half of the VPI Site and the extreme western section of the Phillips 66 Site lie within the subtype ‘modern fields’ (modern). To the east of the VPI Site the land is noted as ‘Parliamentry Planned Enclosure’ (post Medieval to modern). To the south of both the land is ‘Chemical works’ (modern). To the west of the Phillips 66 Site the land is characterised primarily as ‘Fields and Enclosed Land’ (modern) although areas of ‘Warehouse and Distribution’ (Modern) are also seen. To the north of both Sites is the Lindsey oil refinery (‘Chemical works, modern’).

5.89 In addition, the Lincolnshire Historic Landscape Characterisation Project defines the area of the Proposed Developments, as well as the areas to the east, south and immediate north of as **NOM2: The Northern Marshes (Immingham Costal Marshes).** This is defined as a zone dominated by industrial activity and which, prior to enclosure in the 18th century, was mainly

comprised of saltmarsh grazing land. The zone is largely modern in character although historic elements can still be identified in the landscape.

5.90 The importance and significance of historic landscape character is assessed in terms of sensitivity to change. Those with a high sensitivity to change should be accommodated and preserved where possible within new developments or should be subject to well managed changes. Historic landscapes with a lower sensitivity to change can be potentially enhanced by new developments and can absorb most types and scales of essential, well-managed change.

5.91 There are no historic landscapes within either of the Sites with a very high or high sensitivity to change. Modern industrial areas such as chemical works and modern fields are both common within the region and at most considered to be of local interest. Therefore, they are considered to be of **negligible** sensitivity to change.

6. Impact Assessment

6.1 The Proposed Developments consist of the Proposed Phillips 66 Development and the Proposed VPI Development as described in ES Chapter 3.

6.2 Intrusive activities associated with the Proposed Developments have the potential to impact on both known and previously unrecorded archaeological remains, if and where present, through their truncation or complete removal. Such activities are expected to include the foundation and footing excavations, the excavations of trenches for underground services and the possible excavation associated with the planting of mature trees.

6.3 Furthermore, there is the possibility that the Proposed Developments may have a visual impact on designated and non-designated assets in the vicinity of the Sites, resulting in a change to their setting.

6.4 These impacts are discussed individually below.

6.5 During a site visit on 15th June 2022, photographs were taken of a number of viewpoints (see Annex C):

- Figure 12A.5: General image looking east taken from the gates (VPI Site);
- Figure 12A.6: North-east boundary looking out towards the port (VPI Site);
- Figure 12A.7: General image of site conditions (VPI Site);
- Figure 12A.8: Photo taken looking south into fenced off area of site (VPI Site);
- Figure 12A.9: Photo taken looking south-west within the VPI Site with VPI Immingham CHP Plant (to west) and Philips 66 Humber Refinery in background;
- Figure 12A.10: Spoil heap within VPI Site;
- Figure 12A.11: Existing pipe bridge over the railway on south-west boundary of VPI Site;
- Figure 12A.12: Existing stack at VPI Site taken looking north-west;
- Figure 12A.13: Existing VPI Immingham CHP Plant cooling towers looking north- west (VPI Site);
- Figure 12A.14: Looking north from south of VPI Site;
- Figure 12A.15: Spoil heaps(VPI Site);
- Figure 12A.16: Drain in north-west corner (VPI Site);
- Figure 12A.17: Immingham War Memorial (BH30) urban setting with no views of the Sites;
- Figure 12A.18: Church of St Andrew (BH6) and cross base (bh5) (Sites not visible);
- Figure 12A.19: Belmont Cottage (BH29) (Sites not visible);
- Figure 12A.20: The Iron Bungalow (BH31) (Sites not visible) ;
- Figure 12A.21: The Nook (BH21);
- Figure 12A.22: View of Phillips 66 Site east from Town St, South Killingholme around the corner from BH21;
- Figure 12A.23: St Denys Church (BH7) North Killingholme;
- Figure 12A.24: St Denys (BH7) Churchyard looking east to Lindsey refinery;
- Figure 12A.25: White Cottage (B15) (Sites not visible – too distant).

6.6 The above viewpoints demonstrate that the northern half of the VPI Site and almost all of the Phillips 66 Site are heavily industrialised. They also show that whilst the southern part of the VPI Site (and overlapping part of the Phillips 66 Site) is, apparently, undeveloped is not truly open grassland but more akin to overgrown “wasteland” in nature.

6.7 A number of Built Heritage assets were visited and it was considered that the Proposed Developments would not be significantly visible from them, and where elements would be visible they would blend into the already existing industrial skyline of chimneys and stacks.

Conservation Area

6.8 There are no conservation areas within either study area.

Designated Built Heritage Assets

6.9 In assessing the setting and significance in **Section 5** of this report, it was determined that the Sites are not considered to form part of the immediate setting of any listed building. However, the significance of these assets means that they are potentially highly sensitive to change within their wider settings and should therefore be carefully considered.

6.10 The assets associated with Thornton Abbey, including Thornton Abbey gatehouse and wing walls, precinct walls and barbican **[BH1]** the remains of Thornton Abbey **[BH4]** and Abbot's lodge **[BH9]** are located approximately 3.8 km north-west of the Sites. The Sites are not visible, obscured by existing development, dense foliage, and mature trees. Where occasional glimpses of the Proposed Developments may be visible, they are not considered to diminish the setting of the assets as the immediate landscape surrounding the Sites is already considered industrial in character.

6.11 The Sites are not visible from the Church of St Peter **[BH10],** the Church of St Denys **[BH7],** the Baptist Chapel **[BH22]** and the Old Vicarage **[BH33]** located >1 km east, as any potential viewpoints are obscured by the existing Lindsey oil refinery. While some views may be possible from Manor Farmhouse **[BH20]** unobscured by existing industrial development, they are not considered to diminish the setting of the asset but rather blend into the exiting industrial landscape.

6.12 The assets associated with Brocklesby Estate and Park: Brocklesby Park **[RPG1],** Newsham Lodge **[B26]** and Newsham Bridge **[B27]** are not considered to have any inversibility with either of the Sites which are located at a distance of around 3.6 km north-east of the grouping of assets. The assets are considered to be sufficiently distant from both Sites and potential views are obscured by development and wooded areas such as Rough Pasture Wood and Roxton Wood.

6.13 There is potential for the Proposed Developments to be visible from the Church of St Andrew **[BH6],** located approximately from 1.7 km from the Sites, with views possible across the golf course and small wooded areas. However, these views are not considered likely to diminish the setting of the asset but rather blend into the existing industrial landscape created by the existing refinery structures. Furthermore, the presence of the Proposed Developments in some mid and long distance views will not impact the ability to interpret the churchyard and surrounding parish as the Church's setting.

6.14 The remaining assets are not considered to have potential to be impacted as they are sufficiently distant or shielded from the Sites by other development, and the Sites do not form a part of their setting nor contribute to the ability to appreciate significance.

Designated Parks and Gardens

6.15 Only one designated Park and Garden has been identified within the 5 km study area comprising Brocklesby Park [RPG1]. In **Section 5** of this report, it was determined that the setting of Brockelsby Park is limited to the Brocklesby Estate and the villages of Brocklesby and Limber, and does not extend to include the Sites, located approximately 3.5 km from the VPI Site boundary at its most northerly point. There is no intervisibility between the designated Park and Garden landscape and the Sites, separated by sufficient distance and shielded by existing development and woodland. Therefore, the Proposed Developments are not considered likely to impact the asset either visually or in the ability to interpret its significance.

Designated Archaeological Assets

6.16 None of the six designated assets within the study area sit within the bounds of the Sites and so none will be subject to any physical impact. The below therefore only discusses the impact on setting caused by visual intrusion of the development of the Sites. The Proposed Developments do not form the immediate setting of any of the Archaeological Assets. Archaeological assets and events are shown on Figures 12A.1-4 in Annex A.

6.17 Assets **[A41-A44]** (described above, paragraphs 4.106 - 4.108) are all substantial earthworks which represent the remains of moated manor / farm sites associated with what was once an extensive row of Medieval villages running between East Halton and South Killingholme. Specifically, East Halton, **[A43]**, the possible lost Medieval settlement of Lopinheham – **[A41]** and **[A42]**, and North Killingholme, **[A44]**.

6.18 All of the assets sit in open fields, along the east edge of the north – south aligned "spine" of East Road, present on both the OS map of 1887 and the post enclosure map of 1776. This road, and so the sites along it, rises gently from the south (*c.* 12 m AoD at East Halton) to the north (*c.*18 m AoD at North Killngholme).

6.19 The immediate setting of these assets includes the fields / field systems which sit around them – many of which are unchanged from the Medieval / post Medieval period, and the ditches and hedges which form these field boundaries. It also includes the modern elements of the villages, hamlets and farmsteads in the area, which sit around and adjacent to all of the assets. This generally open aspects means that good views across the wider landscape are afforded from all of these assets.

6.20 Asset **[A43]** (NHLE 1007816), is the most distant of these from the Proposed Developments sitting 3.6 km to the north-west of the Phillips 66 Site. It sits at a height of *c.* 12 m AOD and so is at a similar height to the Phillips 66 site (*c.*12 m AOD) and somewhat higher than the VPI Site (*c* 5 m AOD). However, the land between the asset and the Sites undulates, with high points of around 15 m (Chase hill – just north of the Lindsey Oil Refinery) and 18 m (areas within the Lindsey Oil refinery). The distance between the assets and the Sites, combined with the undulations in the landscape which block line of site and intervening features such as modern buildings, hedgerows and the Lindsey Oil Refinery mean that is unlikely that either of the Proposed Developments will be visible from this asset, and any taller structural elements which may be visible will simply blend into the already industrial viewpoint toward the Lindsey Refinery. Therefore, the Proposed Developments will not diminish the setting of this designated asset.

6.21 Asset **[A41]** (NHLE 1007813), lies 2. km to the north-west of the Phillips 66 Site at 13 m AOD. Whilst the ground between this asset and the Sites again undulates, the position of the asset - relative to the Sites - means that both Chase Hill and the Lindsey refinery hill do no obscure views between the asset and the Sites as much as they do between **[A43]** and the Sites. The Sites are at least partially obscured by distance from the asset, intervening hedgerows and the existing industrial buildings of the Lindsey oil refinery and Phillips 66 refinery - which together create a dominant industrial landscape already visible from this asset. It is possible that the taller elements (towers etc) of the Proposed Phillips 66 Development will be visible from the asset, however these will sit within a viewpoint already dominated by similar structures that are part of the existing refineries and so will simply blend into this view. The VPI Site sits further behind the Lindsey oil refinery and so is even more obscured by it, it also occupies a slightly lower position in the landscape. As a result, it is unlikely that the VPI Site will be visible from this asset, in any case any elements which are visible will simply blend into the industrial back drop of the Lindsey Oil Refinery. Therefore, whilst the Proposed Developments may have a presence in the views from the asset it will not diminish the setting of the designated asset.

6.22 Asset **[A42]** (NHLE 1007815), lies 1.5 km to the north-west of the Phillips 66 Site at a height of *c.* 15m, and so is situated overlooking both Sites, neither Chase hill nor the Lindsey refinery hill sit along the eyeline between the asset and Sites. Both these factors mean that the Sites are potentially more visible from this asset. However, intervening trees and hedges, and the distance to the site do obscure the view to the Sites somewhat. In terms of the Phillips 66 Site, as with **[A41]**, the view from asset **[A42]** to the Phillips 66 Site is already dominated by the industrial landscape created by the Lindsey and Phillips 66 refineries. Smaller elements of the

Proposed Phillips 66 Development (such as car parks etc) would probably not be visible at all and any visible (taller) elements of the Proposed Phillips 66 Development will likely blend into this view, rather than stand out as new elements. The view to the VPI Site is more obscured - by both the Lindsey oil refinery and the Phillips 66 Humber Refinery. As a result, it is unlikely that the Proposed VPI Development will be visible from this asset, in any case any elements which are visible will simply blend into the industrial back drop of the two refineries. Therefore, whilst the Proposed Developments may have a presence in the views from the asset they will not diminish the setting of the designated asset.

6.23 Asset **[A44]** (NHLE 1008044), sits *c.*1 km north-west of the Phillips 66 Site at a height of *c.*18 m AOD. Its views points to the Sites are very similar to those of **A41.** It is a little closer, but the village of North Killingholme, 200 m to the south, also serves to block some viewpoints to the Sites. Generally, the factors which affect the view from **[A41]** are also true for this site and so again whilst the Proposed Developments may have a presence in the views from the asset they will not diminish the setting of the designated asset.

6.24 Asset **[A46]** (NHLE 1011198), Thornton Abbey, sits 3.7 km to the north-west of the Phillips 66 Site at a height of *c.*8 m AOD. Whilst the landscape between this asset and the Sites again consists of open fields, the ground undulates and there are a number of hills along the eyeline between them including one which reaches a height of 15 m and another just to the north of North Killingholme which reaches a height of 18m. Multiple tree and hedge lines also serve to obscure the view between the asset and the Sites, as do the existing industrial structures of both the Lindsey and Phillips 66 refineries. It is unlikely that either of the Sites will be particularly visible from this asset, although it is possible that taller elements (towers etc) may be visible in the distance. However, these will simply blend into the already industrialised aspect of this part of the landscape. As a result, whilst the Proposed Developments may have a very minor presence in the views from the asset they will not diminish the setting of the designated asset.

6.25 Asset **[A45]** (NHLE 1008686), Nun Cotham, lies just within the 5 km study area, to the south of the Sites at a height of 17 m AOD. The view from this asset to the Sites will be completely obscured by distance, but more importantly by the large, dense, woodland of Roxton Wood, which sits on the eyeline between the asset and the site, at a height of 24 m AOD. Therefore, the Proposed Developments will have no impact upon the setting of this designated asset.

Non-Designated Buildings

6.26 In assessing the significance and setting in Section 5 of this report, it was determined that the Proposed Developments do not have the potential to impact the interest of non-designated built heritage as the assets' setting do not extend to include the Sites. In the case of most of the non-designated assets where special interest is derived from associations with agriculture **[BH37-49]** setting is limited to the surrounding fields and enclosed land. Where views of the Proposed Developments are possible from the setting of non-designated assets, they are not considered to diminish the special interest but rather blend into the existing industrial landscape created by the current refinery works.

Non-Designated Archaeological Assets

6.27 The 1 km study area contains 135 non-designated assets. The vast majority of these will not be subject to any physical impact by the Proposed Developments. Most will have some view to the Proposed Developments due to the generally open nature of the landscape. Whilst modern structures (houses, farms etc), hedgerows, trees and undulations in the ground level will obscure some sites, from some elements of the work most will still be able to see some aspect of the Proposed Developments. However, as previously discussed the Sites of the Proposed Developments sit within an already heavily industrialised area. As a result, the visible elements of the Proposed Developments will likely blend into this already industrialised back drop and not alter the skyline or views to this area from the majority of these assets in in any significant way, and so will not diminish their settings.

6.28 The rest of this section focuses on the small number of non-designated assets which many be subject to more of an impact from the Proposed Developments due to their presence within the

Sites' boundaries, their proximity to it, or they being a particularly sensitive receptor. These are largely the same as those assets discussed in paragraphs 5.69 - 5.78, but excludes find spot assets **[A7]** and **[A24]**, as such assets are incapable of being impacted by the Proposed Developments.

6.29 The following table details the archaeological assets which are present *within* the Sites.

Table 12A.4 Archaeological Assets within the Sites.

Asset	Description	Within Site
A20	A significant Iron age to Roman period settlement site located t beyond (to the west of) the ancient foreshore	VPI Site
A25	Enclosure seen as a crop mark in Aerial Photographs of 1958	Phillips 66 Site
A26	Iron Age – Roman ditched enclosure	VPI Site
A53	Ridge and Furrow activity as mapped by various surveys and studies	Both Sites
A70/71	Historically important Hedgerow	VPI Site
A72	Medieval / Post Medieval field boundary ditch noted as a crop mark	VPI Site
A122	Theoretical line of foreshore and associated palaeosols	VPI Site confirmed, hypothetical channel in Phillips 66 Site.

6.30 Within the undisturbed (central – southern) part of the VPI Site is likely that physical archaeological remains (features, finds and deposits) still exist. The Proposed VPI Development's intrusive activities are expected to include the excavations of foundations and footings, the excavations of trenches for underground services and intrusive ground works associated with landscaping. These activities are likely to truncate or remove surviving archaeological remains and so will have significant, severe impact upon them.

6.31 The ground beneath the Phillips 66 Site has likely, for the main part of it, been heavily disturbed by the construction of the extant Refinery. As a result, is unlikely that assets **[A25]** or **[A122]** survives and are therefore incapable of being impacted by the works. It is possible that elements of asset **[A53]** survive in the apparently undisturbed western section of the Phillips 66 Site. If so, there is the potential that it may be subject to significant, severe impacts in the same way, and for the same reasons, as those assets below the VPI Site.

6.32 Assets **[A70]** and **[A71]** include a stretch of extant hedgerow categorised as historically important. It acts as the current eastern boundary of the VPI Site (and so is deemed as sat within it). Comparative mapping of the asset as well as archaeological excavation demonstrates that it sits on top of a ditch that is seen as a field boundary on the 1776 map. The hedgerow itself is protected and so will be subject to strict control measures to limit / mitigate impacts upon it. However, the ditch below it is an archaeological asset which may be impacted by ground intrusive works within the VPI Site. It is not clear at this time how close to the east edge of the VPI Site development will come, but should intrusive ground works affect this area they there is the potential for them to truncate or remove this asset and so have a significant, severe impact upon it.

6.33 Assets **[A11], [A12], [A13], [A16]** and **[A26]** appear to represent the remains of a major focus of Bronze Age to Iron age and potentially Roman activity located within the foreshore to the south-east of the VPI Site (ranging from 0 m - 260 m away). The current setting of these assets is an area of scrubland located adjacent to the Humber Road to the south, with the modern coal works and docks to the east, fields to the north and Immingham West fire station to the immediate west, with the Humber refinery beyond that. The setting, as noted is fairly heavily

industrialised already. However, as these assets are not visible in the modern landscape their associated with it is largely irrelevant. It is the potential impact of the Proposed Developments upon the physical, below ground, remains of the assets which is of more importance. Archaeological work to date indicates that is highly likely that the activity site represented by these remains, and that represented by the remains of asset **[A20]** are contemporary and, spatially linked. As a whole, the assets may be representative of one large, multi-period site or a wider area of activity, with various linked points of nucleation within it. If this is the case there is the potential for archaeological remains (features, finds, deposits etc) associated with these assets to be present within the far eastern and southern parts of the VPI Site. In which case intrusive ground works that affect this area have the potential to truncate or remove elements of these assets, and in so doing have a significant, severe impact upon them.

6.34 Assets **[A40], [A62]** and **[A63] -** a moated site and earthworks associated with Medieval South Killingholme - sit less than 200 m to the west of the Phillips 66 Site at a height of 17 - 18 m AOD. The setting of these assets include views to the visible remains of the other assets in the group (earthworks), the modern village of South Killingholme (to the immediate south of **[A40]** and **[A63]** and the immediate north of **[A62]**) and the landscape of open fields and associated ditch and hedge boundaries which surround these assets - many of which date to the Medieval / post Medieval period. To the east this includes the open land at the extreme west edge of the Phillips 66 Site which sits at height of 10 m AOD. The view from the assets to the western edge of the Phillips 66 Site is largely unobstructed – sections of South Killingholme and a single hedgerow interrupt the view but do little to obscure the Phillips 66 Site, therefore development at this part of the Phillips 66 Site would be very visible from the assets and so impact their settings. However, as with other assets in this area, the view towards the Phillips 66 Site is already dominated by heavy industrial activity and the development of this section of the Phillips 66 Site will likely merge into this backdrop. Therefore the Proposed Phillips 66 Development can be seen has having a minor impact upon the settings of these assets. The VPI Site will not be visible to these assets, as it will be obscured by a combination of the existing Linsey and Phillips 66 refineries, and so will not diminish the settings of these assets.

6.35 There is a possibility that physical, below ground, archaeological remains associated with these assets may extend into the western edge of the Phillips 66 Site. This may include such things as the remains of farm outbuildings, storage pits, waste pits, animal enclosures and field boundaries associated with Medieval South Killingholme. The Proposed Phillips 66 Development's intrusive activities are expected to include the excavations of foundations and footings, the excavations of trenches for underground services and intrusive ground works associated with landscaping. These activities are likely to truncate or remove surviving archaeological remains which may be present, and so will have significant, severe impact upon them.

Potential Archaeological Remains

6.36 Within the bounds of the VPI Site, this assessment has identified a moderate potential for pre-Iron Age prehistoric deposits, and a high potential for Iron Age, Roman, Medieval and Post Medieval remains. It has concluded a low potential for remains dating to the early Medieval period and a negligible potential for modern remains. The early prehistoric remains are considered likely to be of local, archaeological interest. The Iron Age and Roman Remains of local to regional archaeological interest and the Medieval and Post Medieval remains are deemed likely to be of local archaeological and historical interest.

6.37 Within the bounds of the Phillips 66 Site, this assessment has identified a moderate potential for Medieval and Post Medieval deposits. It has concluded a low potential for all other periods of use, with the exception of the modern period which has negligible potential. The Medieval and Post Medieval remains are deemed to likely be of local archaeological and historical interest.

6.38 The Proposed Developments' intrusive activities (across both Sites) are expected to include the excavations of foundations and footings, the excavations of trenches for underground services and intrusive ground works associated with landscaping. These activities are likely to truncate or remove surviving archaeological remains.

Historic Landscape

6.39 Given the negligible sensitivity of the historic landscapes identified within and surrounding the Sites, this assessment concludes that the Proposed Developments would not result in any significant impact to any significant historic landscapes. The Proposed Developments have been identified as likely to alter the NLHLC character of the southern area of the VPI Site and the western extreme of the Phillips 66 Site from 'modern fields' (modern) to 'Chemical works' (modern) as is currently the case across the rest of both of the sites. However, this will result in minor overall change.

6.40 The Lincolnshire Historic Landscape Characterisation Project designation of the Sites as **NOM2: The Northern Marshes (Immingham Costal Marshes)** will remain unchanged by the Proposed Developments.

7. Conclusions and Recommendations

7.1 This DBA has been prepared following Historic England guidance on the assessment of the setting and significance of heritage assets set out in GPA 2, GPA 3 and Advice Note 12. The assessment of the potential impact to heritage assets follows the advice in the PPG which expands on policy outlined in the NPPF and in Principles of Cultural Heritage Impact Assessment in the UK. In line with these documents, as well as the regional and local planning policies, the DBA describes the heritage assets which could potentially be impacted by the Proposed Developments, the extent to which their setting contributes to that significance, where relevant, and assesses the impact the Proposed Developments will have on those assets.

Archaeological Assets

7.2 No designated assets are present within the Sites, and no such assets within the study area will be impacted as a result of changes to its setting.

7.3 There are a number of non-designated assets known to be within the bounds of the Sites – **[A20], [A25], [A26], [A53], [A70/A71], [A72]** and **[A122]**. These include such things as regionally important Iron Age / Roman occupation sites (**[A20]** and **[A26])**), the remains of ridge and furrow activity and the edge of the ancient foreshore. These remains have the potential to be subjected to a significant level of harm by the intrusive works associated with the Proposed Developments. This impact can be at least partially mitigated via a programme of archaeological works undertaken in advance of the main works – as outlined below.

7.4 Other non-designated assets outside of the Sites may also be impacted by the works. Assets **[A11], [A12], [A13]** and **[A16]** represent a major focus of Bronze Age to Roman activity located near to the VPI Site and likely associated with **[A20]**. It is possible that below ground archaeological remains associated with these assets may extend into the southern part of the VPI site, in which case they would also be subjected to a significant level of harm by intrusive works, with mitigation activity being required to reduce this.

7.5 Asset **[A40]**, **[A62]** and **[A63]** which represent earthworks associated with Medieval South Killingholme, near to the Phillips 66 Site, will see a minor change to their settings, which will result in a slight level of harm to the ability to appreciate the assets special interest. This impact could be partially mitigated by potential landscaping and planting to screen the Proposed Phillips 66 Development from the assets.

Built Heritage

7.6 No designated or non-designated built heritage assets have been identified within the Sites, therefore there will be no direct impact upon the physical fabric of any built heritage asset.

7.7 Although there is potential for intervisibility between the Sites and a limited number of built heritage assets, the Proposed Developments will likely blend into the existing industrial developments and therefore not alter these views. The presence of the Proposed Developments within the landscape is not thought to impact the setting of any assets therefor will not result in a measurable level of change to the ability to appreciate the significance of any of the heritage assets identified.

Archaeological Potential and Recommendation

VPI Site

7.8 The VPI Site retains the potential for surviving early prehistoric, Iron Age, Roman, Medieval, and Post-Medieval remains of, at most, regional archaeological and historical interest. This assessment has concluded that the Proposed VPI Development would impact on these remains through their truncation or removal. As such, and in line with the NPPF and the North Lincolnshire Local Development Framework, a programme of geophysical evaluation was undertaken in October 2022 which demonstrated a strong potential for the presence of archaeological remains within the VPI Site. On the basis of these results, a programme of archaeological trial trench evaluation was devised in order to further evaluate the archaeological potential of the VPI Site. This will involve the excavation of 32 trenches across the VPI Site, which are placed so as to test areas of archaeological presence and apparent blank areas (as demonstrated by the geophysical survey) and to answer questions raised by previous archaeological evaluations and investigations which have been undertaken in and around the Sites. In addition, a programme of geoarchaeological investigation will take place in tandem with this evaluation – which is designed to examine the paleoenvironment of the VPI Site. This work is programmed to take place in January 2023 and the results of this will be used in determining the need for, and design of, any further archaeological investigation.

7.9 . The nature, extent and scope of the planned evaluation works has been agreed with the NLC Heritage officer. The nature, extent and scope of any further works will also be determined in liaison with the NLC Heritage officer and will be based upon the information gathered by the preceding works.

Phillips 66 Site

7.10 The disturbed nature of the Phillips 66 Site means that it is unlikely that significant archaeological remains survive beneath the Phillips 66 Site. However the full nature and extent of this disturbance, and its true impact upon the underlying archaeological resource, is unknown. This needs to be established to understand if there is the potential for any archaeological remains to survive, and if there is these remains need to be located and understood before they are impacted by the Proposed Phillips 66 Development. Therefore, and in line with the NPPF and the North Lincolnshire Local Development Framework, a phased programme of archaeological evaluation will take place to inform the planning determination as well as the scope and extent of the archaeological mitigation strategy – which will be agreed before determination of the planning application.

7.11 This evaluation should be particularly focus on:

- Determining the extent of previous ground disturbance within the Phillips 66 Site and what these means for the survival of the archaeological horizon(s) in this area, and establishing a deposit model for the area;
- Determining if elements of the ancient foreshore, in particularly the paleochannel noted at the VPI Site extend as far west as the Phillips Site;
- Determining if archaeological remains associated with asset **[A40], [A62]** and **[A63]** extend into this area, and if so establishing their extent and character; and
- Characterising and recording relic ridge and furrow across the Phillips 66 Site.

7.12 Further archaeological works may be required to record significant remains identified by the evaluation, in order to mitigate impacts to the archaeological resource. The nature, extent and scope of these works will be determined in liaison with the NLC Heritage officer and will be based upon the information gathered by the preceding works.

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Annex A: Gazetteers

Archaeological Assets Gazetteer

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
A1	MLS20142	Unknown	FORMER SHORELINE, NORTH LINCOLNSHIRE	LND	The historical position of the tidal high water mark, reflecting Holocene sea level change, and prior to large scale drainage. Recorded as being within parish of North Killingholme, but precise location it not recorded / known.	Lower Palaeolithic to Post Medieval
A2	MLS22851	517803 417638	LATE MESOLITHIC PEAT DEPOST, MARSH LANE	LND	A borehole survey along Marsh Lane was carried out by Archaeological Services Durham University in 2013. This was in advance of a proposed new bridge over the railway line. There were 7 boreholes in the transect; a thin layer of prehistoric peat was recorded within the deepest borehole MLI13-2, centred to TA17801763. The core from this borehole was 7.22m long, equivalent to a depth of -4.47m OD. This represented the full sequence of post-glacial estuarine deposits. At the base of the core was a coarse clayey sand, thought to be glacial meltwater sands. Above this was a layer of sandy peat at -4.14 to -4.21m OD. The peat was overlain by a thick deposit of dark grey alluvial clays of marine origin, with occasional organic material such as root fragments and reed stems. Brown mottled clays, imported chalk rubble and topsoil were at the top of the sequence. This sequence of deposits was consistent with others recorded in the Humber estuary. The accumulation of peat was the result of post-glacial rising sea levels, when the water table near to coast was high and dryland vegetation could not grow. This was followed by marine flooding that deposited clays, with occasional periods where colonisation by plants became possible. The report concluded that further analysis of the peat deposits was necessary, to determine the date of deposition and the type of environment at the time. A further assessment report was produced by Durham University in 2014. It contained the results of radiocarbon dating, pollen analysis, and diatom analysis of the upper clays. Radiocarbon dates were produced for the base and the top of the peat layer. The dates were 4727-4546 cal BC (base) and 4651-4451 cal BC (top). This equates to the later Mesolithic period. Four pollen samples from within the peat layer were analysed. Tree and shrub species were identified - alder, hazel, oak, willow, lime and elm. Ferns and dianthus-type herbaceous plants were also present. Larger organic fragments in the peat included sedges, mosses, buttercups, daisy, alder fruits, sloe, meadowsweet, ferns and docks. This assemblage of species suggested a fen carr environment near to the site, becoming a salt marsh in the upper part of the sequence. The diatoms (algae) present in the upper clays suggested a brackish, tidal environment. The transition from an organic saltmarsh deposit to estuarine sediment was identified as an important Sea Level Index Point that formed at or near mean high water of spring tides This was a significant addition to the regional dataset for reconstructing the post-glacial evolution of the Humber Estuary.	Late Mesolithic
A3	MLS19799	516180 415730	FLINT FLAKES, EAST END	FS	Three flint flakes, East End, 1999. Three secondary flakes, two of till A flint and one of till B flint. One is recorticated and has some post-depositional damage.	Late Mesolithic to Late Neolithic
A4	MLS19726	516850 417915	FLINT CORE, 3 FLAKES, S OF STATION ROAD	FS	Late Mesolithic core and three flakes, South of Station Road, 1999. A core and three flakes were found near Killingholme Marshes. Two pieces are of till A flint and two of till B flint. One is recorticated and two are complete. The core is a late Mesolithic blade core with two plain striking platforms; one large platform has at least 18 blade-like removals and the second has at least seven flakes removed . The core retains a small patch of cortex at the distal end. One flake is blade-like and may be of a similar date to that of the core. One flake has a plain striking platfonn and one has a shattered platfonn. One has a pronounced bulb of percussion and one has a flat bulb. One flake is utilised. All three are secondary flakes. Two of the flakes are likely to be of a later date than the core and the blade-like flake, possibly dating to the Bronze Age period.	Late Mesolithic to Early Bronze Age
A5	MLS19833	515565 415329	TWO FLINT FLAKES	FS	Two flint flakes, south of Faulding Lane, 2002. Two flint flakes recovered from the spoil heap of Trench 8, during an evaluation in advance of the construction of a gas pipeline. One is a large cortical flint flake, with irregular shallow retouch on one side. The other is a gravel derived reddish-brown chert flake, with neat shallow retouch on one side and end.	Late Mesolithic to Early Bronze Age
A6	MLS19834	514994 415520	FLINT FLAKE	FS	Flint flake, west of Habrough Road, 2002. Flint flake recovered from the spoil heap of Trench 12, during an evaluation in advance of the construction of a gas pipeline. A small unretouched flake of chert.	Late Mesolithic to Early Bronze Age
A7	MLS21544	516925 417065	WORKED FLINT	FS	Fieldwalking was carried out by Humber Field Archaeology in 1999 on the site of the Conoco Combined Heat and Power plant. Two areas were walked, a rectangular Area 1 and a larger triangle, designated Area 2, to the east. Lithic material was widely distributed, with a slight concentration in the south-eastern part of Area 2. 223 pieces of flint were found. The majority were undiagnostic flakes and chunks, some of which may have been natural. A bladelet was late Mesolithic, and a bladelike flake was late Mesolithic or early Neolithic. Two cores were found, one discoidal and possibly Neolithic. A single scraper was dated to the Bronze Age. 43 worked lithics were collected during an evaluation on the site in 2000. They were three cores, 20 flakes and 20 chunks. 13 worked lithics were found during the subsequent open-area excavation in 2000. They included a retouched flake, a retouched bladelike flake, and two scrapers. They suggested Mesolithic, Neolithic and later prehistoric flintworking, using local poor-quality material from the area. 16 worked lithics were retrieved during the	Late Mesolithic to Early Bronze Age

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
					2002 open area excavation - 14 flakes and two chunks. This material included Mesolithic and Neolithic blade technology, but the quality of flintworking was poor. The assemblage suggested that local flint was being collected, knapped and used by a transient community.	
A8	MLS19727	516880 418270	FLINT SCATTER, N OF STATION ROAD	FS	Neolithic scraper, cores and flakes, north of Station Road, 1999. A scraper, two cores, nine flakes and a chunk were found to the west of Killingholme Marshes. Eight pieces are of till A flint and five of till B flint. Two are recorticated. Three pieces are complete and two have some post-depositional damage. The scraper is on an incomplete secondary flake that retains about 30% cortex. It has abrupt retouch along the distal section of the left edge. Both cores are incomplete, but still show evidence for rejuvenation. They both have one striking platform from which flakes have been removed. One has at least 13 flakes removed and the other at least 16. One of the flakes is a core rejuvenation piece, which has removed a large plain striking platform from a core. It has a cortical striking platform and a pronounced bulb of percussion. Two flakes have plain striking platforms and diffuse bulbs of percussion, and two have hinge terminations. Seven flakes are secondary removals and one is a tertiary flake. The only piece within this assemblage that is likely to be datable is a blade-like flake that could date from the Neolithic period. However, this piece is out of character amongst the rest of the assemblage, which is more likely to be of a later date.	Neolithic
A9	MLS22487	516480 417960	POLISHED STONE AXE FRAGMENT, BURKINSHAW'S COVERT	FS	Part of a polished Neolithic stone axe was found during weeding within Burkinshaw's Covert, 2nd May 2012. The findspot was described as Plot 1 at the southern end of the Covert, approximately 40m west of Rosper Road. The find was within unstratified material, removed from some part of the refinery site in the 1960s.	Neolithic
A10	MLS22737	516536 418328	WORKED FLINT, EAST OF ROSPER ROAD	FS	7 pieces of Neolithic-Bronze Age worked flint were collected in two adjoining fields during fieldwalking by Allen Archaeology Limited in 2012. This was carried out in support of an application for a proposed marine energy park. The finds were dispersed, but more frequent in the western parts of survey Fields 1 and 5. 6 were struck flakes. One was a flint nodule with some flake removals. All the flakes were relatively crude and unspecialised, removed with a hard hammer. They were thought to be most characteristic of the late Neolithic and early Bronze Age.	Late Neolithic to Early Bronze Age
A11	MLS21554	517416 416829	EARLY BRONZE AGE DITCH, N OF HUMBER ROAD	MON	An archaeological evaluation was carried out by Headland Archaeology (UK), in advance of a proposed renewable energy plant, 2009. Trench 5 contained a linear feature, underlying a 0.2m thick deposit of alluvial clay. The feaure was interpreted as a ditch, 1.3m wide and 0.32m deep. It contained several fills; the earliest contained charcoal and burnt stone. The upper fill may have been a deliberate backfill, perhaps using material from a bank associated with the ditch. A sample of charcoal was sent for radiocarbon dating, which produced an earlier Bronze Age date (2280 - 2030BC). Two other features of Middle and Late Bronze Age date were found during the evaluation, also sealed by alluvial clay. None were typical of domestic settlement, but were connected with some kind of exploitation of the estuarine margin.	Early Bronze Age
A12	MLS21555	517632 416686	MIDDLE BRONZE AGE MOUND, N OF HUMBER ROAD	MON	An archaeological evaluation was carried out by Headland Archaeology (UK), in advance of a proposed renewable energy plant, 2009. Trench 13 was positioned to target a linear magnetic anomaly, detected during an earlier geophysical survey. No archaeological features were found under the topsoil, but a spread of burnt material was recorded at a lower depth. Beneath the alluvium. This spread of material measured about 5.2m x 3.34m, and was 0.2m deep. It consisted of charcoal flecks and burnt stone, and it lay on top of a thin layer that was interpreted as a buried soil. A sample of the charcoal was sent for radiocarbon dating, which produced a Middle Bronze Age date (1580 - 1380BC). The buried soil layer indicates that there was a period of perhaps a few decades when estuarine alluviation ceased, long enough for the site to be used by people. When sea levels rose, the site was buried beneath more flood-deposited alluvium. The radiocarbon date provides a good match with the sea level curve for this area, after corrections for changes in tidal range. Two other features of Middle and Late Bronze Age date were found during the evaluation, also sealed by alluvial clay. None were typical of domestic settlement, but were connected with some kind of exploitation of the estuarine margin.	Middle Bronze Age
A13	MLS21553	517458 416786	LATE BRONZE AGE FEATURE, N OF HUMBER ROAD	MON	An archaeological evaluation was carried out by Headland Archaeology (UK), in advance of a proposed renewable energy plant, 2009. Trench 4 was located in the south-western part of the site, and was targeted on a linear anomaly identified by a geophysical survey. Sealed beneath 0.4m of alluvial clay was a charcoal-rich deposit, which included burnt stones. It was 0.02m deep and curvilinear in plan, extending beyond the trench. A sample of charcoal was sent for radiocarbon dating, which produced a later Bronze Age date (1010 - 840 cal BC). Two other features of Early and Middle Bronze Age date were found during the evaluation, also sealed by alluvial clay. None were typical of domestic settlement, but were connected with some kind of exploitation of the estuarine margin.	Middle Bronze Age to Late Bronze Age
A14	MLS26743	517283 417744	STREAM VALLEY OF LATER PREHISTORIC DATE IDENTIFIED BY AUGER SAMPLING AT MARSH FARM,	MON	A former stream valley of prehistoric date, broadly following the modern canalised watercourse, was identified by a transect (C) of sixteen auger samples undertaken by a Phase 1 palaeo-environmental assessment for the planning submission of the Able Marine Energy Park. The valley was infilled by a deep deposit of organic silts, possibly accumulating in the Late Bronze Age or Iron Age. Samples C10 to C15 identified an area of small creeks draining the valley.	Late Bronze Age to Iron Age

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
			NORTH KILLINGHOLME			
A15	MLS20422	516743 417438	IRON AGE DITCHES, W OF ROSPER ROAD	MON	An archaeological evaluation on land east of Rosper Road was carried out by Archaeological Project Services in May 2006, in advance of proposed stores, offices and workshops for Lindsey Oil Refinery. 60 trenches were dug, most positioned in order to investigate anomalies identified by an earlier geophysical survey. Archaeological features were recorded in 17 of the 60 trenches. An early - mid Iron Age date was established for some through pottery evidence, and it was thought likely that some of the other undated features were of the same period. A northwest-southeast ditch was identified running 30m between Trenches 28 and 55 (NB this feature had not been picked up by the geophysical survey). Within Trench 28 it was irregular in profile, and measured approximately 1.68m wide by 0.52m deep. It was filled by silty clay deposits, and had been recut to the northeast on the same alignment. The recut ditch measured 1.36m wide by 0.54m deep. Nine sherds of early-middle Iron Age pottery were recovered from its fill. In Trench 55, two ditches on a similar alignment were thought to represent the same features. A ditch 2.2m wide by 0.55m deep was truncated by a later ditch 1.7m wide and 0.5m deep. Other features on the same alignment within Trenches 12, 6, 60, 59, 58, 57 and Area 62 were also conjectured to represent the same ditch, which would make its total length at least 400m. At its northern end in Area 62, it was observed to truncate other Iron Age features. The ditch may have been a boundary demarcation, or a drainage ditch, during the Iron Age period. The presence of a recut and an increased amount of pottery at its southern end may be connected with the known settlement to the south (SMR19771). The stripped Areas 56 and 62 revealed a number of small drainage or boundary features. In Area 56, one northeast-southwest drainage ditch or boundary was 0.66m wide by 0.3m deep, and was dated to the early/middle Iron Age by a single sherd of pottery in its fill. A parallel ditch of similar dimensions was undated, but likely to be contemporary. Other undated linear ditches within this area were aligned northwest-southeast, north-south, and east-west. A conjunction of 6 features was revealed in Area 62. The earliest ditch was aligned northeast-southwest, and was 1.11m wide by 0.48m deep. Three sherds of early/middle Iron Age pottery were recovered from its fill. A second ditch on the same alignment was less than 0.92m wide and 0.56m deep, and also contained early to middle Iron Age pottery. An undated ditch on a northwest-southeast alignment was 1.2m wide by 0.66m deep, and may have ben a boundary rather than for drainage. Also crossing Area 62 on the same alignment was the major boundary ditch already observed in 8 other trenches to the south. Environmental samples taken from these ditches were completely barren. This, together with the lack of occupation debris, suggests that the land was put to agricultural use during the Iron Age, and that the ditches represent a field system. The main boundary ditch may be connected with the location of the site being close to the boundary between the Outmarsh and the Middle Marsh, marking a change in the suitability of land for permanent settlement during the Iron Age/Romano-British periods. Undated features in Trenches 17, 30, 54 and 61 did not appear to relate to the Iron Age field system. They may relate to later drainage attempts, before the installation of modern land drains.	Early Iron Age to Middle Iron Age
A16	MLS21556	517500 416766	IRON AGE & ROMAN SETTLEMENT, N OF HUMBER ROAD	MON	A geophysical survey was carried out by Headland Archaeology (UK), in advance of a proposed renewable energy plant, 2009. It identified several areas of low/medium archaeological potential, mainly in the west and north of the survey area. An archaeological evaluation was carried out by Headland Archaeology (UK), later in 2009. 22 trenches were excavated across the site, some targeting magnetic anomalies from the geophysical survey, and some testing 'blank' areas. Iron Age/ Romano-British features were recorded in 4 trenches. In the south-western area, Trenches 1 - 3 were targeted on curvilinear magnetic aomalies, and were found to contain archaeology. In Trench 1, a singe E-W ditch was exposed for a length of 2.16m. It was 2.38m wide and 0.86m deep, and was interpreted as a possible boundary ditch. It had four separate fills; the middle ones contained Iron Age and Romano-British pottery, as well as a bone awl and two pieces of metalworking debris. A plano-convex hearth bottom and a small fragment of possible iron slag may indicate that iron smelting was taking place in the vicinity. In Trench 2, the magnetic anomalies related to several linear ditches. One E-W ditch measured 1.4m wide and 0.46m deep. The fill was truncated by a modern cut for a land drain, but contained Mid-Late Iron Age pottery. A small circular pit 0.7m wide lay to the north, with a spread of burnt bone and charcoal to the east. A linear double ditch, also E-W, was to the north. The upper fill of one contained pottery from the late 2nd century AD, while the other contained a small Iron Age pottery group. Another linear ditch at the north end of the trench was not picked up by the geophysical survey; it measured 2.3m wide x 0.68m deep, and contained a single Romano-British pottery fragment. In Trench 3, two shallow ditches appeared to correlate with the geophysical results. They were undated, but may have been earlier than Iron Age. In the central and eastern part of the site, two trenches produced further evidence of Iron Age and Roman activity. Trench 8 revealed a shallow NE-SW ditch measuring 1.53m wide x 0.2m deep. The fill contained charcoal, chalk and flint fragments, and prehistoric-Iron Age pottery fragments. In Trench 10, a large spread of material councided with a magnetic anomaly. It measured 8m x 5m with a maximum depth of 0.12m. Daub, burnt clay, charcoal and Late Bronze Age - Iron Age pottery were found in this deposit. Some of the fired clay fragments were later identified as ceramic trays or pans, rare evidence for salt production in northern Lincolnshire. However there were no sooting marks, or pedestal fragments, so it is possible that the trays were used for a different purpose. About 200 fragments of animal bone were collected from mutiple contexts. Large mammals were predominant - cattle, horse and sheep/goat. One of the horse bones had possibly been cut by a knife, indicating that meat had been removed for consumption. The Iron Age and early Roman occupation appears to have been concentrated on the driest ground, towards the west of the site. The majority of the features coincided with geophysical anomalies, likely to have been Iron Age enclosure ditches. It is possible that saltmaking was carried out on the wetter ground to the east.	Early Iron Age to Roman
A17	MLS21567	516729 418357	IRON AGE/ROMANO-BRITISH SETTLEMENT	MON	An extensive geophysical survey was carried out by GSB Prospection in 2011, in advance of a proposed Marine Energy Park. A concentration of strong, well defined magnetic anomalies was detected in Field 1 of the survey, east of Rosper Road and north of Station Road (centred to TA16641840). They covered an area of about 150m by 100m, and had the appearance of a series of conjoined rectangular enclosures with a north-south orientation. The western edge of the settlement appeared to be defined by a series of up to 5 parallel curvilinear ditches. The northern edge of the settlement was clear within Field 1, and the	Early Iron Age to Roman

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
					responses continued south until the field boundary. The northern section of the field to the south (Field 5) was not surveyed, but some responses in the southern section were probably a southern extension of the same complex. A second geophysical survey was conducted by Headland Archaeology in April 2012, including the field (Field 5) immediately to the south of the 2011 settlement discovery, centred to TA16671833. The results showed that the settlement complex continued to the south. A group of rectangular conjoined ditched enclosures could be seen, arranged on either side of a broad N-S rectangular courtyard. There were two parallel E-W double-ditched trackways at either end of this main complex. Several of the smaller rectangular enclosures contained strong discrete responses, consistent with kilns or hearths. The combined results from the GSB and Headland surveys indicate that the settlement covers an area of at least 6 Ha. A single linear ditch was present at the eastern end of the field. It was parallel to the modern field boundary, and was interpreted as a possible drain or plough headland. Roman pottery was collected in the area of the geophysical anomalies during fieldwalking by Allen Archaeology Limited in 2012. This was carried out in support of an application for a proposed marine energy park. A total of 112 sherds were picked up in two adjoining fields, designated survey Fields 1 and 5. Finds were more common in the northern Field 1, mainly due to the unfavourable surface conditions in Field 5. The sherds ranged in date from the beginning to the end of the Roman period. The earliest pieces of pottery were Iron Age tradition grit-tempered wares. This types survives poorly in the ploughsoil, so could be under-represented in the assemblage. The later wheel-made pottery was dominated by reduced-fabric greywares. 1 Swanpool-type mortaria sherd was found, and 2 Nene Valley colour-coated sherds. 5 fragments of Roman tile including 1 piece of tegula were also found. 1 piece of frosted vessel grass may have been of Roman date. Allen Archaeology Ltd also carried out an extensive programme of trial trenching in advance of the construction of the proposed marine energy park, 2012. 39 trenches were excavated, mostly 30m x 2m. A group of 15 trenches investigated 'Area 2', the location of geophysical anomalies where Romano-British pottery had been collected during fieldwalking earlier the same year. Two trenches designated 'Area 3' were in the south-astern corner of the same field. Trench 1 contained an E-W orientated ditch measuring 1.7m wide and 1m deep, with a V-shaped profile. There was no dating evidence, and a parallel ditch visible on the geophysical survey could not be traced. This may have been due to the very wet conditions prevailing during the work. Trench 2 contained 3 ditches. Two were NW-SE, and one E-W. They appeared to be trackway and enclosure ditches. Dating evidence comprised a copper alloy Roman coin of the late 1st to early 2nd century, and pottery groups of the late 2nd - 3rd century and the late 4th century AD. Environmental samples were later found to contain burnt grains of wheat, barley and spelt. A substantial N-S ditch was recorded in Trench 3. It measured 2m wide and 0.75m deep, and the fill contained 2nd - 3rd century pottery and tile. Burnt grains of wheat, barley, spelt and legume were also present. Another N-S ditch truncated an E-W ditch, both producing 2nd century pottery. 3 undated pits were also recorded, and there was evidence of a post-Roman ploughsoil that sealed all these features. A Roman stone roofing tile was also found in this trench. Ditch features in Trench 4 were found to match closely the geophysical anomalies. An E-W ditch 2m wide and 0.9m deep contained mid-late 3rd century pottery, and fragments of iron slag that indicated smithing activity. A curvilinear ditch had a rounded terminus within the trench; it produced late 2nd century pottery. Close by were 3 undated small pits or postholes. An E-W ditch produced a group of pottery dated to the mid-late 3rd century. Trench 5 contained two E-W ditches, perhaps the same boundary feature that had been recut. One contained 3rd century pottery. A shallow curvilinear gully extended north from this boundary; mid-late 3rd century sherds from its fill indicated a broadly contemporary date with the boundary. A small E-W ditch in the centre of the trench had not been detected by the geophysical survey. Pottery finds suggested that it was 4th century, and environmenta samples contained grains from barley and wheat crops. A similar feature was found in the northern end of the trench. In Trench 6, three E-W ditches ranged from 1.2m wide up to 3.5m wide. A small group of mid 2nd to mid 3rd century pottery dated the narrowest ditch, while late 3rd - 4th century pottery was present in the largest. Five E-W ditches in Trench 7 were all present on the geophysical survey. Despite widths of up to 2.6m and depths up to 0.95m, they contained no pottery dating evidence. Wheat grains, burnt animal bone and burnt/fired clay were present in the fills.Trench 8 contained 6 ditches, 5 broadly N-S and 1 E-W. Only partial segments of these ditches were present on the geophysical survey. 3 ditches were substantial, measuring up to 3m wide. Pottery finds were sparse, but ranged in date between the late 2nd - 4th century. A 4th century copper alloy two-stranded armlet was also found in the upper fill of one ditch. Trench 14 contained two parallel ditches, both undated. The trial trenching in this area confirmed the presence of rectilinear enclosures and trackway ditches, as indicated by the geophysical survey. All the features had been highly truncated by recent ploughing, which accounted for the fresh condition of the pottery collected during fieldwalking. There was evidence for crop processing and iron smithing in the vicinity. Evidence of structures was sparse, but the presence of roofing tile could indicate a building in the vicinity. The pottery assemblage extended from Iron Age tradition wares to late Roman period coarse greywares - these greywares may even have been in use into the early 5th century. The Iron Age/Romano British enclosure complex is clearly visible as bare earth features on aerial photographs taken during the excavations. They were digitally plotted during the Inner Humber RCZAS NMP. Area excavation was carried out in 2015 on behalf of Able UK Ltd. The site was referenced as AMEP 2. AMEP 2 was occupied late in the Roman period, with evidence for a continuation into the early Anglo-Saxon period but with sparse evidence for prehistoric activity. A multi-phase enclosure system was based around a central east-west orientated trackway, onto which sub-rectangular enclosures were appended. Internally, several structures and an aisled building (which appeared to be the main focus of the site) were recorded. The aisled building probably represented a high status dwelling, with a large quantity of CBM, iron objects, fired clay and roof tile recovered. The pottery assemblage is one of the largest recorded from a single site in North Lincolnshire, with over 12185 sherds. Additionally, a large assemblage of high status dress accessories and personal objects were recovered, as was a late Roman period coin mould. Six inhumations were recorded on the site.	
A18	MLS21569	517020 417855	IRON AGE AND ROMANO-BRITISH ENCLOSURES, SOUTH OF STATION ROAD	MON	Geophysical surveys in 2011 and 2012 recorded a series of magnetic anomalies in fields south of Station Road. Trial trenches in 2012 recorded ditches and pottery of Iron Age and early Roman date. Two conjoined enclosures and a linear ditch, possibly a trackway, were digitally recorded from aerial photography as part of the Inner Humber RCZAS NMP. The site was excavated in 2013. An extensive geophysical survey was carried out by GSB Prospection in 2011, in advance of a proposed Marine Energy Park.A group of weak magnetic anomalies was detected in survey Field 10, centred to TA16991789. They had a rectilinear pattern which could indicate archaeology. Two parallel north-south anomalies had the appearance of a trackway, with a potential rectangular	Early Iron Age to Roman

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
					enclosure to the east. A second geophysical survey was conducted by Headland Archaeology in April 2012, including the field (Field 12) immediately to the south of the 2011 Field 10, centred to A17021781. The results showed that the enclosure complex continued to the south. A series of rectilinear enclosure-type anomalies were detected, lying on a NNE-SSW alignment and extending over a distance of 120m. Some individual pit-type responses among the enclosures may indicate industrial activity.The GSB and Headland results, when combined, indicated that this complex covers a total area of about 1.5ha. Allen Archaeology Ltd carried out an extensive programme of trial trenching in advance of the construction of the proposed marine energy park, 2012. 39 trenches were excavated, mostly 30m x 2m. A group of 6 trenches investigated 'Area 4', the location of these geophysical anomalies. Two trenches recorded archaeological features. Trench 21 was orientated E-W, and located at the northern end of the anomalies. It contained one N-S ditch, a sub-rectangular pit, and a second pit or ditch terminus. The ditch measured 0.82m wide and 0.28m deep; its fill contained mid 1st - mid 2nd century AD Roman pottery. The ditch location did not correspond with any geophysical anomaly. The rectangular pit contained a dumped deposit that included 38 fragments of fired clay, flattened and limewashed on one surface. They were thought to be part of a floor or wall of a building. the 2nd pit measured 0.42m wide and 0.24m deep, and contained pottery of the same Roman date. Trench 22 was located in the centre of the main complex of geophysical anomalies. Several archaeological features were recorded, but progress was hampered by wet conditions. A NE-SW ditch measured 0.3m wide and 0.1m deep; it produced no dating evidence. This ditch had been cut by a later and more substantial ditch, initially NE-SW, turning NE and possibly SW. It produced only cattle bone and a single sherd of Romano-British pottery. Two NE-SW ditches lay to the north east. One produced mid-late Iron Age pottery, and an environmental sample from the fill contained oat grains and spelt fragments.The excavated remains and geophysical results from this area were thought to indicate the remains of a relatively small settlement, perhaps a farmstead. Two conjoined enclosures and a linear ditch, possibly a trackway, were digitally recorded from aerial photography as part of the inner Humber RCZAS NMP. Area excavation was carried out in 2013 on behalf of Able UK Ltd. The site was referenced as AMEP 4. AMEP 4 featured two large enclosures, a large sub-rectangular enclosure in the southern portionof the site and an elongated enclosure located in the northern part of site. Both enclosures featured internal sub-divisions, with the southern enclosure displaying evidence of six ring gullies and other structural elements. A date range of between the mid to late Iron Age and early 1st century AD has been assigned to the southern enclosure, falling into disuse as the focus shifted to the northern enclosure, which was occupied until the late 2nd century AD.	
A19	MLS20124	516552 417594	POSSIBLE CROPMARKS, SOUTH OF EAST MIDDLE MERE ROAD	MON	Cropmark ditches and sub circular features identified during aerial photographic transcription, 2002. Evaluations in 2006 found Iron Age ditches in the area of 'Site 13', but no trace of archaeological features in the south and west. As part of an archaeological evaluation in advance of the construction of a 400Kv overhead power line, an aerial photographic transcription was carried out by Northern Archaeological Assosciates in 2002. Two vertical aerial photographs were consulted, and several areas south of East Middle Mere Road were identified as displaying cropmarks of a mainly sub-circular nature. None were affected by the construction of the power line. Two linear features plotted by NAA are visible, but none of the sub circular features (apart from SMR 4635) can be seen. An archaeological evaluation was carried out by Archaeological Project Services in 2006. In Area 62, Iron Age ditches were recorded in the area of the NAA plot marked as 'Site 13', although the excavated features do not appear to correlate directly with the cropmarks. (See SMR 20422). Three trenches (49, 52, 35) were located in the area of the double circular feature plotted by Northern Archaeological Associates in 2002. None were found to contain archaeology. Trenches 37 and 38 were located in the area where a semicircular feature was plotted, but no archaeology was found. Trenches 30 and 31 in the southern area, where more circular and linear features had been plotted. One linear ditch, interpreted as modern, was found in Trench 30.	Iron Age (Uncertain)
A20	MLS19771	516817 417139	IRON AGE & ROMANO-BRITISH SETTLEMENT	MON	Archaeological investigations were undertaken on the site of a proposed combined heat and power plant (CHP) at North Killingholme, west of Rosper Road, between 1999 and 2000. They comprised of a desk-based assessment fieldwalking, geophysical survey auger survey, watching briefs, trial trenching, and open area excavation (Phase 1 : CNK2000) and 22nd April and 14th June 2002 (Phase 2: CHP2002). Both the desk-based assessment and the fieldwalking confirmed the archaeological potential of the site, although the amount of Romano-British pottery was low due to ground conditions during the fieldwalking. The results from the geophysical survey revealed the presence of several ditched enclosures connected by a trackway. The date of these enclosures was subsequently confirmed as Romano-British by a series of evaluation trenches targeting geophysical anomalies. The evaluation and later open area excavation undertaken in 2000 (CNK2000) showed the extensive survival of remains of modest settlements of both the Iron Age and Romano-British periods, truncated by Medieval and later agricultural practices. Although the extent of survival was relatively good, there was little in the way of evidence of the organic materials and artefacts that would have been an integral part of the activity on the site, despite the low-lying nature of the area. The main purpose of the excavation was to reveal and fully excavate all archaeological features in the proposed area of a Combined Heat and Power plant (CHP) and to date the enclosures and any phases of development. To this end a roughly triangular area was opened up encompassing 11 ,000m2. Further extensions to evaluation Trenches 1 and 8 were also carried out to determine the limits of the features found therein. The sequence revealed by the excavation suggests that an original early Iron Age settlement was located in the south of the site on the lower ground near to the former creek on the shore of the River Humber extending into the area of the subsequent CHP 2002 excavations. There then appears, on the basis of the pottery sequence, to have been a hiatus in the mid to late Iron Age. The late Iron Age and Romano-British settlement developed on higher ground further north, centred around a droveway and a pattern of enclosures. The environmental evidence from the site reflected a mainly pastoral landscape, with some evidence of cereal cultivation and the possibility of hedge-lined ditches supporting semi-aquatic flora and fauna, including sticklebacks and water voles. Later in the mid to late 3rd century the settlement contracted to an area within the main enclosure (Enclosure 4), although the droveway may have remained in use. There then appears to have been some form of settlement migration 150m to the NE where later 3rd- and 4th-century material was recovered in an evaluation trench near Rosper Road. However the dynamics of the shift are not understood. The middle to late Iron Age settlement site investigated during 2002 (CHP2002) lay	Early Iron Age to Roman

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					on the shore of a former creek or channel to the south of the 2000 excavation area. The creek and several others on this stretch of the shore were recorded by the British Geological Surveyas alluviated channels; the outline of another channel to the south of the site is still reflected in the line of modern drainage dykes and field boundaries. Originally this was thought to lie some 50m from the site but evidence from the excavations and the bore hole survey carried out during Phase 1 of the works suggests that during some periods the shoreline was much closer and actually within the confines of the southern part of the open area itself. The creek or channel was east-west aligned with a broad opening onto the River Humber which then narrowed by two thirds west of the site. Generally the environment on the Humber shoreline and in the Lincolnshire marsh was a mixed landscape of alder carr, with areas of phragmites reeds. Other data from the area suggests an increase in grass, herb and cereal pollen probably correlating with woodland clearance just prior to the Iron Age, more particularly analysis of samples taken from various features excavated on the site has provided evidence for grassland habitats, including saltmarsh and rough grazing land. The presence of early pottery makes the Killingholme site significant in Lincolnshire, where relatively few early to mid Iron Age settlements have been investigated. The northern part of the settlement (CNK2000) appears to have been unenclosed: although the single roundhouse from this period was found between two boundary ditches, these appear to represent the subdivision of an open area, as opposed to the enclosure of smaller compounds which was a feature of the southern area (CHP2002). The pottery from both sites was predominantly rock tempered, with the CHP material exhibiting a large number of other distinctive fabric types, whilst the CNK assemblage displayed a small but significant percentage of shell-tempered fabrics. A further distinction between the two area is the lack of briquetage (remains of clay vessels associated with salt production and/or storage) in the northern area although some greenish 'slag' or residue similar to that found on the CHP site was present, now interpreted as being associated with salt production.What is apparent from both sites is that during the early to mid Iron Age the pottery assemblage had more in common with fabrics found in the East Riding than those from other sites in Lincolnshire, including a settlement excavated at Dragonby. This implies that there was a cultural sphere of influence on the north bank of the Humber which influenced the south bank. This can be contrasted with the situation in the late Iron Age/early Roman period, where the reverse is true. Alternatively the potters may have been exploiting similar clays which outcrop on both sides of the Humber. The environment as far as it can be reconstructed for the early to mid Iron Age was pastoral, with little evidence of woodland and some localised cereal cultivation - although the pollen from which this assertion was made could equally be derived from cereal processing, and in this respect differs little from that found in the later Romano-British period.The nature of the pottery, the general lack of artefacts, and the environmental evidence from the site all suggest a rural, pastoral settlement. Moreover, given the presence of a droveway, ponds, and enclosures interpreted as pens or corrals for livestock, it can argued that the settlement was mainly dependant on raising cattle and sheep/goats.The pottery evidence for the later Iron Age and Romano-British periods suggests that until the mid 2nd century there was a scarcity of imports, and it is likely that the site was of a relatively low status. It was not until the mid to late 2nd century that the settlement started to reflect the Romanisation of the area, with the appearance of occasional sherds of amphorae, mortaria and Samian ware, while other regional imports included pottery from Dorset and the Nene Valley. However, these items occur in small numbers and the settlement probably retained much of its earlier character. The same can be said for the recently-excavated Winterton Landfill site where the pottery dates are similar, with none of the pottery dating later than the end of the 2nd century AD. However, the appearance of usticated ware on that site suggests the Romanising influence was earlier, although this could be attributed to its relative proximity to Ermine Street . A site much nearer to Conoco at Chase Hill Farm, North Killingholme, had a much longer pottery type-series spanning the period from the 2nd to the late 4th century AD. In contrast to the CNK settlement it had much greater access to Romanised products that more closely resembled those from other north Lincolnshire sites including Hibaldstow small town, Winterton Villa and Dragonby.The general conclusions drawn regarding the Romano-British pottery from the site suggest that it was occupied by peasant farmers with only a peripheral access to material goods representing a more Romanised lifestyle.The environmental evidence from the site for the period is virtually the same as that for the Iron Age, reflecting a continuation of a pastoral existence, with some indication of the consumption and possible processing of cereals, although it should be noted that the presence of cereal pollen demonstrates the cultivation and use of cereals, but not the extent of that cultivation. Further evidence from the pollen record suggests that pastoral/grassland habitats were dominant, at least in the area around the site, and that this grassland was not closely grazed and was perhaps hay meadow.Despite this there was ample evidence for the consumption and probable raising of livestock from the archaeological record. Cattle bones dominate the assemblage, with sheep/goat abundant and pig relatively infrequent. An initial conclusion drawn from the dental and epiphyseal evidence indicates that calves, immature and adult cattle and sheep were being slaughtered, and the bones of foals as well as adult horses were also represented. The slaughtering of both juvenile and adult animals might indicate that they were being used to supply both meat and skins and/or wool, perhaps indicating that the community was relatively self sufficient. This was in contrast to Chase Hill Farm where, although the same range of livestock was kept, again with cattle being dominant, only fully mature animals were slaughtered, suggesting they were being raised for milk and wool. There was also a marine element to the diet of the settlement, represented by shellfish, which included whelk, cockle, and mussel, with oyster being a significant element of the diet.The presence of bank vole and other shade-loving fauna hint at the presence of hedges lining the ditches belonging to the enclosures, with little evidence of woodland. Whilst sticklebacks, water vole, frog/toad and newts indicate that the ditches were water-filled for at least part of the year. There was evidence of Iron Age salt production on the site, in the form of briquetage fragments, including the ceramic trays that were used to reduce brine to salt. The presence of a soft, ashy residue was additional evidence for salt production - it was a by-product casued by the chemical reaction between salt, fuel and clay. This was potentially the most northerly early Iron Age saltern on the Lincolnshire coast.Other denser grey slag was identified as related to Iron production, although no metal residues were found. 35 colour photographs were taken over three site visits made by the HER. A complex of ditched enclosures and boundaries associated with this settlement are visible as soilmarks on aerial photographs taken in 2000, they were digitally plotted during the Inner Humber RCZAS NMP project. The group of linear geophysical anomalies identified alongside the west edge of Rosper Road (f8) and evaluated in Trench 8 was not fully excavated in 2000. This area was preserved in situ under the car park to the CHP plant. The triangular area containing the ditch complex could be seen on aerial images post 2000 and was	

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					plotted on contemporary OS mapping. As of 2021, the remains survive in situ within the car park. These features are believed to represent a small farmstead or settlement situated on a small promontory on the palaeo-shoreline separate from the main nucleus to the west. In 2013 the ditches were seen to continue on the east side of Rosper Road within the AMEP 6 site (see MLS22743).	
A21	MLS21313	514445 416323	LATE IRON AGE ENCLOSURE, WEST OF TOP ROAD	MON	A geophysical survey was carried out by Archaeological Services WYAS in 2009, in advance of proposed improvements to the A160-A180. Survey Block 31 was located to the west of Top Road, South Killingholme. A short length of linear magnetic anomaly was identified in the north eastern corner of the block. It was aligned east-west, at variance with surrounding field boundaries. It may be an infilled ditch of unknown date. Another phase of geophysical survey was carried out by Archaeological Services WYAS in 2011, as part of the same road scheme investigation. Survey Blocks 36 and 37 extended the survey in the area west of Top Road. They revealed that the ditch that was detected in 2009 turned northwards and continued for a distance of at least 50m. This appeared to form the south-western corner of an enclosure, possibly of Iron Age or Romano-British date. Some other discrete magnetic anomalies were detected within the enclosure and immediately to the west. They may indicate large pits or hearth areas. A fieldwalking survey was carried out at the same time as the 2010 survey. No prehistoric or Roman pottery was found in the area of the enclosure. The geophysical anomaly was investigated by Archaeological Services WYAS in 2010. Within trial Trench 18, a single large ditch was recorded. It was 2.45m wide and 1.10m deep, and had a broad V-shaped profile. The primary fill deposit appeared to be the result of erosion while the ditch was open. It incorporated a small sherd of Roman Greyware. This sherd was probably intrusive, given that the secondary fill deposit produced a large amount of Late Iron Age pottery(150 sherds), 17 fragments of fired clay and daub, and animal bone. An upper 3rd fill deposit contained no finds. The size of the ditch and the association with quantities of occupational material, suggested that it may have formed part of an enclosure, extending to the north and east. The east-west linear anomaly centred to TA14441628 was also detected during a geophysical survey carried out by Pre-Contruct Geophysics in 2011.A second fieldwalking survey was carried out along the line of a proposed cable route in 2011. Two Romano-British sherds were found within 100m of the enclosure, at TA14421624 and TA14451638. The sherd from the second location was dated to the 3rd-4th century AD.	Late Iron Age to Roman
A22	MLS22603	514866 417773	IRON AGE ENCLOSURE, EASTFIELD ROAD	MON	A rectangular enclosure of Iron Age date, detected during a geophysical survey west of Eastfield Road, 2011. A trial trench dug in 2012 revealed Iron Age ditches and finds. A rectangular enclosure was recorded during a geophysical survey by Pre-Construct Geophysics on land west of Eastfield Road, 2011. The survey was carried out in advance of a proposed electricity cable route.A group of linear magnetic anomalies were interpreted as a possible enclosure, on the same NE-SW alignment as the modern field boundary to the south. It measured c.50m x 50m, with a possible internal subdivision. The western end extended beyond the boundary of the survey. The southern ditch was either absent, or disturbed by readings from the site of an adjacent Second World War military camp. At least four pit-type anomalies were located within the enclosure.The report noted the proximity of Romano-British finds during the construction of the Lindsey Oil Refinery, on the east side of Eastfield Road. A trial trench dug by Pre-Construct Archaeology in 2012 targeted this geophysical anomaly. Designated Trench 102, it was 50m long and orientated WNW-ESE. A series of ditch features dating to the mid-late Iron Age were revealed. The largest ditch was aligned N-S, and measured 2.3m wide. There were four fill deposits; two contained mid-late and late Iron Age pottery, and a single pig bone. The upper fill contained 3 fragments of poor quality iron ore. A smaller E-W ditch may have been contemporary, but contained no dating evidence. The other sequence of ditches recorded in Trench 102 were in a NNE-SSW direction. Two narrow, parallel ditches were thought to be the opposing sides of a rectangular enclosure. They were undated, but an adjoining feature contained 39 sherds of mid-late Iron Age pottery, along with animal bones. 3.5m to the south-east were three intercutting ditches on the same alignment. The earliest was sealed under a natural flood deposit. The boundary was re-established after flooding, using two successive ditches of a similar depth and profile. They both produced charcoal inclusions, and the earlier ditch contained two sheep/goat bones. There was no dateable pottery, but the ditches were evidently close to human occupation, and were maintained over a long period.Another ditch to the south-east was on a slightly different alignment, and contained a small amount of mid-late Iron Age pottery.The most southerly ditch in Trench 102 returned to the NNE-SSW alignment. It was 1.1m wide and 0.41m deep, but contained no finds. At the south-eastern end of the trench, a feature thought to be a natural palaeochannel was investigated. It had been open during the Iron Age; a single horse bone was found in the upper fill, and the same fill sealed the southerly ditch. A peat layer beneath this contained a sheep/goat bone.	Middle Iron Age to Late Iron Age
A23	MLS1615	516600 416200	FLINT SCRAPER, RB POTTERY, OIL REFINERY, 1966	FS	Flint scraper, RB greywares, shell-gritted wares dated to 3rd-4th cent., from site of Oil Refinery 1966	Early Neolithic to Roman
A24	MLS1614	516080 416620	RB OCCUPATION, OIL REFINERY	MON	Linear features and enclosures visible on 1958 air photos. Flint knife and greyware pottery discovered (now in North Lincolnshire Museum). AP plot of enclosures shown at head of a former tidal inlet.	Early Bronze Age to Roman
A25	MLS20078	516128 416705	FORMER CROPMARK ENCLOSURE	MON	Cropmark enclosure, now beneath oil refinery, South Killingholme. A rectilinear enclosure measuring c.30m by 20m and a small L-shaped feature lying just to the north was recorded at Swindon. The feature has since been partly or totally destroyed by the construction of the refinery. Linear features and enclosures visible on 1958 air photos. AP plot shown at head of former tidal inlet.	Later Prehistoric

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A26	MLS22428	517088 416784	LATE IRON AGE DITCHES, WEST OF ROSPER ROAD	MON	Three trenches were excavated by Archaeological Services WYAS on land west of the fire station, Rosper Road, in 2010. This was related to the preferred route of the A160-A180 improvements. The two northerly trenches (20 and 26) targeted geophysical anomalies, but no archaeology was found. Two Late Iron Age ditches were recorded in the Trench 25, directly west of the fire station. One ditch had a U-shaped profile, and measured at least 0.87m wide and 0.67m deep. There were three fill deposits within the ditch. The lower fill contained much late Iron Age pottery, including 77 sherds from a single shell gritted jar with a pierced base. Late Iron Age pottery was also present in the secondary fill, and animal bone was also found in both upper fills. The second ditch to the east was earlier, as it was cut by the first ditch. It also had a U-shaped profile, and measured 1.98m wide and 0.35m deep. Two fill deposits both contained Iron Age pottery sherds, and the interface between them was marked by a thin lens of charcoal. The function of these ditches was not clear, but the excavation report suggested that they could be part of an occupied enclosure.	Late Iron Age to Roman
A27	MLS26159	516983 418311	PREHISTORIC PENANNULAR ENCLOSURE, NORTH KILLINGHOLME	MON	A double-ditched penannular enclosure is visible on aerial photographs taken in 2015 as top-soil stripped bare-earth marks. The inner enclosure is 10m across and the outer 17m, each have a entrance facing due east. The feature is clearly of prehistoric date and may be a later Neolithic or Bronze Age ritual site or a later prehistoric settlement enclosure. The site was digitally plotted during the Inner Humber RCZAS NMP project. This is the site of an archaeological evalution which recovered Roman pottery but a ring-ditch was not described (MLS21568).	Later Prehistoric
A28	MLS1607	515000 416300	ROMAN COIN FROM GARDEN	FS	Roman coin, Bronze of Constantine II dated to AD 316-317, from village garden.	Roman
A29	MLS1628	515100 417800	RB OCCUPATION, LINDSEY OIL REFINERY	MON	Occupation site found during the construction of Lindsey Oil Refinery. Romano-British , C3rd - C4th.	Roman
A30	MLS1630	516500 417800	OCCUPATION SITE, E OF LINDSEY OIL REFINERY	MON	RB greyware sherds, dated to 3rd-4th cent., from site of Oil Refinery, 1966.	Roman
A31	MLS19806	516660 418230	ROMAN SHERD, N OF STATION ROAD	FS	Single greyware sherd, north of Station Road, 1999.	Roman
A32	MLS19807	516720 417960	ROMAN SHERD, S OF STATION ROAD	FS	Single greyware sherd, south of Station Road, 1999	Roman
A33	MLS20152	516631 415890	RB SETTLEMENT, EAST END FARM	MON	Romano-British ladder settlement, recorded by geophysical survey and a metal detecting survey, East End Farm, 2004-05. Two phases of geophysical survey were carried out by Geoquest associates at East End Farm, in advance of a tree planting scheme. The surveys detected the ditches of a N/S oriented trackway, varying between 7 and 14 metres apart. It continued northwards, beyond the edge of the survey, into the refinery. To the south, the trackway narrowed and became diffuse, perhaps due to colluviation on the lower ground. A linear spread of material within the southern part of the trackway, giving a dipolar magnetic reading, may be interpreted as a possible metalled surface. A complex series of rectangular ditches were conjoined to either side of the trackway, in a square area measuring at least 130m by 140m. The ditches of the western side were enclosed by triple ditches to the west and south. The boundary of the eastern side was less well defined, but may possibly mirror this pattern. Some of the positive anomalies within the settlement were accompanied by symmetrical negative anomalies, suggesting the location of wall footings. They were grouped on a scale which suggests buildings - one example to the east of the trackway measured 19 x 10m and appeared to be divided into four bays. Similar anomalies occurred in the western section, probably at a depth of about 1m, and there was evidence of fragmentation which may have been caused by modern deep ploughing. There was convincing evidence here either of a cluster of very small ditched enclosures, offset recuts of larger enclosures, or an assemblage of timber buildings. The complex structural sequence may be indicative of settlement over a protracted period. On morphological grounds, this settlement could be considered to be of the 'ladder settlement' type, i.e. a linear arrangment of enclosures alongside a trackway, perhaps representing a series of small farmsteads. However, the arrangment of the features and the triple ditched boundary are not typical, and may suggest that this settlement was a single large farm with architectural pretensions, or perhaps even of military or ritual origin. A metal detecting survey was carried out in 2005, designed to investigate the rectangular enclosure and road discovered during the earlier geophysical survey. About 20 detectorists from the Grimsby and District Metal Detecting Club participated, roaming freely over the unplanted area. All finds were bagged and flagged, the locations later being recorded by NLM staff using GPS. Although ground visibility was poor, some pottery was also found and recorded in the same manner. Sixteen 3rd and 4th century coins were found. 10 dated from the 4th century, 3 from the 3rd, and 3 could not be dated to a century. Of those which could be positively identified, one was a radiate of Victorinus (269-271AD), one was a radiate of Claudius II, c.268-270, 3 were nummi of Constantius II (324-361AD) , and one was a nummus of Constans, c. 343-348AD. Two Roman brooches were identified as a Dolphin brooch of the 1st century, and a headstud brooch of the 1st or 2nd century. A Roman lock bolt fragment, 32 sherds of greyware, 30 lead fragments and 14 copper alloy fragments (including part of a vessel) were also recovered. When plotted, it was clear that most of the finds came from the	Roman

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					west of the trackway, including all but one of the coins. This area was less well defined on the geophysical survey, but appears to have been the main focus of occupation. It is possible that the enclosures east of the trackway were used for stock. A very similar settlement complex (HER 22764) was photographed from the air at South Ferriby in 2013.	
A34	MLS20423	516538 417767	ROMAN POTTERY, W OF ROSPER ROAD	FS	An archaeological evaluation on land east of Rosper Road was carried out by Archaeological Project Services in May 2006, in advance of proposed stores, offices and workshops for Lindsey Oil Refinery. Roman pottery was found in an unstratified context within Trench 21. Eight wheel-made greyware body sherds, from two thick walled vessels. They cannot be closely dated.	Roman
A35	MLS21568	516988 418302	EARLY ROMAN DITCHES, NORTH OF STATION ROAD	MON	A geophysical survey completed in 2011 recorded a possible enclosure, north of Station Road. An evaluation in 2012 recorded two substantial ditches, one containing early Roman pottery. A pennanular enclosure was identified at this location on aerial photographs during the Inner Humber RCZAS NMP. The site was excavated in 2014.An extensive geophysical survey was carried out by GSB Prospection in 2011, in advance of a proposed Marine Energy Park. A group of broad, strong magnetic responses were detected at the eastern end of Field 5 (centred to TA16981831). Three sides of a rectilinear pattern measuring 45m across (east-west) had the appearance of a possible enclosure. However, the location was close to a modern boundary where modern disturbance might be a factor. Allen Archaeology Ltd carried out an extensive programme of trial trenching in advance of the construction of the proposed marine energy park, 2012. Two trenches investigated 'Area 3', the location of these geophysical anomalies. Trench 17 encountered a substantial NE-SW ditch, at least 4.5m wide and up to 1.1m deep. It appeared to be in the same location as one of the geophysical anomalies. Excavation was hampered by local flooding, but it did produce a group of late 1st - 2nd century AD pottery. Trench 18 contained an E-W ditch, 2.5m wide, in the same location as one of the geophysical anomalies. No further excavation was possible due to flooded conditions. These ditches were thought to form part of an enclosure, perhaps contemporary with the earliest phase of activity in the settlement to the west (HER 21567). It may have been abandoned in favour of this settlement, as it did not continue in use beyond the mid 2nd century. There were some indications of a trackway linking the two areas on the geophysical survey, but its presence could not be established during the excavation. A double-ditched penannular enclosure is visible at this locations on aerial photographs taken in 2015 as top-soil stripped bare-earth marks. It was digitally plotted during the Inner Humber RCZAS NMP project and described in MLS26159. Area excavation was carried out in 2014 on behalf of Able UK Ltd. The site was referenced as AMEP 3. AMEP 3 was characterised by a large main sub-rectangular enclosure, which contained several ring gullies and other fragmentary structural elements. The main enclosure had several subenclosures appended to it and a short stretch of double ditched trackway was recorded. The features displayed evidence of being re-worked and adapted from the mid to late Iron Age through to the early 2nd century AD, with artefactual evidence supporting the chronology.	Roman
A36	MLS22605	514874 416689	ROMAN SETTLEMENT, SOUTH OF WESTFIELD FARM	MON	A Roman settlement was investigated by geophysical survey, fieldwalking and evaluation trenches in 2011 and 2012. A field containing Medieval cropmarks and earthworks south of Westfield Farm was surveyed by Pre-Construct Geophysics in 2011. This was in advance of a proposed windfarm cable route. A complex of linear ditches and pits was revealed, closely matching the Medieval rectilinear patterns visible from the air. Fainter responses to the east (area TA148 167) appeared to be of a different character, perhaps from an earlier phase of settlement. Fieldwalking along the proposed cable route was carried out by Pre-Construct Archaeological Services Ltd in 2011. 5 greyware sherds were collected, along with the Medieval pottery from this area . Four were within 120m of the north-eastern corner of the field, area TA148 166. Two sherds could be dated to the 2nd or 3rd century. The fieldwalking report suggested that a Romano-British farmstead was located in the area, perhaps with associated magnetic anomalies that were masked by the dense Medieval remains. Trial trenches were investigated by Pre-Construct Archaeology in the Westfield Farm area in 2012, as part of the ongoing evaluation of the Hornsea Windfarm cable route. Trenches 95 - 98 targeted a Medieval moated enclosure and associated geophysical anomalies, some of which were thought to be of Romano-British date. Trench 99 was immediately north-east of the moated enclosure. Archaeological deposits associated with a probable Romano-British 'ladder' settlement were recorded in these trenches. There were also indications of Late Iron Age origins for the settlement. In Trench 95, only two residual Roman sherds were found. One was grog-gritted ware, an Iron Age tradition fabric.Trench 97 produced a small group of shell-gritted sherds in the Iron Age tradition from a pit. There was also an unstratified group of 20 sherds, dating from the 3rd-4th century AD. Trench 98 contained 8 pit and ditch features that produced late Iron Age and Early Roman pottery. Most of these features could not be reliably dated from the finds, but the geophysical survey showed an E-W aligned row of small rectangular enclosures in this area, thought to be part of the Roman 'ladder' settlement. Much of the pottery was utilitarian shell-gritted ware, typical of the Late Iron Age - Roman transition in North Lincolnshire. One sherd in a cream fabric was thought to originate from a 1st century AD kiln at Lincoln. In contrast, Trench 99 (60m to the north east) produced a distictively late Roman pottery assemblage, 3rd-4th century AD. The earliest features were undated, but one contained an animal bone assemblage including cattle and sheep/goat. An undated N-S ditch was recut; the fill of the later ditch contained 3rd-4th century pottery and 2 rubbing or polishing stones. A soil sample was later found to contain 20 hobnails (perhaps from a Romano-British boot), coal, cinders, and charred plant remains. An ENE-WSE linear ditch contained two fills. There was 3rd-4th century pottery in the lower fill, and 4th century pottery in the upper fill. Both fills contained metalworking residue, fired clay fragments, oyster shells, and animal bone. This mixture of finds indicated the presence of a late Roman settlement in the near vicinity.	Roman
A37	MLS22692	514739 416427	ROMANO-BRITISH DITCHES, NORTH OF GREENGATE LANE	MON	A series of ditch features were recorded within evaluation trenches on land off Greengate Lane, 2012 and 2013. One contained a Roman roof tile tragment. An archaeological evaluation was carried out by Archaeological Research Services Ltd on land north of Greengate Lane, 2012. This was in advance of a residential development. Trenches 1 and 2 were located to the west of St. Denys' Close, c. 15m apart, in the north-eastern part of the application area. Within both trenches, a topsoil and a thick silty clay subsoil layer were present. They were thickest in Trench 1, with maximum depths of 0.35m and 0.74m	Roman

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					respectively. A north-south aligned ditch, stratigraphically beneath the subsoil, was recognised as the same feature in both trenches. Its width varied between 2.4m in Trench 1 and 1.9m in Trench 2. No finds were found in the ditch fill. In Trench 2, a second north-south ditch was recorded, 0.88m west of the first. It was narrower at 0.75m wide, and had a V-shaped profile. Again, there were no finds. A small undated pit (or ditch terminus) cut into this ditch within the trench. The common alignment of the north-south ditches suggested a shared purpose, perhaps as part of a double-ditched droveway or enclosure. Although there was no direct dating evidence, they were both sealed by the later subsoil. Within Trench 2, 15 sherds of Medieval pottery were recovered from this subsoil. The ditches were thought to be of Romano-British date, probably part of the same complex identified by geophysical survey in the field to the north. Environmental samples from the ditch fills were later found to contain a small amount of charred wood and a single seed husk. This may be evidence for domestic or industrial activity in the vicinity. An archaeological strip, map and sample exercise was carried out by Archaeological Research Services Ltd during the groundworks for the residential development north of Greengate Lane, 2013. An evaluation trench, designated Area 3, was positioned to the east of housing Plot 19 in order to obtain further dating evidence for one of the ditches recorded in 2012. The expected north-south alignment was not intercepted, but a large east-west ditch was revealed beneath the subsoil. It was interpreted as one of the ditched from the 2012 evaluation that had turned through 90 degrees. This ditch measured 0.5m deep; the full width was not exposed within the trench, but would have been more than 1.71m. The silty clay fill included a large fragment of tile near the base of the ditch. It was identified as Roman tile, and had an animal paw or hoof impression.	
					A group of later Roman ditches, north of Marsh Lane, was recorded during trial excavations in 2012 and 2013. The ditches appear to be a continuation of a small farmstead or settlement recorded on the west side of Rosper Road. An extensive geophysical survey was carried out by GSB Prospection in 2011, in advance of a proposed Marine Energy Park. A group of weak magnetic anomalies was detected in survey Fields 17 and 18 , centred to TA170174. They had a rectilinear pattern which could indicate archaeology. Allen Archaeology Ltd carried out an extensive programme of trial trenching in advance of the construction of the proposed marine energy park, 2012. 39 trenches were excavated, mostly 30m x 2m. Two trenches investigated 'Area 6', the location of these geophysical anomalies. Trench 37, centred to TA17001746, was difficult to excavate due to flooding. However, 4 ditch features were recorded., all cut into a south-east facing slope in the underlying deposits. A small E-W ditch measured 0.45m wide and 0.2m deep. There was no dating evidence. In the centre of the trench was a large N-S ditch measuring 4.5m wide and 1.2m deep. The fill contained a group of 4th century AD pottery, including sherds from a mortarium. Immediately to the south were two parallel NE-SW ditches. One was c.2m wide, but was not investigated. The second was 0.7m wide, and produced mid-late 3rd century AD pottery, including another mortarium sherd. All these features were sealed by alluvium flood deposits. It appeared that the underlying slope was the edge of a palaeochannel. It is possible that the pottery was within a series of drainage ditches, rather than from domestic activity in the immediate vicinity. Trench 38 was 90m to the south-east of Trench 37, and contained no archaeology. A further 10 trial trenches were excavated by Allen
A38	MLS22743	517016 417404	LATE ROMAN DITCHES, NORTH OF MARSH LANE	MON	Archaeology Ltd in 'Area 6', 2013. Three of the trenches contained archaeological features consistent with the 2012 excavations. Trench 4 was on the western side of the field, and parallel to Rosper Road. Central grid reference TA17011729. At the northern end of the trench was a curvilinear ditch, orientated north-south and turning east at its northern end. It was 4m wide and 0.26m deep, but contained no finds. A second curvilinear ditch at the southern end of the trench was east-west, 2.15m wide and 0.24m deep. The only find was an animal tooth. A ditch terminus or pit, 2.6m wide, extended into the central part of the ditch. A single fragment of pottery from the fill was thought to be of Roman date. Trench 6 was 40m west of Trench 37 from the previous year, centred to TA16971743. Two ditches were recorded. One was north-south, 1.35m wide and 0.24m deep. The other was east-west, 2.90m wide and over 0.28m deep. A single sherd of pottery, thought to be Roman, was found in the fill. Trench 7 was 75m east of Trench 37, centred to TA17071749. Two east-west parallel ditches were recorded, running through the centre of the trench. One was 1.3m wide and 0.35m deep; the other was 1.10m wide and 0.36m deep. Another north-south feature at the northern end of the trench measured 0.98m wide and 0.44m deep. There was no dating evidence in any of these ditches. All of the archaeological features in these trenches was sealed with a thick layer of flood-deposited alluvium, up to 0.90m deep, lying below the topsoil. They were all thought to be of Roman date, probably part of a field or enclosure system. The 2013 trenches were carried out on behalf of Able UK Ltd. The site was referenced as AMEP 6. AMEP 6 was investigated with a total of ten trenches, with archaeology recorded in three and were noted to contain several ditches with a date range of late Iron Age through to the early Roman period. These ditches are likely to be the continuation of those identified by geophysical survey for the Conoco CHP project on the west side of Rosper Road opposite AMEP 6. A complex of linear geophysical anomalies (f8) were confirmed by trial trench (T.8) to be of Late Iron Age/Romano-British date and evidence of a possible rectangular structure was recorded. The features either side of Rosper Road are likely to represent a small farmstead or settlement situated on a small promontory on the palaeo-shoreline; see MLS19771, SLS3507.	Roman
A39	MLS19659	514635 417187	ANGLO SAXON AND MEDIEVAL POTTERY	FS	Early Medieval and Medieval pottery, found while metal detecting in North Killingholme, 1999. One sherd of possibly pagan Saxon pottery; one sherd of shelly ware; one sherd of orangeware; several splash glazed sherds, perhaps late Stamford ware. Sherds identified by Kevin Leahy at North Lincolnshire Museum, August 1999. A silver 3d of Elizabeth I (dated 1580) was found at about the same time, at TA14561715.	Early Medieval to Medieval
A40	MLS1606	514841 416487	MOATED SITE, `BLOW FIELD'	MON	A Medieval moated site, `Blow Field'. It was ploughed in 1970 but still exists as a very slight earthwork within an arable field. A dense complex of rectilinear ditches was revealed by a geophysical survey in 2011. Trial excavations in 2012 revealed features and finds of late Saxon to Medieval date.	Early Medieval to Medieval
A41	1007813	514169.01 418842.27	MOATED SITE AND ASSOCIATED	SAM	The monument is the moated site at Baysgarth Farm. It includes a large sub- rectangular moated site, a second smaller moated enclosure, and other associated earthwork features. The island defined by the main moat measures 150m north-south and 80m east- west. The surrounding moat, which is now dry, is 10m wide and 2m deep. An external earthen bank 0.5m high and 5m wide encloses the moat. Two fishponds extend into the island of the site; one on	Medieval

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			EARTHWORKS AT BAYSGARTH FARM		the western side of the site, the other on the northern side. Both are connected to the adjacent moat by well- preserved sluices. A group of buildings originally stood in the south-eastern quadrant of the island, their former existence indicated by a range of earthwork features in this area. A channel 20m wide and 2m deep runs eastward from the moat's eastward arm. This feature is not included in the scheduling as its date and function is not yet fully understood. To the immediate north of the large moated site are several building platforms, the stances for Medieval houses, and associated earthworks. To the west of the large moat is a secondary moated enclosure. The island within this second moat measures 60m north-south by 50m east-west. The western arm of the surrounding moat has been destroyed by the excavation of drains along the adjacent roadside. Elsewhere the moat has mostly been in-filled, but where it remains visible as an earthwork feature it is between 7m and 10m wide and up to 1m deep. To the north of this second moated site is an area of ridge and furrow cultivation. Ridge and furrow also survives to the east of the main moat, although here it does not survive well and is not included in the scheduling.	
A42	1007815	514272.25 418111.76	NORTH GARTH MOATED SITE AND ASSOCIATED ENCLOSURES	SAM	The monument is North Garth moated site. It includes a series of dry ditches enclosing a main moated site and a group of associated enclosures. The main moated site is situated at the northern end of the monument. The island defined by the moat is 40m long north-south and 20m east-west. It is enclosed by a moat 6m wide and 1m-1.5m deep. The northern arm of the moat and northern end of the island have been truncated by the modern road which now bounds the site to the north. The enclosures are situated to the south and east of the main moat. The surrounding ditches are 5m wide and 1m deep and define six enclosures. The ditches and moat appear to have served as much to drain this low-lying site as to defend and define it. An external earthen bank defines the western edge of the monument. It is 5m wide, 0.5m high and 150m long and is orientated north to south.	Medieval
A43	1007816	514030.45 420149.35	MANOR FARM MOATED SITE	SAM	The monument is the moated site at Manor Farm, East Halton. It includes a large moated site which is sub-divided by a series of internal ditches. It is thought that the site was originally more extensive and extended into the area now occupied by Manor Farm and the adjacent property; the extent of archaeological survival in these areas, if any, is not known and hence they are not included in the scheduling. The main enclosing moat is 10m wide and 3m deep. For almost the entire circuit of the moat an internal bank survives; this is between 1m and 1.5m high and 5m and 7m wide, an external bank also survives at the western boundary of the site, it is 1m high and 5m wide. The large roughly L-shaped island thus enclosed measures a maximum of 200m north-south by 180m east-west. It is sub-divided by a network of drainage ditches, now dry, which range between 5m and 10m wide and 1.5m deep. At the western end of this complex of drains a small internal moat is created where one of the ditches bifurcates. The island thus created is orientated north-south and measures 20m long by 7m wide. Slight earthworks visible across the remainder of the main moated island indicate the positions of the buildings which would originally have stood here. A ditch extends eastwards from the eastern arm of the main moat. It is not included in the scheduling as its date and association with the moat are not yet fully understood.	Medieval
A44	1008044	514445.54 417650.35	MANOR FARM MOATED SITE	SAM	The moated site at Manor Farm includes two moated sites, a smaller one located in the north-western corner of the larger one, and other associated features. The large moated site measures c.240m east-west by 180m north-south. The moat which defines this site is best preserved at the northern end where it remains water-filled. The northern arm is 10m wide and at least 2m deep. An outer bank, 0.5m high and 5m wide, flanks this arm of the moat. On the west side only the northern half of the moat is visible as an earthwork feature: here a 100m length is visible as a ditch 10m wide and 2m deep. This western arm of the moated site would originally have extended further to the south. Although this section has been in-filled it will survive as a buried feature below the present ground surface. The eastern arm of the larger moated site is similarly only visible in its northern half where it is 125m long, 10m wide and 2m deep. It also contains water but further south the moat has been in-filled. The southern arm of the larger site has also been in-filled but remains visible as as a slight hollow 0.5m deep running across fields to the south of the farmyard. Within the north-western corner of the larger moated site is the smaller moated site, the island of which is 50m square. The northern and western arms of this smaller moat are formed by the arms of the larger moat. The southern and eastern arms of the moat remain visible as earthworks up to 10m wide and 2m deep. They also retain water. Access to the island of the smaller site is provided by a causeway across the north-eastern corner of the moat. The remainder of the island of the larger moat (the area outside the smaller site) appears to have been sub-divided by further drainage ditches. One of these remains as a water-filled ditch which appears to extend the line of the eastern moat of the smaller site further to the south to link up with the southern outer moat. It does not, however, visibly link with the arm of the smaller moat, having been in-filled to provide a crossing point for an access track to the later farm. Manor Farm and its associated outbuildings are located in the centre of the island of the larger moated site. The farmhouse is a Grade II* Listed Building whilst adjacent stables and granaries are Listed Grade II. All buildings on the site are excluded from the scheduling although the ground beneath them is included.	Medieval
A45	1008686	515568.60 411236.60	SITE OF MEDIEVAL NUNNERY AND POST-DISSOLUTION HOUSE, NUN COTHAM	SAM	The monument includes the remains of the Medieval nunnery of Nun Cotham, a priory of Cistercian nuns founded in the mid-12th century and dissolved in 1539. The remains of the nunnery are overlain by those of a post-Dissolution house, garden, farmbuildings and other later features. Also associated with the site are a pair of fishponds and a post-Medieval windmill mound. The monument therefore includes a complex sequence of building remains and other earthworks which can be described in eight areas: a central area of building remains; a series of ditched and banked enclosures; a complex of water-control features; a group of rectangular closes; remains of a barn-like structure and other buildings; a group of farmyard earth-works and a windmill mound; a pair of rectangular enclosures; and a pair of fishponds. At the centre of the monument lies an area of building remains characterised by low earth-covered walls. The visible features are largely the remains of a house built on the site of the nunnery conventual buildings in the 16th and 17th centuries after the Dissolution. Archaeological remains of the nunnery will survive below these visible remains and it is thought that the later house utilised part of its original structure. (The principal nunnery buildings would have been laid out in ranges around a central cloister and it is thought that the church may have lain along its northern side. This would suggest that the succeeding house, with its E-shaped plan, occupied the site of the west range of the nunnery cloister with two extensions to the	Medieval

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					east; one overlying the site of the church nave (at the northern end) and the other overlying the site of the refectory (at the southern end)). On the same alignment is a square enclosure adjoining the building to the north. Immediately to the south are building remains of more recent appearance, representing structures which persisted in use beyond the occupation of the house. All of these remains lie within an enclosure defined on nearly all sides by a bank. Immediately to the east of the central area of building remains is a series of enclosures defined by ditches and banks. The ditches interconnect and are linked on the east to the New Beck Drain. Neatly cut and regular, they are considered to represent formal gardens laid out around the post-Dissolution house. On the north, adjoining both the ditched enclosures and the area of building remains, is a separate complex of water-control features, linked on the east to the New Beck Drain and to a channel on the west via a linear ditch. Within this complex, and immediately north of the site of the house, are a small group of linear features representing the remains of ornamental canals, indicating that this area also was part of the formal gardens of the post-Dissolution house. To the north of the water-control complex are traces of further banks and ditches, delineating rectangular closes on the edge of the occupied area. To the south of the central area of building remains, and west of the southernmost and largest garden enclosure, are further building remains. These include a large rectangular barn-like structure and a roughly circular mound on two sides of a small yard. Adjacent to the mound a small section of stone walling has been exposed. To the south-west are further remains of buildings, some only clearly discernible from the air. In the south-west corner are earthworks of a building platform and yard. These are bounded on the south by a bank and part of a hollow way running east-west. To the north is a circular mound approximately 7m in diameter representing the site of a windmill. These remains are surrounded on the north and west by an area of shallow earthworks representing quarrying. This area is bounded on the north by a low bank, roughly aligned with the moated enclosures and other water-control features, representing an old field boundary. On the west it is partly bounded by the remains of a bank, which also defines the western edge of the monument. In the south-east part of the site is a further area of earthworks, adjoining and aligned with the main features of the monument. In the southernmost part of the site is a pair of rectangular enclosures defined by ditches and banks. Adjacent to these, in the easternmost corner of the site, is a pair of linear ponds aligned south-west/north-east and bounded by banks. The smaller, later pond, to the east, is connected to the New Beck Drain by a cut in the bank approximately 2m wide. The larger pond is overlain by a causewayed track running from the hollow way in the south-west of the site to a bridge (outside the area of the scheduling) over the Drain. Excluded from the scheduling are the fences which surround and in places cross the monument, although the ground beneath these them is included.	
A46	1011198	511741.33 418986.01	THORNTON ABBEY AUGUSTINIAN MONASTERY: GATEHOUSE, PRECINCT, MEDIEVAL ROAD AND BRIDGE, MOAT, FISHPONDS, POST-DISSOLUTION COLLEGE AND SCHOOL, AND HOUSE	SAM	Thornton Abbey is situated in Lindsey, south of the Humber estuary, and was formerly in the county of Lincolnshire. The monument comprises a single area which contains the late fourteenth century gatehouse and barbican of the Augustinian monastery, an outer precinct surrounded by a moat and containing the earthwork remains of a wide variety of ancillary features and buildings, the walled inner precinct containing the foundations of the abbey church and other cloister buildings and the buried remains of additional structures, the site of the Medieval road that predated the abbey, the remains of the fourteenth century bridge that underlie modern College Bridge, and a large number of monastic fishponds. In addition, after the Dissolution of the Monasteries, Henry VIII refounded the abbey as a college of secular priests and a school for fourteen boys, re-using buildings of the former monastery. This college was suppressed by Edward VI in 1547 and demolished by Sir Vincent Skinner in 1610. Out of the remains, Skinner built a stately house which subsequently collapsed. The site of this house also lies within the inner precinct. The best preserved standing remains are of the abbey gatehouse. This is a three storey structure built largely of brick and originally rendered with white mortar. It was built in the 1360s and enlarged and defended after licence to fortify was granted to the abbey in 1382 and appears to have had an administrative function since it contained the Abbot's exchequer and courthouse. Three floors were built above a central gate-passage. The first housed a great hall with a fireplace and an oriel window. The second and third contained a complex of passages and rooms and included a large room on the second floor originally divided by wooden partitions. In addition there were eight privies and a latrine. The gate-passage underneath is vaulted and leads at the rear to two original oak gates which date to the fourteenth century. The front of the gatehouse is richly ornamented but has lost most of its battlements on which originally stood statues of men-at-arms and artisans. Other statues stood in niches on the front wall and a number of these survive. Approaching the gatehouse from the front is a barbican consisting of two parallel brick walls 38m long and ending in round turrets. This was built c1382 and is believed to have ended in a drawbridge which led over a now filled-in extension of the moat. It incorporates the remains of an earlier bridge across the moat. Wing-walls flank the gatehouse to north and south and turn at right-angles to enclose the inner precinct. The moat is at its widest in front of the gatehouse where it measures c 20m across and is still partially water-filled. It extends for c 300m to north and south then turns east for c 400m to meet East Halton Beck, enclosing a precinct of c 29 hectares. Fed by the moat are at least two separate groups of fishponds. The northernmost group lies north-east of the church. The southernmost lies outside the south-east corner and consists of a small detached pool adjacent to a group of three small pools and one larger surrounded by a moat. An arm of the main moat which crosses the precinct north of the gatehouse may also have served as a fishpond, as may a similar ditch crossing south of the cloister buildings. A number of other ditches can be seen crossing the precinct and are part of the system of water-management works which served the monastery. An extensive survey of the earthworks visible in both the inner and outer precincts indicates the survival of walled or ditched enclosures and the foundations of many buildings of various sizes in addition to smaller enclosures or pens. None of these have been excavated and so their functions cannot yet be precisely determined. However, they will undoubtedly conform to the usual range of monastic ancillary buildings and include, for example, storehouses, workshops, and barns. Documentary evidence already points to the existence at Thornton Abbey of barns, granaries, a brewhouse and bakehouse, an extensive guesthouse and possibly also a mill. It is also clear that the home grange (or chief monastic farm) lay in the north of the area of the scheduling. Many of the other documented buildings will lie within the walled inner precinct which also contained the abbey church and cloister buildings. Although little remains standing of the cloister buildings, the foundations remain and were excavated by Charles, first Earl of Yarborough in the 1830s. Much of the ground-plan was thus uncovered and a typical monastic layout revealed. However, excavation was not carried out below the level of the latest remains and so details of the layout of the first cloister and church, built at the monastery's foundation, are, at present, not understood. The earliest visible remains are of the vaulted undercroft of the east cloister range. These date to the early thirteenth century and indicate a	Medieval

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
					range of small rooms, one of which has been interpreted as the warming house. These stood beneath the first floor dorter or monk's dormitory. A passage or slype separated the warming house from the rest of the range until it was blocked in the fifteenth century or later. North of the undercroft are the late thirteenth century remains of the vestibule and a narrow room interpreted as the parlour, where necessary conversation was permitted. The vestibule leads into the chapter house which is still partially standing. This octagonal structure was begun in 1282 and was floored in 1308. The surviving walls are decorated with window tracery which is assumed to have mimicked actual windows in the sides which are no longer standing. The remains of the stone seat which lined the walls of the chapter house can be seen on either side of the entrance into the vestibule. The north range of the cloister comprised, as was usual, the abbey church. The surviving foundations indicate a late thirteenth century building with alterations made to the nave in the early fourteenth century when another aisle, the southern, was added. A chapel dedicated to St Thomas of Canterbury (Becket) was built off the north side of the presbytery at this time and a Lady Chapel was built behind the high altar later in the same century. The early fourteenth century alterations to the nave were made at the same time as the building of two new cloister ranges, the west and south, begun in 1322-3. These almost certainly replaced earlier buildings, the foundations of which will survive beneath the visible remains of the later. The fourteenth century west range consisted of a vaulted undercroft of seven double bays. This would have been used for storage and the first floor rooms above would have been either lay-brothers' accommodation or possibly the lodgings of the earlier abbots. A second roughly identical undercroft, formed the ground-floor of the south range which would have housed the monks' frater or refectory on the first floor. The remains of other cloister buildings have not yet been excavated but these will include an infirmary, often found to the east of the east range adjacent to the abbey cemetery, kitchens which were usually built to the south of the south range, and the reredorter or latrine which usually adjoined the dorter (dormitory). Prior to the foundation of the abbey, a road ran through the area that was to become the monastic precinct. When the monastery was established, this road was diverted round the north side of the precinct along its current route but the remains of the pre-monastic road will survive in the precinct. In addition, where the later road crossed East Halton Beck a bridge was built and has been rebuilt on the same site down to the present day. Incorporated into the modern structure are the substantial remains of a fourteenth century bridge. The monastery was founded as a priory in 1139 by William LeGros, Count of Aumale, and was raised to the status of abbey in 1148. It was colonised by twelve black canons from the Augustinian priory at Kirkham in North Yorkshire and became one of the richest Augustinian houses in the country. As noted above, after its suppression in 1539, Henry VIII refounded it as the College of the Holy Trinity whose establishment was part of the King's plan to create new dioceses and secular schools whose purposes included the ministration of the sacraments and the education of young boys. The college lasted only six years, however, then the gatehouse and a number of other buildings were granted to Henry Randes, Bishop of Lincoln, who went on to acquire the whole site freehold. In 1575, his son sold it to Sir Robert Tyrwhitt whose own grandson sold it in 1602 to Sir Vincent Skinner. An account of Abraham de la Pryme, written in 1692, indicates that Skinner demolished the buildings and from the stone built a house on the west side of the abbey plot within the moat; that is, inside the abbey precinct. This house is said to have collapsed without visible cause. Skinner then built another house on the site. Trenches north-east of the gatehouse, dug when building stone was removed from the site, are thought to indicate the position of one of the Skinner houses. In 1720, the site passed to Sir Robert Sutton, in 1792 to George Uppleby and, in 1816, to Charles, First Lord Yarborough whose son carried out the excavations of the cloister ranges. The gatehouse and cloister buildings have been in State care since 1938. They and the Barbican, precinct walls, remains of the church and Abbot's Lodge are Grade I Listed, while the coachhouse and the ruins of the south precinct gateway, the garden and orchard walls and the bridge are Listed Grade II. A number of items within the area are excluded from the scheduling though the ground beneath is included. These are the buildings of Abbey Lodge Farm (Abbot's Lodge), all modern walling and fencing, the surfaces of all paths and drives and all English Heritage fixtures and fittings. In addition, only the Medieval fabric of College Bridge is included in the scheduling. The modern fabric, and the surface of the modern road which crosses the bridge, are excluded.	
A47	MLS1621	514800 416800	HOLTHAM DMV, E OF WESTFIELD FARM	MON	Medieval and Post Medieval settlement & shrunken Medieval village earthworks, North Killingholme. Mentioned in Domesday. Air photo mapping and interpretation was carried out by Alison Deegan in 2008, in advance of proposed A160-A180 improvements. Earthwork remains to the south of Vicarage Farm were plotted from 1946 and 1947 RAF photographs. They were interpreted as Medieval and post-Medieval settlement remains - platforms, ditches, drains and/or field boundaries. Part of the same area was under grass on Google Earth 2008 photography, so some earthworks may have survived. Earthworks south of Vicarage Farm visible on LIDAR survey, 2006. 7 colour photographs were taken of the extant earthworks in area TA147173 during a site visit. Air photo mapping and interpretation of cropmarks and earthworks in the Vicarage Farm area was carried out by Air Photo Services Ltd in 2011, in advance of a proposed onshore cable route.	Medieval
A48	MLS1624	514518 417621	MOATED SITE, MANOR FARM	MON	Moated site, Manor Farm, three sides of water filled moat, N side c. 230m. E-W, E side c. 115m. N-S, on W side moat encloses island c. 50M. square. Narrow pond to S may represent former extension of moat. Present Manor House dates from 16th cent., moat largely ornamental. Site lies 300m. N of St. Deny's Church; OS 25in. resurvey, 1962). This site was listed in a desk-based assessment produced by AC Archaeology in 1999. No additional information. An archaeological watching brief was carried out in 2003 during the excavation of four test pits. They were opened against the exterior elevations of the walls of North Killingholme Manor, to test the depth and condition of their foundations. Each pit was approx 1m square and 0.6m deep, and all four pits exposed a clay-loam topsoil over a chalk-flecked, mid ginger-brown clay, into which the construction trenches for the wall foundations had been cut. The clay appeared to be redeposited, perhaps as the result of site preparation for the construction of the house, or from a much earlier date, to raise the level of the moated platform. The construction of the foundations in each of the four trenches was found to be different, either all brick-built or brick on chalk blocks. The west wing is clearly the product of a single building rogramme, whereas the earlier east wing appears to be the product of several construction phases, and there is extensive evidence for the reuse of reclaimed materials in the east wing. It is suggested that the east end of the east wing with its chimney stack was built at one time, with the south wall to the east of the eastern window at another; or that much of the south wall was rebuilt, or refaced, with the replacement/	Medieval

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					construction of the first floor. None of the test pits produced any archaeological artefacts. The setting of this monument was considered as part of a visual impact assessment relating to the proposed URSA Glass Wool factory development in September 2008. The report concluded that there was little or no intervisibility between the monument and the development area.	
A49	MLS1625	514600 416900	MEDIEVAL POTTERY, VICARAGE FARM, 1965	FS	TA146 169. Medieval sherds from trench for gas pipeline, include Stamford ware, Medieval shelly ware, gritty ware, smooth hard ware. 14th-15th century glazed and 17th century brown glazed.	Medieval
A50	MLS17729	Unknown	SITE OF MEDIEVAL CHAPEL, KILLINGHOLME (NORTH OR SOUTH)	MON	A manorial chapel at Killingholme is mentioned c. 1320. The abbott and convent of Newhouse were licenced to celebrate in a chapel there. This chapel could have been in either North or South Killingholme. Location currently unknown.	Medieval
A51	MLS19827	517500 416400	POSSIBLE MEDIEVAL FARMSTEAD	MON	Farmstead or toft of Enchetun, north east of Houlton's Covert. A possible area of Medieval settlement in area TA175164, north east of Houlton's Covert. The position is suggested by Cameron (Cameron, K, 1991, The Place Names of Lincolnshire part 2, 199) from fieldname evidence. A farm or toft was mentioned in the 12th century as Enchetun or Enketoft. Its position may correspond to the small close shown on Russell's pre-enclosure map of Killingholme, on the edge of Summergates.	Medieval
A52	MLS20098	515390 418037	OPEN FIELD SYSTEM, NORTH KILLINGHOLME	LND	Medieval ridge and furrow, North Killingholme parish. During a geophysical survey by GSB Prospection in advance of the Humber Link Pipeline, linear trends were detected east of Rosper Road. They may represent former ridge and furrow. An area of Ridge and Furrow was identified by Northern Archaeological Associates during a walkover of the route of a 400kv electricity overhead line. Located within the wood known as Burkinshaw's Covert, the trees had been felled along the corridor where pylons were to be constructed. About 35 furrows occurred at intervals of 6m, and survived to a depth of between 0.35m and 0.55m. After being recorded, they were largely destroyed by groundworks associated with an access road, although the furrows could be seen to continue into the unaffected parts of the wood. A series of positive linear anomalies were detected during a geophysical survey by Stratascan in 2004. Located in survey area 3 (TA150 192), the NNW-SSE oriented anomalies were thought to have been caused by agricultural activity. An extensive magnetometer survey (21 ha) was carried out by GSB Prospection at East Halton in April 2008. This was done in advance of a proposed glass wool factory. Ridge and furrow, oriented NE-SW, was detected within North Killingholme parish in Area 10, TA146189 and TA 146188. A prominent headland was detected immediately west of the ridge and furrow in the southern parcel, and could be seen to continue southwards into Area 11, TA146187 . A topographical (earthwork) survey was carried out by Northamptonshire Archaeology in 2008, over the route of a proposed access road to the URSA glass wool factory. The survey coincided with the geophysical survey areas 10 and 11 (above). Height data was collected using differential GPS, recording electronically the tops and bases of all slopes. In the northern two fields, a system of ridge and furrow ploughing was aligned north-east to south-west, up to 122m in length. The average spacing between ridges was 8m, and the maximum height was 0.4m. West of this alignment was another field system, orientated north-west to south-east. The ridge spacing was similar, but the height was shallower, up to 0.3m. No headland was visible between these two alignments.In the southern field, two distinct patterns were also visible. On the eastern side, a splayed 'fan' pattern of ridges and furrows butted against a north-south alignment, which may have represented the southern continuation of the western alignment to the north. In this fied, the ridge spacing was denser at c.6.5m with, and the height was shallower at c.0.2m. The earthworks were partially damaged by landscaping, cattle erosion and the construction of an electricity pylon. This monument was considered as part of an impact assessment relating to the proposed URSA Glass Wool factory development, September 2008. The report discusses the impact of the western access road, and recommends preservation by record in order to mitigate the effect of the development. AP mapping and interpretation was carried out by Alison Deegan in 2008, in advance of proposed A160-A180 improvements. North Killingholme was on the edge of the assessment area, but ridge and furrow was plotted in fields centred to TA14371690, TA14501669, TA14761685 and TA13171602. All survived as earthworks on APs taken in 1946 and 1947, but had been leveleld by 2008. An extensive geophysical survey east of Rosper Road was carried out by GSB Prospection Ltd in 2011. In survey Field 1 and Field 5 (centred to TA166184 and TA167182), parallel magnetic trends were detected. They indicated at least two phases of cultivation, one north-south, the other east-west. Another extensive geophysical survey through North Killingholme was carried out by Pre-Construct Geophysics in 2011. Clear magnetic anomalies associated with Medieval ridge and furrow were detected in Survey Block 121, centred to TA146 185. This area was included in the Inner Humber RCZAS NMP. Numerous units of Medieval and possibly post Medieval ridge and furrow were identified and digitially plotted from aerial photographs. This included those in the vicinity of Burkinshaw Covert and Chase Hill Wood (as marked on the OS 1st edition map) which had previously been plotted, as well as newly recorded areas which are described in records MLS26160 to MLS26164.	Medieval
A53	MLS20104	515996 416693	OPEN FIELD SYSTEM, SOUTH KILLINGHOLME	LND	Ridge and furrow, South Killingholme parish. Several units of Medieval ridge and furrow were digitally plotted during the Inner Humber RCZAS NMP. North-south oriented ridge and furrow, located west of Rosper Road, was detected by a geophysical survey undertaken by GSB Prospection, 2000. This site was listed in a desk-based assessment produced by AC Archaeology in 2006. No additional information. Air photo mapping and interpretation was carried out by	Medieval

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					Alison Deegan in 2008, in advance of proposed A160-A180 improvements. Extensive areas of ridge and furrow in South Killingholme parish were plotted from 1946 and 1947 aerial photographs, when some still survived as earthworks. Very narrow and straight ridge and furrow was interpreted as post-Medieval, for example in the area centred to TA13291500. A comparison with air photos from 1971 showed that much had been levelled.A possible Medieval plough headland could be seen as a broad, faint parchmark on a 1967 air photograph. It was orientated NNW-SSE, and extended over a distance of 375m between TA14721566 and TA14931535 . It was not respected by furrows seen on other photographs of the same field, but it may underlie them. Supplementary air photo mapping and interpretation was carried out by Alison Deegan in 2009, in advance of proposed A160-A180 improvements (Option 7). Ridge and furrow to the east of Rosper Road was mapped from a 1941 RAF aerial photograph. It was narrow, and considered to be post Medieval. Medieval and/or post-Medieval ridge and furrow to the west of Rosper Road was mapped from five aerial photographs dated 1946-1975. Most has now been destroyed by the oil refinery complex. An extensive geophysical survey carried out by GSB Prospection Ltd in 2011 detected several areas of parallel linear anomalies - likely traces of Medieval ridge & furrow cultivation. The orientation these anomalies were often in two directions, suggesting different phases of cultivation. These anomalies were east of Rosper Road, and south of Station Road, centred to TA170173, TA168180, TA171181. Another extensive geophysical survey, carried out by Pre-Contruct Geophysics in 2011, detected linear ridge & furrow type anomalies in the following areas: TA151153 (E-W), TA148155 (E-W), TA145157 (E-W), TA144159 (E-W), TA144162 (E-W), TA143164 (E-W), TA146165 (N-S, associated with moated site HER1606). North-west - south-east aligned ridge and furrow was observed as low earthworks at TA15871616 during a site visit by Humber Field Archaeology in April 2013. It was also detected by a geophysical survey, commissioned as part of the same work. Medieval ridge and furrow showed as cropmarks in area TA 1450 1523, 2011. The irregular spacing indicated a Medieval origin. The field containing the features was shown as subdivided on historic mapping until at least 1946. Several of these units of Medieval ridge and furrow were digitally plotted from aerial photographs during the Inner Humber RCZAS NMP. An additional area of NW-SE ridging was recorded at TA 1607 1737 from aerial photographs taken in 1947. It has since been levelled by the oil refinery.	
A54	MLS20424	516572 417336	MEDIEVAL DITCH, W OF ROSPER ROAD	MON	An archaeological evaluation on land east of Rosper Road was carried out by Archaeological Project Services in May 2006, in advance of proposed stores, offices and workshops for Lindsey Oil Refinery. In Trench 61 in the south-western corner of the site, a shallow ditch was recorded. Northwest-southeast aligned, it was 1 m wide by 0.15 m deep. A single sherd of 13th-15th century Toynton Ware pottery was found in its fill. The ditch may have been a drainage feature or a small scale field boundary.	Medieval
A55	MLS22693	514729 416381	MEDIEVAL DITCH AND POTTERY, NORTH OF GREENGATE LANE	MON	An archaeological evaluation was carried out by Archaeological Research Services Ltd on land north of Greengate Lane, 2012. This was in advance of a residential development. Trench 3 was located north of Lancaster Drive, centred to TA14721638. A large east-west orientated ditch was recorded, measuring c. 6 m wide. The upper fill contained modern plastics, indicating that it was still a landscape feature in recent times. The firm clay basal fill contained no pottery finds, but a fragment of charcoal was later radiocarbon dated to 1154-1255 AD. Within Trench 2, 20 m to the north, 15 sherds of 13th century pottery were recovered from the subsoil. Trench 4 was located c. 40 m west of Trench 3. The large Medieval ditch was clearly visible in the centre of the trench, but flooding prevented any further investigation there. The ditch and pottery are probably associated with the former Medieval moated site in the field to the north. An archaeological strip, map and sample exercise was carried out by ARS Ltd during the groundworks for the residential development north of Greengate Lane, 2013. As part of Phase 4 of this work, an area to the east of Trench 3 was excavated in order to record and sample a full section across the E-W Medieval ditch. The ditch was substantial, measuring 4.75 m wide and 1.10 m deep. It had sloping, concave sides and a flat base. There were three fills. The basal fill was a fine yellow-brown clay with some silt. Several Medieval pottery sherds were recovered, the earliest being a local shell-tempered ware of the mid 12th century. The second fill deposit was found to contain much animal bone, mainly sheep but with some horse and cow. The associated finds were post-Medieval, including 3 sherds of pottery from the 17th - 18th century. The upper fill contained English porcelain of a similar date, along with later sherds of the mid 19th - 20th century. Eight environmental samples were taken from the base to the top of the ditch. In the basal fill, a freshwater species was present alongside damp-loving species, suggested that the base of the ditch was water filled most of the time. Two upper fills contained only land snails.	Medieval
A56	MLS22842	514756 416385	MEDIEVAL DITCH, ORCHID CLOSE	MON	An archaeological watching brief was carried out by ARS Ltd during the groundworks for a residential development north of Greengate Lane, 2013. A Medieval ditch was recorded within housing plots 28 and 29. The linear feature cut into the subsoil, and was aligned NW-SE. It measured c. 0.70 m wide and 0.30 m deep. The single fill deposit was a dark brown-grey clay silt, which contained 3 sherds of Medieval pottery. This feature was interpreted as a small drainage ditch or field boundary, left open for some time.	Medieval
A57	MLS22843	514727 416416	MEDIEVAL DRAINAGE GULLIES AND POTTERY, ORCHID CLOSE	MON	A large amount of Medieval pottery and a network of drainage gullies was recorded during an excavation at Orchid Close, 2013. An archaeological strip, map and sample exercise was carried out by ARS Ltd during the groundworks for a residential development north of Greengate Lane, 2013. Quantities of Medieval pottery and a series of drainage gullies were found within stripped Areas 1 and 2, in the area of housing Plots 17 - 21. No archaeological features were observed within Area 1, but 51 sherds of Medieval pottery were collected from the subsoil. They were later dated to between 1230 and 1350 AD, and suggested some considerable activity in the area during that period. Area 2 was located 5 m south of Area 1. Again, the subsoil contained 13th century pottery, along with ceramic building material, a disarticulated sheep skeleton, and other Medieval and post-Medieval pottery. A series of linear gullies were also recorded, cutting into natural clay till. They intersected each other at varying angles, but the main alignment within the stripped area was a T shape. A	Medieval

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					NE-SW gully was 0.87 m wide and 0.21 m deep. The silty clay fill incorporated some Medieval pottery. The perpendicular gully was slightly narrower, only 0.06 m deep, and did not contain any finds. There was also an E-W gully that intersected the NE-SW one, and appeared to be contemporary.	
A58	MLS26132	516068 417342	MEDIEVAL RIDGE AND FURROW, CAWBER FARM, SOUTH KILLINGHOLME	MON	A unit of Medieval ridge and furrow is visible as earthworks on aerial photographs taken in 1947 (1) in the vicinity of Cawber Farm as marked on the OS 1st edition map. The ridging runs NW-SE and has since been levelled by the oil refinery. The site was digitally plotted from aerial photographs during the Inner Humber RCZAS NMP.	Medieval
A59	MLS26133	517242 418196	Medieval ridge and furrow, Station Road, South Killingholme	MON	The remains of Medieval ridge and furrow cultivation is visible as earthworks on aerial photographs taken in 1941 in the vicinity of Barrage Balloon site described in MLS21225. The ridging runs roughly N-S and was partially levelled by 1946. A smaller area of ridging lies to the east at TA1691 1809 orientated SW-NE. The features were digitally plotted from aerial photographs during the Inner Humber RCZAS NMP.	Medieval
A60	MLS26160	516838 418342	MEDIEVAL RIDGE AND FURROW, NORTH KILLINGHOLME	MON	Medieval ridge and furrow is visible as low earthworks and cropmarks at TA168183 on aerial photographs taken in 1946. Cultivation marks are also visible as bare soil marks on aerial photographs in the adjacent field cutting across the Iron Age/RB settlement described in MLS21567. They were digitally plotted during the Inner Humber RCZAS NMP project and have since been levelled.	Medieval
A61	MNL2238	517376 413622	RIDGE AND FURROW IN IMMINGHAM	LND	Aerial photographs from the late 1940s show earthworks of Ridge and Furrow forming a 500-1000 m buffer around the settlement core with additional areas around the settlement of Roxton - TA16581286, TA16791347, TA17801264 and TA16431190. The furlongs have a sinuous profile, lengths ranging from around 50 m to 600 m and ridge widths of around 6 m to 10 m. The modern field boundaries respect the former field system for the most part, although the longer furlongs have been split by perpendicular hedges. There are no clear indications of any Ridge and Furrow, either extant or levelled, within 2.5 km to 3 km from the modern coast. Aerial photographs from 2000 show small isolated areas of Ridge and Furrow earthworks around the parish, however a large and significant group is extant in and around the golf course running from TA16391498 to TA17771533. LIDAR imagery from 2020 confirms that the earthworks at the golf course are still extant.	Medieval to Early Post Medieval
A62	MLS1613	515634 415896	MED/PM SETTLEMENT AND SMV TRACES, SOUTH KILLINGHOLME	MON	Medieval and Post Medieval settlement and shrunken Medieval village traces, South Killingholme. Mentioned in Domesday. Air photo mapping and interpretation was carried out by Alison Deegan in 2008, in advance of proposed A160-A180 improvements. RAF air photographs taken in 1947 showed Medieval and/or post-Medieval earthworks in area TA14921632. A rectilinear enclosure, ditches and ridge and furrow could be seen. This area is now largely built over. To the south, Medieval ditches, banks, platforms, hollows, field boundaries and ridge and furrow survived as earthworks in 1946. Some were built over when the A160 was constructed, but other components survive in small fields.	Medieval to Post Medieval
A63	MLS1620	514552 417339	MED/PM SETTLEMENT & SMV EARTHWORKS, NORTH KILLINGHOLME	MON	Medieval and Post Medieval settlement & shrunken Medieval village earthworks, North Killingholme. Mentioned in Domesday.	Medieval to Post Medieval
A64	MLS20275	516568 415838	MEDIEVAL FINDS, EAST END FARM	FS	A metal detector survey was carried out in June 2005 by the Grimsby and District Metal Detector Club on land adjacent to the ConocoPhillips refinery. The land was part of a tree planting scheme. The majority of the finds were of Roman date [see SMR 20152], but a few were Medieval. Two were hammered silver coins. One is a farthing of Edward I, 1300-1335. The other is a clipped episcopal penny of the Archbishop of Rotherham, 1485-1507 (North Number 1726/1). A Medieval copper alloy rowel spur was also found.	Medieval to Post Medieval
A65	MLS26145	518120 417210	UNDATED EARTHWORKS, POSSIBLE SALTERN, SOUTH KILLINGHOLME	MON	A linear series of curvilinear mounds with associated hollows are visible as cropmarks on aerial photographs taken in 1947 . They range in size from 22m to 54m across and are of uncertain date and function but may be historic saltern mounds. The site was digitally plotted during the Inner Humber RCZAS NMP project. The site has since been destroyed by the modern coal terminal.	Medieval to Post Medieval
A66	MLS26146	517845 417126	HISTORIC ENCLOSURE AND	MON	A large rectilinear multiple bank and ditched enclosure with attached linear is visible as cropmarks on aerial photographs taken in 1947 in a field to the north of Humber Road. The enclosure is 112m by 55m in size with the drain running roughly southwards from its narrowest side. The features are probably of	Medieval to Post Medieval

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			DRAIN, SOUTH KILLINGHOLME		Medieval or later in date and are possibly flood defences or drains. The site was digitally plotted during the Inner Humber RCZAS NMP project. The site has since been destroyed by the modern coal terminal.	
A67	MLS26147	517768 417017	HISTORIC FIELD BOUNDARY, SOUTH KILLINGHOLME	MON	Two parallel banks are visible as cropmarks on aerial photographs taken in 1947 cutting diagonally across the end of a field to the north of Humber Road. The features appear to continue the line of a boundary marked on the 1st edition map which runs divergent to (and therefore may predate) the post Medieval field system in the area. The site was digitally plotted during the Inner Humber RCZAS NMP project.	Medieval to Post Medieval
A68	MLS20121	516505 417943	HISTORIC HEDGEROW, PARISH BOUNDARY	HED	A desk-based assessment carried out by AC Archaeology in 1999 identified the hedgerow between South Killingholme and North Killingholme as historically siginificant under Criteria 1 of the Hedgerow Regulations (i.e. a parish boundary). A walkover survey during the same year recorded a positive boundary formed by a 4m high dense hedgerow, with mature trees and bushes, along East Middle Mere Road (area TA164178). An archaeological desk-based assessment was carried out by Northern Archaeological Associates in advance of the proposed 400KV overhead line between the Conoco power station and the Killingholme electricity substation. A hedgerow which runs E-W to the south of East Middle Mere Road coincides with the parish boundary. The same boundary position appears to be shown on the enclosure map of 1776-9, and may be Medieval in origin. An archaeological desk-based assessment carried out by AC Archaeology in connection with the Immingham CHP pipeline notes that the parish boundary between North and outh Killingholme only exists as an open ditch. The pipeline route is in the same vicinity as the 400KV line above. Two test pits were hand dug across the parish boundary in 2014 on behalf of Able UK Ltd. An undated bank and ditch were recorded in the westernmost trench.	Medieval to Modern
A69	MLS1617	Unknown	STUKELEY'S 'GREAT CASTLE' KILLINGHOLME AREA	FS	The antiquarian William Stukeley mentioned 'a great castle' at Killingholme. It may have been a substantial manor house on one of the moated sites in North or South Killingholme. He also recorded 'occasional finds of Roman pottery and coins'. William Stukeley's mention is short: "A mile east of Thornton are the ruins of another great castle called Kelingholme". Currently, location is unknown.	Roman to Post Medieval
A70	MLS20569	516116 418737	HISTORICALLY IMPORTANT HEDGEROWS, NORTH KILLINGHOLME PARISH	HED	A desk-based assessment was carried out by AC Archaeology in 1999, and incorporated into Environmental Statements for both the Humber Link Pipeline Project and the Energy Corridor Gas Pipeline. Several extant field boundaries along the pipeline route appeared on the 1779 North Killingholme enclosure map; this is one of the criteria to identify an 'important' hedgerow under Schedule 1, Part II of the Hedgerow Regulations. All were visited as part of the walkover survey associated with the desk-based assessment : Plot 24 (area TA15691943) Positive boundary formed by a deep water-filled drain with a managed hawthorn hedgerow on the NE side. Boundary shown on maps pre 1840. Plot 26 (area TA15881923) Positive boundary formed by a ditch with occasional trees on SE side. Boundary shown on maps pre 1840. Plot 28 (area TA15901914) Positive boundary formed by a hawthorn hedgerow. Boundary shown on maps pre 1840. Plot 29 (area uncertain) Positive boundary formed by a ditch. Boundary shown on maps pre 1840. Plot 30 (area TA16241901) Boundary shown on maps pre 1840. Plot 33 (area TA16311857) Positive boundary formed by very substantial 2m high hedgerow with trees. Boundary shown on maps pre 1840. Plot 34 (area TA16401842) Positive boundary formed by a slight bank with occasional trees. Boundary shown on maps pre 1840. Plot 35 (area TA16491826) Positive boundary formed by a post & wire fence on a slight bank ?? Boundary shown on maps pre 1840. Historic hedgerows shown on map of archaeological features within the DBA	Post Medieval
A71	MLS20570	517131 417262	HISTORICALLY IMPORTANT HEDGEROWS, SOUTH KILLINGHOLME PARISH	HED	A desk-based assessment was carried out by AC Archaeology in 1999, and incorporated into Environmental Statements for both the Humber Link Pipeline Project and the Energy Corridor Gas Pipeline. Several extant field boundaries along the pipeline route appeared on the 1779 South Killingholme enclosure map; this is one of the criteria to identify an 'important' hedgerow under Schedule 1, Part II of the Hedgerow Regulations. All were visited as part of the walkover survey associated with the desk-based assessment : Plot 37 (area TA16501805) Positive boundary formed by a c. 2m high dense hedgerow, narrow verge and Rosper Road. Boundary shown on maps pre 1840. Plot 40 (area TA16651777) Positive boundary formed by a hawthorn hedgerow. Boundary shown on maps pre 1840. Plot 41 (area TA16701755) Positive boundary formed by a hawthorn hedgerow with pipe racks running parallel on S side. Boundary shown on maps pre 1840. Plot 43 (area TA17181689) Positive boundary formed by verge and Rosper road. Boundary shown on maps pre 1840. Plot 44 (area TA17611688) Positive boundary formed by a hawthorn hedgerow and a deep water-filled ditch. Boundary shown on maps pre 1840. Plot 45 (area TA17481669 ?) Positive boundary formed by a hawthorn hedgerow and a deep water-filled ditch. Boundary shown on maps pre 1840. Plot 46 (area TA17371666 ?) Positive boundary formed by a water-filled ditch. Boundary shown on maps pre 1840. Historic hedgerows shown on map of archaeological features within DBA.	Post Medieval
A72	MLS21101	516849 416980	CROPMARK FIELD BOUNDARY	MON	Cropmark, visible on an aerial photograph. Apparently a post Medieval boundary. Part of a field boundary measuring approx 83m visible on the Ordnance Survey 25" 1st edition map of 1887.	Post Medieval

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
A73	MLS21316	514509 416603	POSSIBLE MILL MOUND, EAST OF EAST HALTON ROAD	MON	Air photo mapping and interpretation was carried out by Alison Deegan in 2008, in advance of proposed A160-A180 improvements. A possible post-Medieval mill mound was visible as a soilmark and cropmark on air photographs taken in 1976 and 1984. It was located on the western side of South Killingholme village, and could also be seen as a slight earthwork on LIDAR images from 2006. It appeared to overlie, or lie between, blocks of ridge and furrow. Magnetic anomalies centred to TA14521661 were detected during a geophysical survey carried out by Pre-Contruct Geophysics in 2011. A group of ditches and possible pits were located on the northern boundary of the field. To the east at TA14531661 was a small, partially resolved circular ditch 15m in diameter, with a cross-shaped central feature. This was interpreted as the site of a former windmill. Note that the circular ditch with a central cross detected by a geophysical survey in 2011 (Ref. 2 above) is located about 30m north-east of the cropmark ring-ditch that appears to coincide with a mound visible on Lidar. However, another pit on the geophysical survey appears to be centred on the mound. It is possible that there were two successive mills on different sites.	Post Medieval
A74	MLS21598	515848 415650	BAPTIST BURIAL GROUND, BAPTIST CHAPEL LANE	MON	A burial ground to the south of the Baptist chapel is shown on an Ordnance Survey map dated 1887. 'Baptist Chapel' with 'B.G.' (Burial Ground) to the south of the chapel, printed and shown on the Ordnance Survey 25'' first edition map of 1887. 'Chapel' with 'B.G.' printed and shown on the OS second edition map of 1908.	Post Medieval
A75	MLS22841	514698 416335	POST MEDIEVAL DITCH, ORCHID CLOSE	MON	An archaeological watching brief was carried out by ARS Ltd during the groundworks for a residential development north of Greengate Lane, 2013. A linear ditch or watercourse was revealed within housing plots 1 and 2. The linear feature cut into the subsoil, and was aligned NW-SE. It measured c. 3.36m wide and 0,80m deep. The primary fill was a dark brown-grey clay, which contained a single fragment of ceramic building material. This had a wide date range, from the late 16th century to the 20th century. An upper fill of silty clay contained no finds. Both fills indicated that the drainage ditch or watercourse contained slow-moving or stagnant water. A small fragment of Roman brick or tile was also found in the topsoil in this area.	Post Medieval
A76	MLS26153	517383 418098	POST MEDIEVAL POND, SOUTH KILLINGHOLME	MON	A pond is marked at this location on the OS 1st edition map. It is visible as an earthwork on aerial photographs taken in 1946 and was digitally plotted during the Inner Humber RCZAS NMP project. The site has since been levelled but a low depression is still visible on lidar imagery.	Post Medieval
A77	MLS5146	515494 415673	MANOR FARMHOUSE	MON	Manor farm' and nine associated buildings are printed and shown on the Ordnance Survey 2004-2011 dataset. The original farmstead plan is visible on the 1887 ans 1907 1st and 2nd edition 25'' Ordnance Survey maps.	Post Medieval
A78	MLS19787	515004 416380	THE OLD CROSS KEYS (SITE OF)	MON	Inn' printed and shown on the Ordnance Survey 25'' first edition map of 1887. The building is shown but not named on the second edition map. The North East Lincolnshire Council Library Service collection of images includes a late 19th/early 20th century images of the Cross Keys Inn. It was a thatched, single storied timber framed building, with a central brick chimney stack. By the time of this photograph, the building had been encased in brick.	Post Medieval to Modern
A79	MLS21324	517634 417508	MARSH FARM (SITE OF)	MON	Marsh Farm' printed and shown as a group of 4 buildings on the 1887 Ordnance Survey 25'' first edition map, with a 'Spring' to the south-west. 'Marsh Farm' printed and shown as four buildings on OS 6'' map of 1945. 'Marsh Farm' printed and shown as the two eastern buildings only on OS 1:10,000 map revised in 1983. A parchmark in the grass shows the outline of one of the farm buildings on Google maps photographic coverage, 2009.	Post Medieval to Modern
A80	MLS21882	515096 416217	WESLEYAN METHODIST CHAPEL (SITE OF)	MON	Site of a Wesleyan Methodist Chapel situated on the west side of Town Street.	Post Medieval to Modern
A81	MLS22322	514495 417305	SMITHY (SITE OF), ST CRISPINS CLOSE	MON	A smithy on the corner of Town Street and St Crispins' Close. The 'Smithy' is printed and shown on the Ordnance Survey 25'' 1st and 2nd edition maps of 1887 and 1907. The smithy was a small structure butting against the corner of the two streets. It was roughly rectangular coming to a point at the northwest corner. It measured approx 6x8m The smithy has been demolished, the western part has been used as a road and the eastern has been landscaped into the front garden of a residence.	Post Medieval to Modern
A82	MLS22323	515127 416229	SMITHY (SITE OF), TOWN STREET	MON	A smithy on the east side of Town Street. The 'Smithy' is printed and shown on the Ordnance Survey 25'' 1st and 2nd edition maps of 1887 and 1907. The smithy was a small structure butting against the edge of the road. It was a rectangular structure measuring approx 10x8m. The smithy has been demolished and the land is now used as the entranceway to a commercial property.	Post Medieval to Modern
A83	MLS22325	515379 416083	PINFOLD, HUMBER ROAD	MON	A 'Pinfold' is printed and shown on the Ordnance Survey 25'' 1st and 2nd edition maps of 1887 and 1907. It is a small rectangular enclosure measuring approx 4x2m. The boundary of the pinfold is still visible as a hedge line, the internal area has been converted into a small garden.	Post Medieval to Modern
A84	MLS24845	514805 416311	SITE OF UNNAMED FARMSTEAD,	MON	Site of Unnamed farmstead, South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with L-plan range plus detached buildings to the third side of the yard. The farmhouse is detached with the gable end facing on to the yard. Located within or in association to a village.	Post Medieval to Modern

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
			SOUTH KILLINGHOLME			
A85	MLS24846	514888 416503	SITE OF (MOAT HOUSE), SOUTH KILLINGHOLME	MON	Site of (Moat House), South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with linked working buildings to all four sides of the yard. The farmhouse is detached from the main working complex. Located within a Church and/or Manor farm group. Large modern sheds are located on the site.	Post Medieval to Modern
A86	MLS24941	516326 415622	SITE OF UNNAMED FARMSTEAD, SOUTH KILLINGHOLME	MON	Site of Unnamed farmstead, South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with linked working buildings to all four sides of the yard. The farmhouse location is unclear. Isolated location.	Post Medieval to Modern
A87	MLS25000	515940 417499	SITE OF CAWBER FARM, SOUTH KILLINGHOLME	MON	Site of (Cawber Farm), South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with multiple regular yards. The farmhouse is attached to a range of working buildings. Isolated location.	Post Medieval to Modern
A88	MLS25001	515069 416251	SITE OF UNNAMED FARMSTEAD, SOUTH KILLINGHOLME	MON	Site of Unnamed farmstead, South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with linked working buildings to all four sides of the yard. The farmhouse is attached to a range of working buildings. Located within or in association to a village.	Post Medieval to Modern
A89	MLS25010	514796 416263	SITE OF UNNAMED FARMSTEAD, SOUTH KILLINGHOLME	MON	Site of Unnamed farmstead, South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with linked working buildings to all four sides of the yard. The farmhouse is detached with the gable end facing on to the yard. Located within or in association to a village.	Post Medieval to Modern
A90	MLS25012	517608 417485	SITE OF MARSH FARM, SOUTH KILLINGHOLME	MON	Site of Marsh Farm, South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard of L plan. The farmhouse is detached from the main working complex. Isolated location.	Post Medieval to Modern
A91	MLS25013	516879 417454	SITE OF UNNAMED FARMSTEAD, SOUTH KILLINGHOLME	MON	Site of Unnamed farmstead, South Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with linked working buildings to all four sides of the yard. The farmhouse is detached from the main working complex. Isolated location.	Post Medieval to Modern
A92	MLS25014	516738 417681	SITE OF UNNAMED OUTFARM, SOUTH KILLINGHOLME	MON	Site of Unnamed outfarm, South Killingholme. Demolished 19th century unlisted outfarm. Regular courtyard of U plan.location is unclear. Isolated location.	Post Medieval to Modern
A93	MLS25015	515940 418017	SITE OF WOODLANDS, NORTH KILLINGHOLME	MON	Site of Woodlands, North Killingholme. Demolished 19th century unlisted farmstead. Linear. The farmhouse is attached to a range of working buildings. Isolated location.	Post Medieval to Modern
A94	MLS25022	514419 417250	SITE OF UNNAMED FARMSTEAD, NORTH KILLINGHOLME	MON	Site of Unnamed farmstead, North Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with L-plan range plus detached buildings to the third side of the yard. The farmhouse is detached with the gable end facing on to the yard. Located within or in association to a village.	Post Medieval to Modern
A95	MLS25023	514485 417273	SITE OF UNNAMED FARMSTEAD, NORTH KILLINGHOLME	MON	Site of Unnamed farmstead, North Killingholme. Demolished 19th century unlisted farmstead. Regular courtyard with multiple regular yards. The farmhouse is attached to a range of working buildings. Located within or in association to a village.	Post Medieval to Modern

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
A96	MLS20103	516742 417545	GEOPHYSICAL ANOMALY	MON	Linear anomaly, west of Rosper Road, recorded by geophysical survey, 2000. Identified as a modern services trench during evaluations in 2006. A number of east-west linear anomalies were detected during a geophysical survey by GSB prosection in 2000. Located in Area C3, west of Rosper Road, the anomalies were magnetically strong, and may represent a buried ditch. An archaeological evaluation was carried out by Archaeology Project Services in 2006. Trench 15 was located in the area of a geophysical anomaly identified by GSB Prospection in 2000. A modern services trench was recorded, aligned east-west and measuring 0.78m wide x 0.8m deep, with near vertical sides.	Modern
A97	MLS21225	517248 418211	BARRAGE BALLOON ANCHORAGE, SOUTH OF STATION ROAD	MON	A 942 Squadron barrage balloon site on Station Road still has two shelters; both have been modified for use as cattle byres. The main balloon anchorage and a secondary anchorage are both still in place. The same site has also been a Ministry of Agriculture depot, where machines and equipment were stored during marshland drainage operations. There are concrete blocks on the site, some with anchor rings, that may have originated from balloon sites on the marshes. At least 3 concrete buildings and some small circular marks, possibly anchor points, are visible on aerial photographs to the south of Station Road. Ground photograph showing the remains of Nissen-hut type buildings. The accompanying text names the site as Site 7 of 'F' Flight. The site of the barrage balloon anchorage including associated buildings were digitally plotted from aerial photographs during the Inner Humber RCZAS NMP. The probable site of an additional anchor point lies immediately to the south in the next field. The site was recorded in 2013 on behalf of Able UK Ltd. The barrage balloon site was identified, with four buildings and 23 concrete barrage balloon tethering blocks recorded. The site was notable as it was part of the intricate anti-air and anti-invasion defences for the east coast and Humber River. The remains at the barrage balloon site consisted of four buildings in varying structural condition and twenty-three concrete anchor points, which had been used to tether barrage balloons. Two of the buildings were of essentially the same construction, consisting of red brick walls approximately 1m high, laid in English Garden Wall Bond on a concrete floor slab. The walls supported vaulted roofs set on concrete wall plates with roof coverings made from corrugated steel sheets. A third building located some 50m to the east consisted of two parts, a small brick building with a corrugated sheet roof and an adjoining wooden structure (Plate 58). The fourth building, which had largely collapsed, consisted of a cement block wall approximately 1m high which had been built on a concrete slab. The structure formed by the wall was slightly smaller than the slab and may be of a later date, possibly utilising the floor slab of an earlier building which may have been contemporary with the other structures at the site. A total of 23 concrete anchors were recorded at the site during this recording process. The anchors were not earth-fast and it is therefore not clear how many, if any, were in-situ. The anchors measured 0.50m x 0.50m x 0.45m high on average with an iron fitting acting as the anchor ring or tethering point on top (Plate 60). The barrage balloons were part of an intricate anti-air defence network and were designed to help protect the strategically important Humber River and its dock and port facilities.	Modern
A98	MLS21322	517387 417040	WWII AIRCRAFT OBSTRUCTIONS	MON	Air photo mapping and interpretation was carried out by Alison Deegan in 2008, in advance of proposed A160-A180 improvements. A T-shaped arrangement of ditches is visible on wartime air photographs, north of Humber Road. Four other sections of ditch were also mapped, in the fields to the east of Rosper Road. All the ditches were flanked by elongated mounds of spoil. They have now been mostly infilled and levelled. These ditches were not detected by a geophysical survey in 2009. In a later archaeological evaluation targeting other geophysical anomalies, there was also no evidence of these ditches, although only one trench crossed one of the ditches as plotted from air photographs.	Modern
A99	MLS21323	517443 417374	MARSH ROW (SITE OF)	MON	Air photo mapping and interpretation was carried out by Alison Deegan in 2008, in advance of proposed A160-A180 improvements. RAF aerial photographs from 1941 showed a row of terraced houses to the south of Marsh Lane. OS map evidence showed that they were built at some time between 1902 and 1932. A 1975 aerial photograph showed that they had been demolished by that date. Modern Google Earth photography showed that there were still low earthworks on the site in 2008. 'Marsh Row' printed and shown as a row of about 16 houses on OS 1945 6" map.	Modern
A100	MLS21326	514810 416964	THE HUMBER COMMERCIAL RAILWAY	MON	An environmental assessment connected with proposed A160-A180 road improvements was undertaken by Golder Associates Ltd for the Highways Agency in 2009. The Humber Commercial Railway was indentified in the assessment, passing through both option areas. Its date of construction was given as 1910; no further information. The Humber Commercial Railway was constructed to link the eastern jetty at Immingham Dock with the main Grimsby - New Holland line at Ulceby. There was a passenger station at Eastern Jetty in 1912 when the docks were first used. A spur was later built to the Western Jetty. Connections were made with the Grimsby & District Light Railway.	Modern
A101	MLS21371	515703 416327	WWII PRISONER OF WAR CAMP (SITE OF), SOUTH KILLINGHOLME	MON	A former army camp on Eastfield Road was used to house 'low category' German prisoners of war. Locally, it was called 'Monkey Camp' after its army code of 'M for Monkey'. It was located where the Conoco refinery is now, on Eastfield Road. The prisoners worked on farms in the area. No army buildings visible on Ordnance Survey 6" map of 1945. This site was not listed in a national survey of POW camps produced by English Heritage in 2003.	Modern
A102	MLS21417	515300 417300	HEAVY-ANTI AIRCRAFT BATTERY (SITE OF), EASTFIELD ROAD	MON	Site of Second World War heavy anti aircraft battery at North Killingholme Oil Refinery. Designated 'Humber H23', it was listed as unarmed in 1941.	Modern

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
A103	MLS21959	514327 418998	THE BARTON AND IMMINGHAM LIGHT RAILWAY	MON	The Barton and Immingham Light Railway opened in 1910-11. It was a direct connection between New Holland and Immingham. The single track ran between a junction with the Humber Commercial Railway at Immingham West, and the existing New Holland line at Goxhill. There were halts at Killingholme and East Halton, with one at Killingholme Admiralty Platform added in the 1920s. The passenger service opened in 1911 with 7 trains each way on weekdays, and one extra on Saturdays, and no Sunday service. The service was withdrawn in June 1963, although the Immingham-Killingholme section was still used for oil traffic.	Modern
A104	MLS22497	517166 417028	MISSION ROOM (SITE OF) ROSPER ROAD	MON	A 'Mission Room' is printed and shown on the Ordnance Survey 1945 6" map. The building was L shaped and is shown set back from the road approx 13m. Originally the structure contained a stable for the visiting Preacher. In 1923 a vestry was added. 7 photographs were taken during a site visit by HER staff. The shots show the datestone of 1910 and some of the dedicated bricks.	Modern
A105	MLS22498	517226 416910	DAY SCHOOL AND SCHOOL HOUSE (SITE OF), ROSPER ROAD	MON	Site of a Day School and associated school house shown on the Ordnance Survey 1945 map. The School is shown on the Ordnance Survey 6" map of 1945. It is a roughly rectangular building with a second (the school house) situated to the NEE	Modern
A106	MLS22569	517378 418292	KILLINGHOLME RAILWAY STATION (SITE OF)	MON	Killingholme station on the Barton and Immingham Light Railway opened in 1910 and closed in 1965. Two short stretches of rail-track making up sidings associated with the station are visible on aerial photographs and were digitally plotted during the Inner Humber RCZAS NMP. 'Killingholme Station' printed and shown on post-1945 Ordnance Survey 6" maps. Killingholme station on the Barton and Immingham Light Railway opened in 1910 and closed in 1965. Two short stretches of rail-track making up sidings associated with the station are visible on aerial photographs and were digitally plotted during the Inner Humber RCZAS NMP.	Modern
A107	MLS22594	515042 417578	RAF DISPERSED SITE No 4 (SITE OF), EASTFIELD ROAD	MON	Site No 4, a former WWII RAF dispersed site west of Eastfield Road. A Second World War military camp west of Eastfield Road was identified from 1940s air photographs during an assessment in 2011. At least 30 hut-type structures were plotted within a rectangular field of 1.58 ha. Source: RAF/CPE/UK/1748/5031. At least 3 structures were still extant c. 2010. This site was named as 'Site No 4' on an Air Ministry plan of dispersed sites associated with RAF North Killingholme, 1945. 41 buildings and structures were listed : Picket post Officers quarters (4) Officers latrines (2) Officers ablutions (for 17/24) Sergeants latrines (for 32) (2) Sergeants quarters (6) Sergeants and airmens ablutions Drying room Airmens barrack hut (15) Airmens latrines (for 72) (3) Fuel compound (chain link) Air raid shelters (Stanton) (for 50) (3) Blast shelter (for 25) In 2020 the Pillbox Study Group recorded three extant Stanton Shelters (an Air Raid Shelter for 50), BLDG Nos 38 (at TA15001752), 39 (at TA15021756) & 40 (at TA15071759) at SITE No 4 [3], shown on the 1966 1:2500 OS map. In 2020 the Pillbox Study Group recorded a removed Blast Shelter (for 25), BLDG No 41 (at TA15041758) at SITE No 4 shown on the 1966 1:2500 OS map.	Modern
A108	MLS22595	514950 417777	RAF DISPERSED SITE No 5 (SITE OF), EASTFIELD ROAD	MON	Site No 5, a former WWII RAF dispersed site west of Eastfield Road. A Second World War military camp west of Eastfield Road was identified from 1940s air photographs during an assessment in 2011. At least 31 hut-type structures were plotted within a triangular area of about 1.3 ha. Source: RAF/CPE/UK/1748/5031. The site of this camp was detected by a geophysical survey in 2011. A series of strong magnetic readings were confined to the known boundary of the camp, although individual buildings could not be seen. A strong linear anomaly was interpreted as a sewer serving the camp. This site was named as 'Site No 5' on an Air Ministry plan of dispersed sites associated with RAF North Killingholme, 1945. 39 buildings and structures were listed : Sewage pump house Picket post Officers quarters (4) Officers latrines (2) Officers ablutions (for 17/24)	Modern

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
					Sergeants and airmens ablutions Drying room Airmens barrack hut (13) Airmens latrines (for 72) (3) Sergeants quarters (6) Sergeants latrines (for 32) (2) Air raid shelters (Stanton) (for 50) (3) Blast shelter (for 25)	
A109	MLS22596	514627 417546	RAF DISPERSED SITE No 1 (SITE OF), NORTH OF NICHOLSON ROAD	MON	Dispersed Site No 1 was associated with RAF North Killingholme. A Second World War military camp west of Eastfield Road was identified from 1940s air photographs during an assessment in 2011. At least 10 hut-type structures were plotted within a triangular area of about 0.6 ha. Source: RAF/CPE/UK/1748/5031. This site was named as 'Site No 1' on an Air Ministry plan of dispersed sites associated with RAF North Killingholme, 1945. 37 buildings and structures were listed : Picket post Sergeants quarters (3) Sergeants latrines (for 32) (2) Officers quarters (4) Officers latrines (2) Officers ablutions (for 17/24) Sergeants and airmens ablutions block Drying room Airmens barrack hut (13) Airmens latrines (for 72) (3) Transformer plinth Blast shelter (for 20) Air raid shelters (Stanton) (for 50) (3) Blast shelter (for 10)	Modern
A110	MLS26104	517013 417149	SITE OF CHAPEL, WEST SIDE, ROSPER ROAD	MON	The side of a former building is shown on the 1945 OS map. Reminisences of resident of South Killingholme identified this building as a chapel in use in the mid 20th century, forming part of the former settlement at South Killingholme Haven.	Modern
A111	MLS26149	517222 417381	SECOND WORLD WAR BOMB CRATER, SOUTH KILLINGHOLME	MON	A small near-circular hollow is visible on aerial photographs taken in 1947 100m to the north-west of Hazel Dean, South Killingholme. It is 17m across and considered likely to be the site of a Second World War bomb crater. It was digitally plotted from aerial photographs during the Inner Humber RCZAS NMP project.	Modern
A112	MLS26150	517408 417544	SECOND WORLD WAR ANTI LANDING OBSTACLES, SOUTH KILLINGHOLME	MON	An extensive series of Second World War anti landing obstacles are visible on aerial photographs taken in 1941 in fields right across South Killingholme. They were digitally plotted during the Inner Humber RCZAS NMP project. The obstacles comprise pairs of elongated pits and banks dug across the fields to prevent enemy aircraft from landing on the flat ground alongside the Humber estuary.	Modern
A113	MLS26155	516809 418140	SECOND WORLD WAR BOMB CRATERS, NORTH KILLINGHOLME	MON	Two near-circular hollows are visible on aerial photographs taken in 1946 within the corner of a field at North Killingholme. They are 12m and 14m across, the larger of the two being surrounded by a doughnut of upcast material. They are considered likely to be the sites of Second World War bomb craters and were digitally plotted during the Inner Humber RCZAS NMP project.	Modern
A114	MLS26156	516835 418222	SECOND WORLD WAR BOMB CRATER, NORTH KILLINGHOLME	MON	A near-circular hollow is visible on aerial photographs taken in 1946 within the corner of a field at North Killingholme. It is considered likely to be the site of Second World War bomb crater and was digitally plotted during the Inner Humber RCZAS NMP project. It is 11m across with an outer doughnut of upcast and lies just to the north of those described in MLS26155. The feature is still visible as a hollow on lidar imagery	Modern

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
A115	MLS26157	516879 418239	SECOND WORLD WAR BOMB CRATER, NORTH KILLINGHOLME	MON	A near-circular hollow is visible on aerial photographs taken in 1941 within a field at North Killingholme. It is considered likely to be the site of Second World War bomb crater and was digitally plotted during the Inner Humber RCZAS NMP project. It is 6m across and predates those described in MLS26155 and 6	Modern
A116	MLS26168	516069 416739	SECOND WORLD WAR SEARCHLIGHT EMPLACEMENT, NORTH KILLINGHOLME	MON	A near-circular earthwork is visible on aerial photographs taken in 1945 immediately to the west of Haven Road. It comprises a circular bank 12m across with an outer ditch. The feature is similar to other earthwork sites which have been interpreted as the sites of Second World War searchlight emplacements (e.g MLS26144); it was digitally plotted during the Inner Humber RCZAS NMP project. The site has since been levelled.	Modern
A117	MLS26592	515718 417786	FUEL STORAGE SITE, EASTFIELD RD	MON	In 2020 the Pillbox Study Group recorded a WWII Fuel storage site at Killingholme refinery.	Modern
A118	MLS26703	517998 417823	20TH CENTURY RAILWAY, SOUTH KILLINGHOLME	MON	A railway branchline leading to a fish meal works at South Killingholme is recorded on the fourth edition Ordnance Survey map	Modern
A119	MLS22324	515137 416199	VILLAGE HALL (SITE OF), TOWN STREET	MON	Site of a building marked 'hall' in the centre of the island between Town Street and School Road. A 'Hall' is printed and shown on the Ordnance Survey 25" 1st and 2nd edition maps of 1887 and 1907. The building was rectangular with a projection to the rear (southwest) which measured approx 19x6m plus 4x2m for the projection The building has since been demolished and the land is now used as an island in the centre of the road.	Unknown
A120	MLS22499	517156 417041	MYRTLE VILLAS (SITE OF), ROSPER ROAD, SOUTH KILLINGHOLME	MON	Site of a house called Myrtle Villas situated on the E side of Rosper Road. Shown on the Ordnance Survey 6" map of 1945.	Unknown
A121	MLS1610	514887 415416	POSSIBLE FIELD BOUNDARY (CM), S OF ULCEBY ROAD	MON	Possible field boundary (cropmark), south of Ulceby Road. Air photo mapping and interpretation was carried out by Alison Deegan in 2008, in advance of proposed A160-A180 improvements. A linear ditch was visible on aerial photographs taken in 1971 and 1994, extending between TA14911562 and TA14951504, approximately 600m. It appeared to predate 19th century drainage ditches that cut across its path.	Unknown
A122	MLS20141	517176 417841	FORMER SHORELINE, E OF ROSPER ROAD	LND	A geophysical survey was carried out in 2003 by ArchaeoPhysica Ltd, in advance of a proposed storage and distribution facility for Able UK. A widespread group of amorphous anomalies was detected, apparently related to natural geochemical processes within a marsh area. Some sinuous anomalies showed the position of creek systems within the marsh. Together, they marked the extent of the marsh before drainage in the first half of the 20th century. A geophysical survey was carried out in 2004 by Stratascan, also related to the Able UK application. In survey area 1, a large number of irregular anomalies were thought to be caused by former marshes and river channels. In September 2004, evaluation trenches were dug south of Clough Road in advance of a road realignment scheme. In Trench A, a dark reddish-brown peat deposit was found at a depth of 1.97m OD. It was preserved beneath a 1m thick layer of alluvium. The peat was interpreted as the remains of a former salt marsh ground surface.Environmental samples were taken, but preservation was extremely poor, and only fragmentary pollen grains were present. This is probably due to the highly minerogenic nature of the deposits, as well as damage and reworking by fluvial processes. Diatoms were completely absent, the silica perhaps being dissolved in the highly acidic peat environment. An archaeological evaluation was carried out in 2004 by Archaeogical Services WYAS, in advance of a proposed storage and distribution facility for Able UK. In area D3 (centred to TA163 191), it revealed a thick deposit of estuarine alluvium sealing archaeological deposits of the mid-late Iron Age. In Trench 1, a deposit of dark black-brown silty clay was found at depths of between 1.90m and 2.13m OD. It contained frequent lumps of charcoal and preserved organic remains, including small pieces of wood. The deposit represented a former shorefront ground surface, preserved beneath the alluvium. A further archaeological evaluation was carried out in 2005 by Archaeogical Services WYAS, in advance of the proposed storage and distribution facility for Able UK. An alluvial deposit was recorded beneath the subsoil in 13 trenches towards the eastern margin of the evaluated area. An organic deposit beneath this alluvium was recorded in 5 of these trenches, at a depth of about 1.90m OD. Environmental samples were taken from the organic layer. Initial analysis revealed the presence of Sea Arrowgrass, clearly indicating a coastal salt-marsh environment. Other invertebrate remains, together with pollen and diatoms, should allow a detailed environmental reconstruction of this nvironment. An archaeological evaluation was carried out by Lindsey Archaeological Services in December 2005, also in advance of the Able UK proposal. In Area E, the evaluation trenches at the east of the site encountered a series of deeper and shallower alluvial deposits, reflecting the shifting nature of the coastline. Environmental samples were not productive, and no dating evidence was recovered.	Unknown

Asset Number	HER Number	Co-ordinates	Name	Type	Description	Period
					In a 1999 desk-based assessment by Humber Field Archaeology, the former shoreline was mapped in Figure 7. It appears to have been defined as the boundary between drift geology deposits - glacial till to the west, and clay and silt alluvium to the east. An extensive geophysical survey completed in 2011 detected numerous natural magnetic anomalies. Some may relate to the former shoreline.	
A123	MLS20273	516271 415553	GEOPHYSICAL ANOMALIES, EAST END FARM	MON	A geophysical survey was carried out by GeoQuest in 2004, in advance of a tree planting scheme. In Area A, west of East End Farm, several short (c 20m) linear anomalies were thought to represent silted ditches or sections of tile land drain. Immediately south of these was an 8m wide magnetic anomaly on an ENE/WSW alignment. It was interpreted as a ditch or pit.	Unknown
A124	MLS20274	516504 415572	GEOPHYSICAL ANOMALIES, S OF EAST END FARM	MON	A geophysical survey was carried out by GeoQuest in 2004, in advance of a tree planting scheme. In Area C, south-east of East End Farm, two weak positive linear anomalies were interpreted as sections of silted ditch, which probably continued east of that survey block. 80m to the east in Area D, a cluster of strong positive anomalies were also thought to be soil-filled ditches which contiued beyond the survey area.	Unknown
A125	MLS20783	515157 415638	LINEAR CROPMARK, EAST OF HABROUGH ROAD	MON	Linear cropmark, visible on an aerial photograph to the east of Habrough Road, running approx 270m north south.	Unknown
A126	MLS20789	517376 417818	CROPMARK, SOUTH KILLINGHOLME MARSH	MON	Cropmark, visible on an aerial photograph. A possible enclosure with a double ditched trackway to the east. An ovoid enclosure with a double ditch trackway to the east. The ovoid enclosure is alligned approx north-west with the ditches protruding from the centre towards the east. The enclosure measures approx 94 by 42m and the trackway varies in width from 7m in the west and 10m in the east. A geophysical on the site in 2011 detected neither enclosure or trackway.	Unknown
A127	MLS21314	515408 416027	GEOPHYSICAL ANOMALY, EAST OF TOWN STREET	MON	A geophysical survey was carried out by Archaeological Services WYAS in 2009, in advance of proposed improvements to the A160-A180. Survey Block 33 was located to the east of Town Street, South Killingholme. A short length of linear magnetic anomaly was identified in the centre of the block. It was aligned east-west, and may be an infilled ditch of unknown date. Archaeological Services WYAS investigated the supposed ditch with a trial trench in 2010. Trench 19 was orientated north-south, crossing the magnetic anomaly. Only two modern field drains were exposed within the trench, and no archaeological features.	Unknown
A128	MLS21315	517143 416858	GEOPHYSICAL ANOMALY, WEST OF ROSPER ROAD	MON	A geophysical survey was carried out by Archaeological Services WYAS in 2009, in advance of proposed improvements to the A160-A180. Survey Block 35 was located to the west of Rosper Road, South Killingholme. A short length of L- shaped magnetic anomaly was identified in the eastern part of the block. The identification of this feature as archaeological was described as 'extremely tentative.' The geophysical anomaly was investigated by Archaeological Services WYAS in 2010. Within trial Trench 20, only natural deposits were recorded beneath the subsoil - a reddish clay with abundant chalk inclusions.	Unknown
A129	MLS21321	516835 417030	SQUARE ENCLOSURE ?, WEST OF ROSPER ROAD	MON	Air photo mapping and interpretation was carried out by Alison Deegan in 2009, in advance of proposed A160-A180 improvements. A possible square enclosure, c. 50m across, was visible as a cropmark on an air photograph taken in 2001. It was not certain that it was archaeological in origin. It is now masked by the southern edge of the Immingham CHP plant. The south-eastern corner of this enclosure matches the location of evaluation Trench 9 from the Humber Field Archaeology CNK2000 event, i.e. the year before the air photograph mentioned in Ref. 1 above. However, rectangular features were recorded during excavations in this area in 2002, so other elements of the cropmark may be archaeological.	Unknown
A130	MLS21570	517290 418268	GEOPHYSICAL ANOMALIES, SOUTH OF STATION ROAD	MON	An extensive geophysical survey was carried out by GSB Prospection in 2011, in advance of a proposed Marine Energy Park. A group of weak magnetic anomalies were detected in survey Field 11, centred to TA17291827. They were curving, with two parallel ditches forming one section on the eastern side. If this represented an enclosure, it would be c. 30m across. Allen Archaeology Ltd carried out an extensive programme of trial trenching in advance of the construction of the proposed marine energy park, 2012. Trench 29 in Area 5 was positioned to investigate the magnetic anomalies in this area. Only natural sandy clays and silts were recorded within the trench.	Unknown
A131	MLS21571	517450 418029	UNDATED PIT, KILLINGHOLME MARSHES	MON	An extensive geophysical survey was carried out by GSB Prospection in 2011, in advance of a proposed Marine Energy Park. A group of uncertain magnetic anomalies and trends were detected in survey Field 13. A small group (c. 40m x 30m) centred to TA17471800 were rectilinear, which may suggest an archaeological origin. In the opinion of the surveyors, they were more likely to be of natural origin. A complex and extensive group of anomalies within survey Field 13 were labelled in the GSB report as of uncertain origin. It is worth noting that they lie within a discrete area of sand and gravel, potentially an attractive area for settlement or industry within the marsh. Allen Archaeology Ltd carried out an extensive programme of trial trenching in advance of the construction of the proposed marine energy park, 2012. 39 trenches were excavated, mostly 30m x 2m. A group of 7 trenches investigated 'Area 5', the location of these geophysical anomalies. Most trenches revealed on natural deposits, including sands and gravels, silts, silty clay alluvium and boulder clay. In Trench 34, centred to TA 1745 1802, a small pit was recorded. Its fill contained a late Neolithic or Early Bronze Age flint scraper, and a single Romano-British sherd.	Unknown

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					Futher excavation was carried out in 2013 on behalf of Able UK Ltd. The site was referenced as AMEP 5. AMEP 5 was investigated with a single trench and no archaeological features or artefacts were identified.	
A132	MLS25943	514407 416265	LINEAR FEATURES, WEST OF TOP ROAD	MON	Trench 91, centred to TA14401625, was excavated by Pre-Construct Archaeological Services Ltd in 2012. This was in advance of the proposed Hornsea Offshire Wind Farm cable route. It was positioned to investigate an isolated ditch anomaly, detected during a geophysical survey in 2011. Two narrow, parallel linear features were recorded in the northern part of the trench. They measured 0.3m and 0.15m wide, and were on the same NW-SE alignment as two other broader features within the trench, interpreted as the bases of Medieval plough furrows. There was no dating evidence within these features, and they were thought to have also been plough-derived.	Unknown
A133	MLS26758	516950 418209	SITE OF UNDATED DITCH CUT	MON	A possible sea bank of Medieval date, identified and subsequently excavated in January 2014 due to a visible earthwork line within a copse to the north of Station Road in North Killingholme. A northwest to southeast orientated ditch was recorded within the trench containing two fills.	Unknown
A134	MLS4635	516426 417698	`CROPMARK SITE', E OF LINDSEY OIL REFINERY	MON	Linear and enclosure-like features. Romano-British. A transcription of the cropmarks was carried out by Northern Archaeological Associates in 2002, in advance of a 400KV overhead line. The rectified cropmarks appear to be of a series of circular and sub-circular features, some of which lay within the area of a geophysical survey, although there was no correlation of results. However it was noted that this area had been subject to extensive sediment dumping prior to the date of the photographs and some, or even all, of the cropmarks may result from this activity.	Unknown

Events Gazetteer

Event Number	HER Number	Co-ordinates	Name	Description	Date
E1	ELS768	515517 419872	Aerial photographic sortie	By BKS Surveys. Covered: EAST HALTON, NORTH LINCOLNSHIRE GOXHILL, NORTH LINCOLNSHIRE NORTH KILLINGHOLME, NORTH LINCOLNSHIRE SOUTH KILLINGHOLME, NORTH LINCOLNSHIRE Associated Monuments identified: 1056 POST MEDIEVAL ENCLOSURES (CM), EAST HALTON SKITTER (Monument 1056) 10746 OPEN FIELD SYSTEM, EAST HALTON (Landscape 10746) 1496 RB SETTLEMENT SITE, CHASE HILL (Monument 1496) 1593 MOATED SITE, BAYSGARTH FARM (Monument 1593) 1595 MOATED SITE, MANOR FARM (Monument 1595) 1602 MED/PM SETTLEMENT & SMV EARTHWORKS, EAST HALTON (Monument 1602) 1604 POSSIBLE ENCLOSURE (CM), MANOR HOUSE FARM (Monument 1604) 1619 LOBINGHAM DMV (Monument 1619) 1623 RB OCCUPATION SITE, KILLINGHOLME HAVEN (Monument 1623) 17451 PEAR SHAPED ENCLOSURE, EAST HALTON SKITTER (SM) (Monument 17451) 4635 `CROPMARK SITE', E OF LINDSEY OIL REFINERY (Monument 4635) 8770 BRICK MANUFACTORY (SITE OF), EAST HALTON SKITTER (Monument 8770) 8777 RB CROPMARK COMPLEX, NW OF EAST HALTON SKITTER (Monument 8777) 8780 FIELD BOUNDARY DITCHES, EAST OF MARSHLANDS (Monument 8780) 8781 CURVILINEAR DITCHES, CHAPEL FARM (Monument 8781) 8782 MEDIEVAL GRANGE, EAST HALTON GRANGE (Monument 8782) 8784 POSSIBLE MEDIEVAL SALTERN, EAST HALTON BECK (Monument 8784) 8785 SUBRECTANGULAR SOILMARK, CHAPEL FARM (Monument 8785) 8788 ENCLOSURE (SM), E OF MARSHLANDS (Monument 8788) 9898 SETTLEMENT SITE (CM), EAST MARSH (Monument 9898)	1989
E2	ELS1343	514685 417220	Metal detecting, North Killingholme, 1999	Metal detecting by Rick Luther. Early Medieval and Medieval pottery recovered.	1999
E3	ELS1375	514550 417550	Aerial photographic sortie	By Cambridge University Air Committee in NORTH KILLINGHOLME, NORTH LINCOLNSHIRE. Associated monuments MOATED SITE, MANOR FARM (Monument 1624)	N/A
E4	ELS1378	514400 417850	Aerial photographic sortie	By Cambridge University Air Committee in NORTH KILLINGHOLME, NORTH LINCOLNSHIRE. Associated monuments: 1619 LOBINGHAM DMV (Monument 1619) 1624 MOATED SITE, MANOR FARM (Monument 1624) 1627 MOATED SITE, `NORTH GARTH' (Monument 1627)	N/A
E5	ELS1410	516551 417313	Geophysical Survey, OH Line, Conoco CHP Plant, North Killingholme	Resistivity and gradiometer survey of access road and tower base 1 of National Grid overhead line to proposed Conoco CHP plant. Conditions for survey were poor and no archaeological responses or clear anomalies were identified.	2002
E6	ELS1450	516723 417185	Watching Brief during pipeline removal, Immingham CHP Plant	A watching brief was undertaken during ground works associated with the demolition and removal of a redundant pipeline prior to the construction of the CHP Plant. The pipeline ran across an area containing the remains of a late Iron Age and Romano-British farmstead revealed during previous excavations. Three visits were made by the archaeologists to the site to monitor the removal. The pipeline was 610m long, supported an a series on concrete foundations which were placed approximately 9m apart. The concrete plinths were removed by machine. Any archaeological deposits were recorded appropriately, by photographing and drawing scale plans and sections. No further information is given regarding the excavation or recording methodologies. There were no archaeological features identified during this watching brief.	2002

Event Number	HER Number	Co-ordinates	Name	Description	Date
E7	ELS1690	516150 415650	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E8	ELS1691	516150 415750	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :1ha. Field Condition : Class 4	1999
E9	ELS1692	516230 415780	Humber Wetlands Fieldwalking	FIELD OBSERVATION (VISUAL ASSESSMENT). Finds recorded in this field unit. Field size :1ha. Field Condition : Class 1	1999
E10	ELS1695	516350 415650	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :1ha. Field Condition : Class 4	1999
E11	ELS1696	516350 415750	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :1ha. Field Condition : Class 4	1999
E12	ELS1700	516450 415750	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :1ha. Field Condition : Class 4	1999
E13	ELS1704	516550 415950	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :5ha. Field Condition : Class 4	1999
E14	ELS1706	516650 415850	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :14ha. Field Condition : Class 4	1999
E15	ELS1708	516750 415950	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E16	ELS1711	516980 418270	Humber Wetlands Fieldwalking	FIELD OBSERVATION (VISUAL ASSESSMENT). Finds recorded in this field unit. Field size :9ha. Field Condition : Class 3	1999
E17	ELS1712	516950 417650	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E18	ELS1713	516870 418060	Humber Wetlands Fieldwalking	FIELD OBSERVATION (VISUAL ASSESSMENT). Finds recorded in this field unit. Field size :12ha. Field Condition : Class 1	1999
E19	ELS1714	517050 415950	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :8ha. Field Condition : Class 4	1999
E20	ELS1715	517050 417450	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :1ha. Field Condition : Class 4	1999
E21	ELS1716	517150 416350	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :6ha. Field Condition : Class 4	1999
E22	ELS1717	517150 417350	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :4ha. Field Condition : Class 4	1999
E23	ELS1718	517150 417550	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :1ha. Field Condition : Class 4	1999
E24	ELS1719	517250 417250	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :5ha. Field Condition : Class 4	1999

Event Number	HER Number	Co-ordinates	Name	Description	Date
E25	ELS1720	517250 418250	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :4ha. Field Condition : Class 4	1999
E26	ELS1721	517350 417150	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E27	ELS1722	517350 417950	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :6ha. Field Condition : Class 4	1999
E28	ELS1723	517350 418050	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :5ha. Field Condition : Class 4	1999
E29	ELS1724	517450 417150	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :1ha. Field Condition : Class 4	1999
E30	ELS1725	517450 417550	Humber Wetlands Fieldwalking	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :4ha. Field Condition : Class 3	1999
E31	ELS1726	517450 418150	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :3ha. Field Condition : Class 4	1999
E32	ELS1728	517550 417250	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E33	ELS1729	517550 417350	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E34	ELS1730	517550 417650	Humber Wetlands Fieldwalking	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :5ha. Field Condition : Class 3	1999
E35	ELS1731	517550 418050	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E36	ELS1734	517750 417350	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :2ha. Field Condition : Class 4	1999
E37	ELS1735	517950 417450	Humber Wetlands Field Visit	FIELD OBSERVATION (VISUAL ASSESSMENT). No finds recorded in this field unit. Field size :4ha. Field Condition : Class 4	1999
E38	ELS1773	514981 415619	Watching brief, Community Alarm Tower, Habrough Road, 2002	Watching brief held during excavations for the construction of a community alarm tower in an area of potential for prehistoric and/or Romano-British occupation. No archaeological finds or features were recorded, although a deep land drain of 18th century date indicates that the land has been farmed since at least the Enclosure of 1776-9. It is probable that the level of the land in this area has been raised using material from the nearby oil refinery.	2002
E39	ELS1780	516609 418132	Geophysical Survey, Humber Link Pipeline, 1999	A gradiometer survey was carried out along a proposed pipeline corridor to the east of Rosper Road 100m to the northeast of a small cropmark complex indicative of possible settlement activity. The survey identified little of archaeological note; a complex of magnetic anomalies recorded throughout the survey area is interpreted as natural variation in the underlying geology/pedology.	1999
E40	ELS1785	516716 417748	Geophysical Survey, Humber Link Pipeline IIIC, 2000	A gradiometer survey was undertaken along a section of a proposed pipeline corridor. Magnetic disturbance has been recorded due to the presence of a number of pipes and this has complicated interpretation of the data. Some anomalies of archaeological interest have been detected. A region of strong anomalies, short linear trends and a possible ring ditch have been recorded in the northern part of the survey area, near the location of a cropmark complex. Elsewhere, linear trends and isolated pit anomalies have been identified but the anomalies are magnetically weak and the interpretation is cautious. Despite the detection of these responses, there appear to be no indications of major settlement activity with the limits of the study area.	2000

Event Number	HER Number	Co-ordinates	Name	Description	Date
E41	ELS1789	516570 417870	Trial Trenching, Site S24 East Middle Mere Road, Humber Link Pipeline Project, 2000	Two evaluation trenches were opened on part of the proposed Humber Link Pipeline Project route, within a field immediately to the south of East Middle Mere Road, in order to asess the nature of several geophysical anomalies, interpreted as a possible ring ditch and enclosure of late Iron Age or Romano-British date. Upon excavation, no archaeological features were observed, the geophysical survey results reflecting changes in subsurface geology and modern field drains.	2000
E42	ELS1798	514870 415680	Trench 5, Archaeological Evaluation, Immingham CHP Gas Pipeline	As part of an evaluation in advance of a proposed gas pipeline, a trial trench measuring 30m x 1.60m was machine excavated to target a cluster of possible pits identified during geophysical survey. AC Archaeology's standard recording system was used in accordance with AC Archaeology's 'General Site Recording Manual, Version 1). This trench contained three modern land drains and a wide irregular feature likely to be a former water course. These features were not excavated. A small quantity of prehistoric worked flint was recovered from the spoil heap (nb included in Table 10 of report but not itemised in section 7.3 Flaked Stone).	2002
E43	ELS1799	515350 415270	Trenches 6 & 7, Archaeological Evaluation, Immingham CHP Gas Pipeline	As part of an evaluation in advance of a proposed gas pipeline, two trial trenches were machine excavated to target a cluster of possible pits identified during the geophysical survey. AC Archaeology's standard recording system was used in accordance with AC Archaeology's 'General Site Recording Manual, Version 1). Trench 6 measured 30m x 1.60m and contained a wide irregular feature likely to be a palaeochannel. This feature was not excavated. No archaeological features or deposits were present within Trench 7 which measured 50m x 1.60m.	2002
E44	ELS1800	515554 415316	Trench 8, Archaeological Evaluation, Immingham CHP Gas Pipeline Project, 2002	As part of an evaluation in advance of a proposed gas pipeline, a trial trench measuring 50m x 1.60m was machine excavated to target a cluster of possible pits and linear anomalies identified during the geophysical survey. AC Archaeology's standard recording system was used in accordance with AC Archaeology's 'General Site Recording Manual, Version 1). No archaeological features or deposits were present.	2002
E45	ELS1801	516537 415654	Trench 11, Archaeological Evaluation, Immingham CHP Gas Pipeline Project, 2002	As part of an evaluation in advance of a proposed gas pipeline, a trial trench 50m x1.60m was machine excavated to target a possible enclosure and linear anomalies identified during the geophysical survey. AC Archaeology's standard recording system was used in accordance with AC Archaeology's 'General Site Recording Manual, Version 1). This trench contained 2 modern land drains and a wide irregular feature likely to be a palaeochannel. These features were not excavated. Small quantities of modern earthenware pottery and ceramic building material were noted in the spoil heap.	2002
E46	ELS1802	514998 415513	Trench 12, Archaeological Evaluation, Immingham CHP Gas Pipeline Project, 2002	As part of an evaluation in advance of a proposed gas pipeline, a trial trench 50m x 1.60m was machine excavated to target the possible continuation of a linear cropmark identified on aerial photographs. AC Archaeology's standard recording system was used in accordance with AC Archaeology's 'General Site Recording Manual, Version 1). This trench contained a sequence of linear features, two of which were hand excavated, all northeast to southwest aligned and positioned at regular intervals throughout the trench. All had identical fills and are likely to be furrows from a former ridge and furrow system. A single piece of prehistoric worked flint, post-Medieval pottery and two iron nails were recovered.	2002
E47	ELS1974	514387 415661	Geophysical Survey, Conoco CHP Gas Pipeline, North and South Killingholme, 2000	A magnetometer survey was undertaken along the route of a proposed pipeline. The survey areas were 40m wide and covered some 3 km of the overall route. All the fields were under young arable crops at the time of the survey. The soils are typical stagnogleys, comprising fine loams, formed from a parent chalky till. No further information relating to equipment or methodology is given in the report. Within Areas 1-20, in North Lincolnshire, a few pit-type anomalies and faint linear trends were detected. The data also contain responses suggestive of current ploughing, field drains and geomorphological causes. More numerous pit-type and linear anomalies of possible archaeological interest were detected in Areas 21-25. The data also contained a number of linear trends for which no precise explanation possible, as well as responses ascribed to natural causes and recent agricultural practice. Area 26, within North East Lincolnshire, was found to contain a dense concentration of linear, rectilinear and pit-type anomalies of archaeological interest that clearly extend beyond the survey area.	2000
E48	ELS1975	516673 415684	Geophysical Survey, Conoco CHP Gas Pipeline, South Killingholme, 2001	This survey is a continuation of previous work along the route of a proposed pipeline. Detailed gradiometry, totalling c.2 hectares, was undertaken within a 40m-wide corridor which continues from the eastern limit of the previous survey. No further information relating to equipment or methodology is given in the report. At the time of survey the field was under a combination of pasture, harvested beet and a young cereal crop. The soils are typical stagnogleys, comprising fine loams, formed from a parent chalky till. The survey detected a possible small enclosure and several linear and pit-type responses that are thought to be of archaeological potential. Several amorphous anomalies have also been recorded that are thought to be natural in origin, possibly being former stream channels or spreads of dredging spoil from a nearby ditch.	2001
E49	ELS1977	515545 415690	Watching Brief, Conoco CHP Gas Pipeline, South Killingholme, 2001	Archaeological monitoring of topsoil stripping prior to laying a 6 km gas pipeline was undertaken following evaluation fieldwork. Attendance was comprehensive during the topsoil strip, the excavation of the pipe trench was not monitored. The topsoil was removed by a 360 machine mechanical excavator using a 2m wide toothless grading bucket across a 20m wide corridor. Following the topsoil strip, the easement was walked, surface finds were collected and the presence of any subsil features of potential archaeological interest were noted. These features were subsequently excavated and recorded prior to trenching. All topsoil mounds along the route were routinely scanned for displaced artefacts,	2002

Event Number	HER Number	Co-ordinates	Name	Description	Date
				and any artefact concentrations noted. A detailed archaeological record was made of all exposed deposits of archaeological interest by drawing and photography. The topsoil was in general approx 0.30m deep comprising a dark-brown silty clay overlying the subsoil, a very dark-brown stiff clay. Only limited archaeological results were obtained, which included the recording of three areas of ridge and furrow. A single feature of unknown date or function was also recorded, comprising a layer of heat affected stones above three burnt stones bedded horizontally into the subsoil. No artefacts were recovered.	
E50	ELS1997	516693 417849	Geophysical Survey, Land east of Rosper Road, South Killingholme, 2003	A fluxgate magnetometer survey comprising 100% of a 1 hectare site was undertaken in an area of known Romano-British occupation ahead of a proposed wind turbine construction. The survey was completed using a Geoscan FM36 fluxgate gradiometer, with readings taken at 1.0x0.5m intervals on 20mx20m grids. A zigzag traverse scheme was used. Two features of possible archaeological origin were recorded, although both features were given a low confidence rating and may be natural. The first is a sub-circular or loop-shaped feature, the second a weak linear feature running SW-NE across the field.	2003
E51	ELS2225	516399 417570	Desk-based assessment, 400KV OH Line, Conoco Immingham CHP to Killingholme Substation, 2001	The study area measured 5 km x 3 km from SW corner TA150170 to NE corner TA200200. Information collated from Humbs SMR, NLSMR, EH (NAR, NMR Aps), Lincolnshire County Record Office, Lincoln City Library, Scunthorpe Museum (accession records). Study first begun in 1997, undated in 1999 and again in 2001. A walkover of part of the route to the west of Rosper Road was undertaken in April 1999, but the location and extent of new sites could not be established as a result of limited access from public roads & footpaths and the extent of existing vegetation cover.	2001
E52	ELS2226	516526 417627	Aerial photographic transcription, 400KV OH Line, Conoco Immingham CHP to Killingholme Substation, 2002	Transcription of possible cropmarks in area of known sites likely to be affected by construction of overhead transmission line. Selected line detail was traced from the aerial photographs using AutoCAD and a digitising tablet. A projective transformation using a minimum of 5 control points was used to rectify and transcribe the cropmark detail to the OS digital base data. Cropmarks plotted at scale 1:5000.	2002
E53	ELS2227	515894 418338	Watching brief, 400KV OH Line, Conoco Immingham CHP to Killingholme Substation, 2002	A watching brief was maintained during the course of groundworks associated with construction of the overhead line. Topsoil was removed using a back-acting excavator with a toothless ditching bucket under archaeological supervision. A representative section, typically 1m wide, was excavated across any archaeological features or deposits identified within the working corridor. Standard NAA recording system used (based on MoLAS). Archaeological sections were drawn at 1:10. Features were recorded photographically at 35mm format and colour slides. No significant archaeological features were identified during the watching brief. A single Bronze Age flint scaper was recovered from the topsoil.	2002
E54	ELS2239	516566 415863	Geophysical survey, East End Farm, South Killingholme, 2004	A geophysical survey was undertaken in response to a tree planting proposal. A 10% sample of the planting area was surveyed in two east-west strips measuring 500x30m and 200x30m, totalling 2.1ha. The area was a mix of pasture, cereal stubble and set-aside. A Geoscan FM36 fluxgate gradiometer was used, set to 0.05nT/m resolution. Data were logged at 0.25m intervals along traverses spaced 1.0m apart, in zig-zag mode.	2004
E55	ELS2240	515605 415342	Desk based assessment, Immingham CHP Pipeline, South Killingholme, 2000	A desk based assessment of the archaeological and cultural heritage issues relating to a pipeline project. The scope of the study included archaeological sites and finds, Listed and non-listed historic buildings, historically important hedgerows and boundaries, registered (and locally important) parks and gardens, and historic battlefields. The assessment comprised a review of NLSMR, NELSMR & NMR archaeological databases; aerial photographs held by NLSMR, NELSMR & NLAP; historic documents in Lincolnshire Archives Office & Lincoln Central Library; other published & non-published sources and a site walkover of pipeline route where access granted. Data was collected within approximately 500m of the pipeline route. Cropmarks and ridge & furrow were plotted although no description of methodology is given, presumed to be sketch plots only.	2000
E56	ELS2258	516615 415845	Geophysical survey phase 2, East End Farm, South Killingholme, 2004	A second phase of geophysical survey was undertaken to define the extent of a settlement enclosure prior to tree planting. The additional area was 2.56ha in extent and surveyed in two blocks infilling and extending beyond the two earlier survey strips. The area was a mix of pasture, cereal stubble and set-aside. A Geoscan FM36 fluxgate gradiometer was used, set to 0.05nT/m resolution. Data were logged at 0.25m intervals along traverses spaced 1.0m apart, in zig-zag mode. The survey successfully mapped the extent of settlement; the fading out of features to the south may be as a result of later colluviation or alluviation on lower ground.	2004
E57	ELS2365	516423 415570	Geophysical Survey, Phase II, East End Farm, South Killingholme, 2005	Further geophysical survey was undertaken in response to phase II of Community Woodland proposal. A total of almost 5ha were surveyed in 7 blocks A-G of which areas A and northern sections of C & D were located within North Lincolnshire. These areas were recently mown pasture. A Geoscan FM36 fluxgate gradiometer was used, set to 0.05nT/m resolution. Data were logged at 0.25m intervals along traverses spaced 1.0m apart, in zig-zag mode.	2005

Event Number	HER Number	Co-ordinates	Name	Description	Date
E58	ELS2366	516260 415577	Field Observation, East End Farm, South Killingholme, 2005	A hollow way was observed during geophysical survey and plotted on survey plans, although the survey found no significant magnetic anomaly corresponding to the hollow way.	2005
E59	ELS2374	516605 415918	Metal detector survey, East End Farm	A metal detecting survey, designed to investigate a large rectangular enclosure and road which had been discovered during an earlier geophysical survey. About 20 detectorists participated, roaming freely over the unplanted area. In practice, most detectorists remained on the western half of the site, where more finds were being discovered. All finds were bagged and flagged, locations being recorded by GPS. Although ground visibility was poor, pottery was also found and recorded in the same manner. 15 3rd and 4th century coins, two Roman brooches and 32 sherds of greyware were found, in addition to other Medieval and post-Medieval finds.	2005
E60	ELS2400	514485 417366	Watching brief at St Denys' Church, North Killingholme	Watching brief on a 2 square metre pit abutting the north aisle. A raking buttress was to be constructed to stabilise the wall. Maximum depth observed was 600mm. No deposits of archaeological significance were encountered.	1999
E61	ELS2417	516576 417615	Desk-based assessment, Land east of Lindsey Oil Refinery, South Killingholme, 2006	An archaeological desk-based assessment was undertaken to determine the archaeological implications of development. An assessment area of approximately 1 km radius from the centre of the proposal site was examined. The sources consulted consisted of historical documents held in the Lincolnshire Records Office and the North East Lincolnshire Archives; Enclosure and estate maps and plans held in Lincolnshire Records Office; recent and old Ordnance Survey maps held at Lincoln Central Library & Grimsby Local Studies Library; archaeological data from the NLSMR including aerial photographs and from the NMR; archaeological books and journals; geotechnical data. The results of the assessment were committed to scale plans of the area.	2006
E62	ELS2418	516566 417673	Walk-over survey, Land east of Lindsey Oil Refinery, North Killingholme, 2006	A walk-over survey in connection with a archaeological desk-based assessment undertaken to determine the archaeological implications of development. The walk-over survey was undertaken to assess the current ground conditions, land-use patterns and to ascertain the presence of any surface finds of an archaeological character and of features that might indicate the presence of archaeological remains. The results of the field examination were committed to scale plans of the area. Much of the site was overgrown with vegetation, particularly in the southern half, and no archaeological finds or features were observed.	2006
E63	ELS2419	516558 417590	Geophysical survey, Land east of Lindsey Oil Refinery, South Killingholme, 2006	Magnetic geophysical survey was undertaken in advance of proposed development. The survey area covered virtually 100% of the proposed site and comprised 17.3ha. The eastern fields were grass covered, those in the west were ploughed at the time of survey and contained scatters of modern debris. Some areas of the site were known to be contaminated with hydrocarbons. A detailed magnetic survey was undertaken using a Bartington Grad601-2, readings were taken at 0.25m sample intervals along traverses at 1m intervals. The geo-referencing and alignment of the grids was achieved using a Leica GPS System 500. Data processing was performed using Geoplot 3. Extensive evidence of ploughing activity was observed in the eastern and southern sections of the site, along with further linear anomalies that may be of archaeological origin. Modern debris in the western half of the site affected the results.	2006
E64	ELS2459	515193 417328	Watching brief, Kinetica pipeline, Eastfield Road, North Killingholme 1996	Archaeological watching brief undertaken during topsoil strip for construction easement of gas pipeline. A total of four visits were made to monitor the works. The stripped area was examined for features and the spoilheaps were examined for finds with the aid of a metal detector. No archaeological features or finds were encountered. Noted in archive that not all the topsoil was stripped. The excavation of the pipe trench was not monitored.	1996
E65	ELS2460	515165 417216	Geophysical survey, land west of Eastfield Road, North Killingholme, 2006	Detailed magnetic survey of 7 hectare site, southern area under grass, ploughed to the north. Bartington Grad601-2 was used; readings were taken at 0.25m intervals along traverses 1m wide. Grids were set out using a Leca 705 auto Total Station and referenced to suitable topographic features around the perimeter of the site. Data was processed using Geoplot 3.Some weak positive anomalies could have archaeological origin.	2006
E66	ELS2461	515393 417200	Geophysical survey, land east of Eastfield Road, North Killingholme, 2006	Detailed magnetic survey of 1 hectare site consisting of a football pitch with a small adjoining grass field to the south. Bartington Grad601-2 was used; readings were taken at 0.25m intervals along traverses 1m wide. Grids were set out using a Leca 705auto Total Station and referenced to suitable topographic features around the perimeter of the site. Data was processed using Geoplot 3. Strong magnetic anomalies indicating a large amount of ferrous objects. It is possible these could mask weaker responses caused by archaeological targets if present.	2006
E67	ELS2509	515249 417234	Trial trench evaluation, Eastfield Road, North Killingholme, 2006	The evaluation was divided into two areas; ten trenches were excavated to the west of Eastfield Road in a ploughed field, a further two trenches were located in a playing field to the east of Eastfield Road. The trenches were located to confirm the results of a previous geophysical survey and measured a minimum 25m x 1.6m. Removal of topsoils and other overburden was undertaken by mechanical excavator using a toothless ditching bucket. The exposed surfaces of the trenches were then inspected for archaeological remains. A full drawn, written and photographic record was made in accordance with standard Archaeological Project Services' practice. The location of the excavated trenches was surveyed using a differential GPS.Both areas were sealed by layers of silty clay which was extremely waterlogged during fieldwork. West of Eastfield	2006

Event Number	HER Number	Co-ordinates	Name	Description	Date
				Road, the natural glacial till with pockets of glacial gravel was encountered at c.0.60m deep sealed beneath a light brown clay subsoil and ploughsoil. A small number of undated features were recorded comprising plough scars and a pit. To the east of Easfield Road, natural was sealed by a buried ploughsoil overlain by a modern dump deposit and modern topsoil; the depth of modern deposits in one of the trenches exceeded 1.2m and natural was only partially exposed in this trench. Two modern linears were exposed in this area.	
E68	ELS2516	515424 419637	Geophysical Survey, Humber Hydrogen Pipeline, East Halton - South Killingholme 2006	A geophysical survey was undertaken along approximately 3.8 km of a proposed hydrogen pipeline. The survey area was divided into 18 linear plots each 30m wide, and a total of approximately 10.5ha was surveyed. Ground conditions were favourable with the majority of fields being stubble or pasture. The magnetic survey was undertaken using Bartington Grad 601-2 instruments with readings being taken every 0.25m along traverses spaced every 1.0m. The survey grid was set out and tied into the OS grid using a Trimble GPS system. A concentration of potential archaeological anomalies has been detected in the mid-section of the pipeline (plots 26 & 27). Some weaker responses have also been noted further north (Plot 19). Many of the survey areas show evidence of more modern farming practices such as drains and ploughing trends, though in places these plough marks are much stronger, perhaps indicating the presence of magnetically enhanced soils which may be of an archaeological origin. Recent interventions such as pipes and services are very apparent in a large number of the datasets and the associated strong, broad responses could be masking weaker archaeological anomalies. Recent interventions such as pipes and services are very apparent in a large number of the Plots and the associated strong, broad responses could be masking weaker archaeological anomalies.	2006
E69	ELS2517	516575 417610	Trial trenching, Land west of Rosper Road, North Killingholme, 2006	A programme of trial trenching was undertaken to investigate anomalies identified by prior geophysical survey and features highlighted in a desk based assessment in advance of development. Sixty linear trenches, ranging from 15m to 70m in length were excavated by machine. A full drawn, written and photographic record was made to standard APS practice. The location and height OD of the excavated trenches was surveyed with a differential GPS in relation to fixed points on boundaries and existing buildings(?). In response to the discovery of a number of features within 3 of the trenches, two areas in the northern part of the site were stripped, sampled and recorded.The western part of the development site was contaminated and the archaeologists working in the area were required to wear coveralls, masks and breathing apparatus. Recording in this area was limited to written description and photographs. The trenches were in general upto 2m wide x 0.25m to 0.5m in depth. The natural horizon was encountered at around 0.35m below ground level in the majority of trenches. Of the sixty trenches excavated, only seventeen contained archaeological remains. These comprised a number of prehistoric remains in the form of linear features, possibly remnants of a field or enclosure system. Post-Medieval and modern remains were also recorded in many of the trenches, mainly taking the form of land drains or plough scars. Five soil samples originating from possible Iron Age features were assessed but were barren.	2006
E70	ELS2518	516560 417752	Watching brief, Land west of Rosper Road, North Killingholme, 2006	A watching brief was carried out to record linear features identified during trial trenching. The watching brief covered an area measuring approximately 90m x 50m. The topsoil and overburden were removed with a view to allowing archaeological inspection of newly machined areas, although adverse weather conditions made this difficult.The features identified in the trial trenches appeared to terminate and no additional features were identified during the course of the watching brief.	2006
E71	ELS2536	516583 417645	Geotechnical borehole excavations, land east of Lindsey Oil Refinery	Six boreholes excavated by Soil Mechanics Limited to depths of between 16 and 24.7m. In boreholes, BH-1 to BH3 and BH5, topsoil depth varied between 300mm and 400mm. Topsoil was described as 'made ground' in BH2 and BH5. Below the topsoil, the glacial till was recorded as slightly sandy, slightly gravelly clays , with chalk and sandstone inclusions and frequent shell fragments. The Boulder clays in BH4 and BH6 were described as 'made ground' (?). There were strong hydrocarbon odours in BH4 and BH5. No archaeological deposits or artefacts were recovered.	2006
E72	ELS2568	500000 412000	LIDAR survey flights, 2001	Lidar topographical surveys, carried out by the Environment Agency in multiple sorties in North Lincolnshire in 2001. NB the point data for this event represents the centre of each 2 km x 2 km survey grid.	2001
E73	ELS2575	508019 421001	LIDAR survey flights, 1998	Lidar topographical surveys, carried out by the Environment Agency in multiple sorties in North Lincolnshire in 1998. NB the point data for this event represents the centre of each 2 km x 2 km survey grid.	1998
E74	ELS2577	499077 418002	LIDAR survey flights, 2000	Lidar topographical surveys, carried out by the Environment Agency in multiple sorties in North Lincolnshire in 2000. NB the point data for this event represents the centre of each 2 km x 2 km survey grid.	2000
E75	ELS2578	497085 418003	LIDAR survey flights, 2002	Lidar topographical surveys, carried out by the Environment Agency in multiple sorties in North Lincolnshire in 2002. NB the point data for this event represents the centre of each 2 km x 2 km survey grid.	2002
E76	ELS2579	501070 418002	LIDAR survey flights, 2003	Lidar topographical surveys, carried out by the Environment Agency in multiple sorties in North Lincolnshire in 2003. NB the point data for this event represents the centre of each 2 km x 2 km survey grid.	2003

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E77	ELS2580	501070 418002	LIDAR survey flights, 2004	Lidar topographical surveys, carried out by the Environment Agency in multiple sorties in North Lincolnshire in 2004. NB the point data for this event represents the centre of each 2 km x 2 km survey grid.	2004
E78	ELS2581	496089 418003	LIDAR survey flights, 2005	Lidar topographical surveys, carried out by the Environment Agency in multiple sorties within North Lincolnshire in 2005. NB the point data for this event represents the centre of each 2 km x 2 km survey grid. Medium resolution data for four tiles in the Winterton Ings area was supplied to SHWAP in 2006 for use in the assessment of SMR 11230. The data was in ascii grid format, which was translated to MapInfo format by Pete Hewson of NLC IT.	2005
E79	ELS2582	N/A	LIDAR survey flights, 2006	Lidar topographical surveys, carried out by the Environment Agency in several sorties in North Lincolnshire in 2006. NB the point data for this event represents the centre of each 2 km x 2 km survey grid.	2006
E80	ELS2890	513602 419329	Visual Impact Assessment, URSA, East Halton, 2008	An assessment was undertaken of the impact on the settings of cultural heritage features in the proximity of a proposed factory and access route. This assessment was additional to that already included in the desk-based assessment undertaken in connection with the development proposal. The assessment considered the following:Intrinsic visual interest and listing visual qualities; Topographic setting, identifying visual relationships to topography and natural features that can be linked with the function of the site or the reason for placement of the site in the landscape; Landuse setting, identifying whether the landuse is sympathetic to the site's intellectual understanding; Group setting including both contemporary and diachronic groupings or patternings, listing other sites, above or below ground, that could assist with creating a network of relationships. This should acknowledge any spatial element. Viewpoints for photography were selected and agreed with English Heritage and included views from publicly accessible locations close to each of the designated heritage sites. Additional views were taken in close proximity to the proposed development site looking out to the heritage sites, and also third party views from locations where the proposed development site could potentially be seen in context with the existing heritage sites. Baseline photographs were taken using a Canon EOS 20D digital SLR camera using a high quality fixed focus Canon EF 35mm F/2 lens. Photographs were taken at 1.7m above ground level, and the co-ordinates of the viewpoints were recorded using a GPS. The assessment was carried out through the production of a series of computer generated wireframes and, where appropriate, photomontages. The asssessment of the settings considered them in the context of the proposal including elements such as the varying heights of the chimneys, smoke and/or steam plumes, and the mass of lower level buildings.	2008
E81	ELS2918	515437 416452	Gradiometer survey on land off Staple Road, South Killingholme, North Lincolnshire, 2007	The gradiometer survey was undertaken at the proposed site of a carpark development on Staple Road in South Killingholme.The site is approximatly 0.4 hectares in size. P. Heykoop conducted the survey using a non-intrusive Bartington Grad-601 Dual Fluxgate Gradiometer. The zigzag traverse method was used, with 1m wide traverses and readings taken at 0.25m intervals within 30m by 30m grids. The site was located using GPS. The survey did not identify any clear archaeological activity.	2007
E82	ELS2929	514400 417270	Watching brief at Land adjacent to Rockywal, Vicarage Lane	No archaeological remains were encoutered during the watching brief	2007
E83	ELS2947	516694 417155	Excavations on land at Immingham Combined Heat and Power Plant, Killingholme, North Lincolnshire, 1999 - 2000	The open area excavation covered approximately 11,000 square metres was carried out in 1999-2000. This area was the focus of the activity identified in the earlier geophysics and evaluation surveys. The top- and sub-soils were removed using an excavator fitted with a flat-bladed ditching bucket. All archaeological excavation was done by hand. The site was recorded on pro forma sheets, with plans and section drawings and a colour and monochrome photographic record to accompany it. Selected deposits were sampled. There is some evidence for salt production and metal working, and the environmental samples suggest a mainly pastoral landscape. The results of the excavation show several phases of occupation on the site, from the Iron Age seen through dated features including two roundhouses, through the transition into Roman occupation and the subsequent abandonment of the site until the land was divided up in the Medieval period for ridge and furrow farming.	2000
E84	ELS2948	516845 417112	Excavations on land at Immingham Combined Heat and Power Plant, Killingholme, North Lincolnshire, 2002	There were two areas of excavation during this phase of work at the location, the first being 98m by 47m, and the second being 20m by 20m. The top- and sub-soils were excavated using a excavator fitted with a wide flat-bladed ditching bucket. The site was recorded on pro forma sheets, with plans and section drawings and a colour and monochrome photographic record to accompany it. Selected deposits were sampled. The excavation showed that the same occupational phases of the site seen in the earlier excavation continued in these excavations. Early Iron Age settlement focused towards the base of the slope while on the higher ground there was the later Roman settlement. There is some evidence for salt production and metal working, and the environmental samples suggest a mainly pastoral landscape.	2002
E85	ELS2956	516854 417162	Watching brief at the Immingham CHP Plant, Rosper Road, North	This watching brief took place during groundworks associated with further development of the Immingham CHP plant. Three areas were monitored during sixteen visits made to the site by the archaeologist. Where archaeological features were identified, a written record was made, along with section drawings made to a scale of 1:10, a site plan at 1:20 or 1:50 where appropriate, and a photographic record in colour, monochrome and digital was kept. Excavations in area1 involved stripping down 2 - 3 acres of previously undisturbed land for a roadway. The depth excavated to was 0.5m, and revealed natural brown clay. Excavations in area2 was the excavation of a new lagoon covering	2007

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			Killingholme, North Lincolnshire,	approximately 0.25 acres. The depth excavated to was 1.3m, at which level four land drains were identified, and additional excavations within in this area to a total depth of 3.8m revealed only natural clays beneath layers of sand and hardcore used in the levelling of the site. The third area of excavations was for a new Heat Recovery Steam Generator plant and Air Cooling Condenser, which covered an area of 3 acres. The depth excavated to in this area was 1.3m, and revealed only the same natural clays and hardcore levelling stratigraphy seen in area 2. No archaeological features or artefacts were identified during this watching brief.	
E86	ELS3021	516907 417026	Desk-based Assessment of land adjacent to the Conoco Humber Refinery, North Lincolnshire, 1999	This assessment took place in anticipation of a proposed redevelopment of the site. The site is approximately 11.4 hectares of land, to the west of Rosper Road, and the study area of this assessment has a radius of 1 km around this site. A number of archaeological sites were located within the study area, including a number of cropmark sites, and there is evidence of activity from the Mesolithic through to the Medieval period, with the strongest evidence coming from the Romano-British period.	1999
E87	ELS3022	516977 417031	Field walking at land adjacent to the Conoco Humber Refinery, North Lincolnshire, 1999	This fieldwalking was the second stage of the assessment of the land at Conoco Humber Refinery, preceded by a desk-based assessment. The survey covered approximately 23 hectares of land, restricted to the area of the proposed development of a new Combined Heat and Power Plant. The fieldwalking was conducted along transects spaced at 20m intervals which in turn were subdivided into 20m sections. Fieldwalking was carried out in two areas using the same methods. Following specialist examination, modern and non-diagnostic finds were disposed of, while the rest were spot dated and retained. There were only a small number of artefacts recovered from area one compared to area two, but this may be due to the almost continuous vegetation ground cover in area one, opposed to the freshly ploughed area two. The finds recovered can be broadly put into three categories - Roman, Medieval and post Medieval.	1999
E88	ELS3023	516633 417133	Geophysical Survey at land adjacent to the Conoco Humber Refinery, North Lincolnshire, 1999	This geophysical survey took place in two stages to complete the survey of the whole of the development site due to half of the survey area being under crop at the time of the first stage, making it inaccessible (14/09/99-01/10/99 and 15/11/99-11/12/99). The survey was part of the investigations into the land under proposed development of a new Combined Heat and Power Plant. The total area of the site investigated in this survey was approximately 23 hectares. Measurements were recorded using a Geoscan FM36 fluxgate gradiometer. A zigzag traverse pattern was used, with data measured in 20mx20m grids at 1.0x0.5m intervals. GeoQuest InSite software was used to process the data from the two stages. The main features identified are a system of rectilinear ditches and a network of enclosures.	1999
E89	ELS3024	515787 415365	Geophysical Survey for Conoco Gas Pipeline II, South Killingholme, 2000	This survey follows the 40m wide corridor along a proposed pipeline route, and is a continuation of the survey occurring along this pipeline. Two fields were surveyed, an area of approximately 3 hectares. The survey grids were set out by GSB Prospection and tied in to existing field boundaries using an EDM system. No further information regarding the methodologies is given in the report.The survey identified a number of anomalies, a concentration of which appear to be extending southwards.	2000
E90	ELS3025	N/A	Desk-based Assessment of the Humber and Trent shore WAERC	N/A	2001
E91	ELS3156	516772 417725	Geophysical survey at North Killingholme, North Lincolnshire, 2007	This survey was undertaken on an area of 2.8 hectares prior to the development of a carpark. It follows on from two previous surveys completed in 2006. No archaeological features have been recorded previously within this survey area, however there are Iron Age features known in the surrounding area. The survey was carried out using a duel sensor Grad601-2 Magnetic Gradiometer. Grid size was 30mx30m, and readings were taken at 0.25m intervals on traverses 1m apart. Processing of the data was completed using Geoplot The survey identified numerous weak responses, the origin of which is unclear.	2007
E92	ELS3299	514074 415661	Aerial Photographic Assessment, A160-A180 Improvements, South Killingholme 2008	Air photo mapping and interpretaion was undertaken for the A160/A180 improvement scheme. The survey area covers an area of c.5.2 kmsq centred at TA140 154. AP collections consulted included NMR, Cambridge Univ ULM, NLSMR & NELSMR, as well as Google online digital images. Systematic examination of all aerial photos was undertaken using x2 magnification where necessary, and vertical photographs were viewed stereoscopically. Levelled and upstanding archaeological features were mapped at a scale of 1:2500 using traced overlays and the Bradford Aerial Photographic Rectification Programme, AERIAL5.14, gvining error readings of 3metres or less for each control point. Rectified images collated and metadata recorded in MAPINFO 9.5 as vector plots. Two palaeochannels and 25 individual archaeological sites were identified and mapped.	2008
E93	ELS3301	516899 416893	Aerial Photographic Assessment, A160-A180 Improvements, Option 7, South Killingholme 2009	Further air photo mapping and interpretaion was undertaken for the A160/A180 improvement scheme, option 7 area. The survey area covers an area of c.1.7 kmsq centred at TA169 166. AP collections consulted included NMR and Cambridge Univ ULM, as well as Google online digital images. Systematic examination of all aerial photos was undertaken using x2 magnification where necessary, and viewed stereoscopically where possible. Selected prints were photographed with hand held digital camera. Google Earth images were rectified using Airphoto 3.44 to ground control points derived from OS 1:2500 scale map. Levelled and upstanding archaeological features were mapped at a scale of 1:2500	2009

Event Number	HER Number	Co-ordinates	Name	Description	Date
				using the Bradford Aerial Photographic Rectification Programme, AERIAL5.14, gvining error readings of 3metres or less for each control point. Rectified images were collated and metadata recorded in MAPINFO 7.5 as vector plots.	
E94	ELS3302	N/A	A160-A180 Improvements (Geo phys)	A geophysical survey was carried out along optional routes for the A160-A180 improvement scheme. Twenty one separate blocks were surveyed covering an area of 15.25ha, a 50% sample of the total proposed land take. Eight other proposed blocks were not surveyed due to access restrictions. The route was surveyed in two stages ; some blocks were under stubble, others were ploughed and drilled. All survey areas were set out using a differential GPS system. The magnetometer survey was undertaken using a Bartington Grad601 instrument taking readings at 0.25m intervals on zig-zag traverses 1m apart within 20m by 20m grids. Stored data was processed using Geoplot3. Anomalies were detected throughout the survey, the majority concentrated at the southern end of the route.	2008
E95	ELS3304	515718 416235	Geophysical Survey, A160-A180 Improvements, South Killingholme, 2009	Additional geophysical survey was carried out at several locations along the A160-A180 improvement scheme. Fourteen separate blocks were surveyed covering an area of 8.2ha. The majority of blocks were either under stubble or were drilled; those to the east of South Killingholme were not cultivated and were partially overgrown. One further block was unsuitable for surveying. All survey areas were set out using a differential GPS system. The magnetometer survey was undertaken using a Bartington Grad601 instrument taking readings at 0.25m intervals on zig-zag traverses 1m apart within 20m by 20m grids. Stored data was processed using Geoplot3. Anomalies interpreted as having archaeological potential were located in three blocks, although further discrete anomalies were mapped in three other blocks.	2009
E96	ELS3308	515520 415972	Desk based assessment, A160-A180 Improvements, South Killingholme	Cultural heritage desk based assessment undertaken for the proposed road improvement scheme to the A160/180 at South Killingholme. The project followed the guidelines for Simple Assessment in the Highways Agency's Design Manual for Roads & Bridges. Three cultural heritage topics were addressed; archaeological remains, historic buildings and historic landscapes. Archaeological data was gathered from the NMR, EH GIS datasets for designated heritage assets, NLSMR, NELSMR, LCC HER, and the ADS 'ArchSearch' database. Historic maps were consulted at Lincolnshire Archives. Historic landscape characterisation consulted the Lincolnshire HLC pilot project for this area. The study area comprised a 500m buffer zone around the route options. A preliminary walkover was carried out to inspect proposed route options and assess suitability of further non-intrusive survey work. The possible impact was considered for each identified archaeological site along the proposed route options.	2008
E97	ELS3313	514786 417917	Desk based assessment, Heron Renewable Energy Plant, South Killingholme, 2009	A desk based assessment was undertaken in connection with a proposed industrial development site. The study area extended to 1 km around the site. Data was collated from the NMR (digital data - August 2008), NLSMR(June 2009), NELSMR (August 2008), Lincolnshire Archives, Site Investigation work including borehole data, and other published material. A walkover survey of the development site was undertaken on 14th January 2009. A visual impact assessment was undertaken for cultural heritage assets with the Zone of Theoretical Visibility as defined in Chapter 9: Landscape and Visual Assessment of the Environmental Statement; the assessment considered only one cultural asset, namely Thornton Abbey.	2009
E98	ELS3314	517606 416850	Geophysical survey, Heron Renewable Energy Plant, South Killingholme 2009	A geophysical survey was undertaken in connection with a development proposal for a renewable energy plant. The area surveyed comprised c.8.1ha and was conducted with a Bartington Grad 601-2 dual sensor magnetic gradiometer along 1m traverses with readings taken every 0.25m. Twenty metre grids were laid out using a Differential GPS.The survey took place in an alluviated environment. The survey revealed a series of anomalies comprising ditches, drainage ditches, plough furrows and former borehole locations considered to be of low archaeological significance. In the south-west of the survey area a series of ditches occupied an area approximately 80m x 35m. To the north east of the site there is an area of widely fluacting readings; the survey took place in an alluviated environment.	2009
E99	ELS3315	517728 417507	Geophysical survey, temporary laydown area, Heron Renewable Energy Plant, South Killingholme, 2009	A geophysical survey was undertaken across an area of c.20ha to be used as a temporary laydown area during the proposed construction of a renewable energy plant. The area surveyed covered 6 contiguous fields and was conducted with a Bartington Grad 601-2 dual sensor magnetic gradiometer along 1m traverses with readings taken every 0.25m. Twenty metre grids were laid out using a Trimble theodolite tied in to local boundaries and other permanent landscape features. The data was processed using Geoplot3 software (Geoscan Research).Numerous broad, linear and curvilinear anomalies have been identified throughout the survey area. These are interpreted as former creeks or palaeochannels or spreads of alluvial material in the former saltmarsh. No anomalies of probable archaeological potential were identified.	2009
E100	ELS3317	517581 416801	Trial Trenching, Heron Renewable Energy Plant, South Killingholme, 2009	Following a geophysical survey of the proposed main plant area, a programme of archaeological trial trenching was undertaken. Twenty two linear trenches were mechanically excavated under archaeological supervision. The north eastern area contained deep alluvial deposits, whilst the south and west uncovered a concentration of archaeological remains including three large linear ditches and a small pit containing occupation debris dated to the Romano-British period. Several archaeological features were uncovered within the alluvial deposits on the eastern side of the site, in particular a large burnt spread containing burnt stones and a large amount of charcoal, similar in style to a burnt mound. A number of the features were not detected on the geophysical survey	2009

Event Number	HER Number	Co-ordinates	Name	Description	Date
E101	ELS3435	516876 417118	Borehole Surveys, Conoco CHP	Three transects of 100m at 10m intervals, using a 75mm bucket auger. Ground level relative to OD was taken for each position. Sampled sediments described using standard HFA context sheets. The survey confirmed the presence of silted palaeochannels and probable shorelines. No dateable evidence.	2000
E102	ELS3454	517026 418096	Able UK Ltd Marine Energy Park	A detailed fluxgate gradiometer survey, comprising a 50% sample of the study area in 10m wide strips. Total study area c. 100ha. 18 fields were surveyed out of 22 in the survey area; 4 were unavailable or unsuitable. Strong, well-defined anomalies were detected in Field 1, suggested to be a settlement site. Tentative responses in Field 5 may have been a southerly extension. No other responses were definitive, but some isolated groups may be of archaeological origin. Potential ridge & furrow detected in Field 19. numerous natural creek-type anomalies.	2011
E103	ELS3493	514927 415998	A160 - A180 improvements - Geophysical survey	A third set of magnetometer surveys on a proposed road improvement scheme, following on from 2008 and 2009. 9 blocks (Blocks 36 - 44) were surveyed at various locations. Within 30m x 30m grids, Bartington Grad601 instruments were used to take 0.25m interval readings on zig-zag traverses, 1m apart. Geoplot 3 software was used to process and present the data. The only archaeological anomalies were in Blocks 36 and 37, where a linear ditch identified in 2009 was revealed as the SW corner of a possible enclosure.	2011
E104	ELS3494	N/A	Systematic Fieldwalking survey A160-180 improvements	Fieldwalking along 10m wide traverses. All finds individually bagged, co-ordinates taken using handheld GPS at 5m accuracy. The pottery was subject to rapid spot-dating assessment, and was plotted by period in the report. Pottery and flint were the only categories of find presented in any detail. A scatter of Roman pottery was identified near the Brocklesby roundabout (out of county).	
E105	ELS3573	515741 415491	Aerial photographic Sortie	By Cambridge University Air Committee	1950-1970
E106	ELS3578	515434 415830	A160-A180 improvements, Immingham	12 trial trenches were cut by WYAS with a mechanical excavator mostly located through a magnetometer survey. Of the 12 trenches 10 produced no archaeological features and the other 2 produced Iron Age and Late Iron Age finds. 26 trenches were cut in total however 14 lay within North East Lincolnshire parish.	2010
E107	ELS3606	515679 415531	Barns, Grange Farm, South Killingholme	Photographic survey of barns, Grange Farm using a Hasselblad medium format camera on 120 film using 38mm, 50mm and 80mm lenses. All negatives were developed by hand.	2009
E108	ELS3611	514473 417261	Ashbourne Hotel, Vicarage Lane, North Killingholme	A large number of modern features and deposits were observed and recorded along with 8 undated features showing areas of domestic activity.	2009
E109	ELS3636	N/A	Heron REP electrical Connection route, Immingham (DBA)	N/A	2010
E110	ELS3682	N/A	Temporary Planning consent for port related storage (DBA	N/A	2005
E111	ELS3700	502908 413131	Aerial photographic Sortie	Aerial photographic Sortie conducted by Fairey Surveys Ltd of the South Humber	1970
E112	ELS3826	516480 417964	Finding of a Neolithic axe fragment, Burkinshaw's Covert	Part of a polished stone axe was found during weeding within Burkinshaw's Covert. Findspot described as Plot 1 at the southern end of the Covert, approximately 40m west of Rosper Road. The find was within unstratified material, removed from some part of the refinery site in the 1960s.	2012
E113	ELS3829	514482 417314	Construction of a new Lychgate at St Denys Church, North Killingholme	Construction of a Lych Gate at the entrancway to St Denys Church. The datestone on the gate reads 2000. The foundation trench was visited by staff of the HER. No archaeological finds were recorded.	2000

Event Number	HER Number	Co-ordinates	Name	Description	Date
E114	ELS3849	517008 417965	Geophysical Survey, proposed Able UK Ltd Marine Energy Park, North Killingholme	Geophysical survey of 3 fields (13.2 ha total)within the Marine Energy Park application boundary, not previously accessible to survey. Field 5 - full survey, Fields 12, 21 - 50% survey with 10m wide strips. Survey grid set out using an unnamed differential GPS. A Bartington 1m fluxgate gradiometer was used along 1m transects, readings at 25cm. Enclosure-type anomalies were detected in Fields 5 and 12.	2012
E115	ELS3860	514713 416391	Greengate Lane, South Killingholme - Archaeological desk-based assessment	Desk-based assessment of a proposed residential development site, including a walkover survey. The report collated baseline data from sources including the HER, NMR, county archive, local studies library, OASIS and other web resources. The study concluded that there is potential for a NE-SE aligned droveway or track of uncertain date to extend into the development site, and that the site probably lies on the very edge of the Medieval and Romano-British settlement foci seen on geophysical survey plots. The report recommends further archaeological evaluation and proposes a scheme of works for trial trenching.	2012
E116	ELS3877	514579 417965	Hornsea Offshore Wind Farm - Historic Environment desk-based assessment	A historic environment desk-based assessment for the onshore elements of a proposed wind farm. It extends over land covered by North Lincolnshire, North East Lincolnshire and Lincolnshire councils.	2011-13
E117	ELS3878	514769 416675	Aerial photographic assessment and transcription	Assessment of a 500m wide corridor centred on an onshore cable route, running between North Cotes and North Killingholme. Sources consulted: NMR, EH military oblique & vertical photographs, GoogleEarth, Environment Agency Lidar. Transformation of oblique images using AirPhoto. Features transcribed in AutoCAD Map. Lidar examined in SAGA GIS using directional lighting. No control point errors greater than 1.5m.	2011
E118	ELS3884	514803 417351	Hornsea Offshore Wind Farm (Phase 1) onshore cable route & substation	A continuous fluxgate gradiometer survey, stretching between North Coates (Lincs) and North Killingholme. Mostly a 50m wide corridor, but wider in places. Plots 104 - 143 were within N Lincolnshire. The gradiometer (type not stated in report) was used to take 4 readings per metre along 1m wide zig zag traverses. Sensitivity set to 0.1 nanoTesla. The data was processed within ArchaeoSurveyor v1.3.2.8.	2011
E119	ELS3887	514844 417292	Hornsea Wind Farm Option 3 Onshore Cable Route - Fieldwalking Survey	Report on fieldwalking of 27 km of the Option 3 cable route, between North Coates and North Killingholme. This was c. 71% of the proposed route. An initial walkover survey was specified in the WSI prepared by RPS; fields up to no. 119 were only accessible to Smart Wind, who provided photos to asses field conditions. Plots 120 to 142 were accessible to PCA, who did their own assessment. All suitable fields within the 50m wide corridor was walked with 6 parallel transects spaced 10m apart. All pre-20th century findspots were recorded as waypoints by Garmin handheld GPS to 5-10m accuracy. 316 artefacts were recovered within the N Lincolnshire authority.	2011
E120	ELS3926	N/A	Desk-based assessment, Poplar Farm	N/A	2012
E121	ELS3946	514692 416396	Archaeological evaluation at Greengate Lane, South Killingholme	Archaeological evaluation at the site of a proposed housing development. Six machine-excavated 15m x 1.6m trenches were positioned at intervals between planned house plots in specific localities where archaeological features, deposits or remains may have survived. A series of Romano-British, Medieval and post-Medieval features were recorded. The denity of features increased towards the eastern half of the site.	2012
E122	ELS3965	514890 416291	Trial trenching, 17 Greengate Lane, South Killingholme	Report on a scheme of trial trenching, carried out in advance of a proposed residential development. Four trenches were excavated, two 10m x 1.6m, and two 20m x 1.6m. They exposed a number of modern features and a post-Medieval ditch representing a property boundary at the south end of the site. There were few features or deposits of archaeological interest on the site.	2013
E123	ELS3967	515987 416216	Humber Refinery, South Killingholme - Assessment of Archaeological Potential	A desk-based assessment, commissioned in order to provide an assessment of the archaeological potential of the site of a new blender control room and car park at the Humber Refinery, South Killingholme. C 2 km square search area. Sources consulted: North Lincolnshire HER (via Heritage Gateway), published sources, historic mapping, NMR. A site inspection carried out on 03/04/2013 formed part of the work. Ridge & furrow was noted across the area of the proposed access road, and a post-Medieval field boundary parallel to the current Walmer House access road.	2013
E124	ELS3968	515928 416195	Archaeological Geophysical Survey, land at Humber Refinery	A survey commissioned to investigate land proposed for a new blender control room, car park and access road. Two small survey areas were investigated, control room and car park (Survey Area 1), and access road (Survey Area 2). A Bartington 601 Dual Fluxgate Gradiometer was used. The zigzag traverse method of survey involved readings taken at 0.25m intervals along 1.0m wide traverses. The survey grid was recorded by Differential Global Positioning Satellite using a Topcom GSR-1. The visible ridge & furrow cultivation was detected in Area 2, along with two recent/modern boundaries. High readings in Area 1 were associated with the construction of the refinery.	2013

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E125	ELS3977	517163 418295	Heritage Impact Assessment - Land off Station Road, South Killingholme	A Heritage Impact Assessment, commissioned to support a proposed industrial development on land north of Station Road, South Killingholme. It comprised desk-based research and also excavation of 3 trenches. The trenches exposed a deep horizon of modern rubble, directly overlying natural clays, suggesting that the site had been stripped of topsoil and levelled prior to the modern material being imported. The site was thought to have a negligible archaeological potential.	2013
E126	ELS4008	516730 418035	Palaeoenvironmental Assessment, Able Marine Energy Park	Report on a Stage 1 palaeoenvironmental assessment, in advance of the construction of a marine energy park. 59 boreholes were investigated in 3 transects, numbered A, B and C, with boreholes placed at 50m intervals. Transect A comprised 21 auger holes, transect B 22 auger holes and Transect C 16 auger holes. Each auger location was marked out using a Leica GS08 GPS unit receiving RTK corrections to provide millimetre accurate 3D co-ordinates. Due to flooding, boreholes B6 and B7 were relocated to the nearest dry ground.The augering was undertaken using a 25mm diameter, 1m long hand operated gouge auger, with a small 7cm diameter bucket auger used for the harder upper sediments in some boreholes. Extension bars (1m long) were added to the auger to increase the depth of the auger investigation as and where necessary. The core in the gouge auger was cleaned with a knife and logged in the field, with the depth below ground surface recorded for all deposits and the sediments described using Munsell soil colour charts and standard soil descriptions. In each case the borehole was continued until the underlying diamicton was proved or stones or gravels prevented further coring. 2 areas of possible palaeosols (old ground surfaces) were identified. A stream valley was found to contain deep deposits of organic silts, perhaps late Bronze Age or Iron Age. An outcrop of sand & gravel may not have been subject to inundation or erosion, so the prehistoric ground surface should still be extant.	2012
E127	ELS4009	N/A	Earthwork survey, Able Marine Energy Park	N/A	2012
E128	ELS4010	517032 418230	Fieldwalking survey, Able Marine Energy Park, North Killingholme	Fieldwalking survey, carried out over 6 fields within the proposed marine energy park area. Method: linewalking 10m apart, surveying 2m each side. All findspots recorded with centimetre accuracy Leica GS08 GPS. Modern pottery, CBM and glass not collected. 227 recorded finds, including a small amount of worked flint, 2 scatters of Roman pottery in adjacent Fields 1 and 5, and small amounts of Medieval and post-Medieval pottery. The Roman pottery scatters, in adjacent fields, coincided with settlement-type anomalies detected by geophysical survey.	2012
E129	ELS4011	517049 418000	Trial trenching, land at the Able Marine Energy Park	Report on an extensive programme of trial trenching, carried out in advance of the construction of the proposed marine energy park. 39 trenches were excavated, mostly 30m x 2m. They were located to target specific geophysical anomalies. In each excavated trench, topsoil, subsoil and underlying non-archaeological deposits were removed by mechanical excavator with a toothless ditching bucket in spits no greater than 100mm in depth. The process was repeated until the first archaeologically significant or natural horizon was exposed. All further excavation was then undertaken by hand. Poor ground conditions caused by saturated ground and flooding hampered the excavations. However, significant late Iron Age and Roman archaeological remains were recorded in four separate areas. Pottery dating evidence confirmed that Roman activity continued to the 4th century. These results confirmed the results from earlier geophysical and fieldwalking surveys.	2012
E130	ELS4020	517854 417672	Overbridge at Marsh Lane, Immingham	Desk based assessment in connection with a proposed road bridge over the Killingholme Branch Line. NB Marsh Lane is in South Killingholme, not Immingham. The report assessed available information from the HER and additional OS cartographic evidence.	2013
E131	ELS4050	514873 416748	Hornsea Offshore Wind Farm cable route - Trial Trenching	Investigation of the proposed overland cable route between an offshore windfarm and the National Grid substation at North Killingholme; the final part of an assessment agreed with Lincolnshire council, N & NE Lincolnshire councils. Within North Lincolnshire, a total of 13 trenches were excavated, comprising one 15 m x 2 m (Trench 96), one 20 m x 2 m (Trench 94), six 25 m x 2 m (Trenches 85, 88, 95, 97, 98 and 99), one 30 m x 2 m (Trench 101), three 35 m x 2 m (Trenches 93, 100 and 104) and one 50 m x 2 m (Trench 91). Trenches were initially excavated with an excavator fitted with a toothless blade. All archaeological features were hand-excavated in sample section, half section or quarter section. A known Medieval moated site at South Killingholme was investigated, and two square enclosures produced much evidence of Iron Age occupation.	2012
E132	ELS4054	517872 417682	Borehole survey, Marsh Lane, South Killingholme	A palaeoenvironmental borehole survey in advance of construction of a railway overbridge. 7 boreholes were investigated in a transect 230m long. A percussion coring rig was used for 6 boreholes; depths were achieved in the range 2.87 to -4.47m OD. A piston corer was used for a 7th, achieving 7.22m. A thin peat deposit overlying coarse sands at the base of the Holocene sequence was identified. This and the overlying clay have potential for dating the marine transgression, and for reconstruction of the palaeoenvironment.	2013
E133	ELS4064	517030 417393	AMEP Area 6 - Trial Trenching	Ten trial trenches were excavated within Area 6, Able Marine Energy Park. Each measured 30m long by 1.8m wide. Removal of topsoil, subsoil and underlying non-archaeological deposits was undertaken using a tracked 360° excavator fitted with a smooth ditching bucket, excavation continuing until natural geological deposits or a maximum safe working depth was reached. A sondage was machine excavated in each trench to reveal deeper deposits and each sondage was remotely recorded as access was not possible due to safety considerations. The archaeological features comprised dated and undated ditches buried by layers of alluvium up to 0.90m deep below topsoil. Seven of the trenches were archaeologically sterile and three contained archaeology (Trenches 4, 6 and 7). Several ditches were identified running on north to south and	2013

Event Number	HER Number	Co-ordinates	Name	Description	Date
				east to west orientations, following a similar pattern as enclosures that have been identified elsewhere as part of the wider project excavations and are probably associated with low intensity agricultural activity. A pair of parallel ditches were recorded, suggesting a large double ditched enclosure or trackway. The artefactual evidence was limited to a sherd of shell-gritted Iron Age pottery and a sherd of native tradition Roman pottery, giving the site a broad occupation date range of Iron Age to early Roman. Deep alluvial cover was recorded in all the trenches, suggesting the area was abandoned due to flooding at some point during the Roman period.	
E134	ELS4072	514730 416376	Watching Brief, Greengate Lane, South Killingholme	Archaeological Research Services Ltd (ARS Ltd) was commissioned to undertake an archaeological watching brief and a strip, map and sample excavation over targeted areas of the residential development in intermittent stages. The watching brief was carried out over all five phases of the site, and involved monitoring the excavation of nine pairs of housing foundation trenches: Phase 1 Plots 1 - 6 Phase 2 Plots 15 & 16 Phase 3 Plots 22 & 23 Phase 4 Plots 24 - 29 Phase 5 Plots 30 & 31 Two linear features containing Medieval and post-Medieval pottery were recorded.	2013
E135	ELS4073	514729 416403	Strip, Map and Sample, Greengate Lane, South Killingholme	Archaeological Research Services Ltd (ARS Ltd) was commissioned to undertake an archaeological watching brief and strip, map and sample excavation over targeted areas of the residential development in intermittent stages. The strip, map and sample excavation was carried out over Phases 3 and 4 of the site. Phase 3 SMS encompassed the footprints of proposed plots 17-21, with one evaluation trench positioned through the rear garden areas. A series of intercutting linear gullies and ditches of Medieval date were recorded. Phase 4 of the SMS was a trench targeted a large east-west aligned ditch identified in a 2012 evaluation, in order to fully record a representative section and obtain further dating evidence. This was successful, with 13th century pottery recovered from the basal fill.	2013
E136	ELS4090	N/A	A160/A180 Port of Immingham Improvement,(Geo phys)	N/A	2014
E137	ELS4096	515602 416134	A160/A180 Port of Immingham Improvement	A gradiometer survey of seven parcels of land along the road improvement scheme. Conducted using a Bartington Grad601-2 dual fluxgate gradiometer; survey grid nodes were established at 30m x 30m intervals using a Leica Viva RTK GNSS system. The survey provided additional information to the previous geophysical surveys undertaken for the same project. Within North Lincolnshire, clusters of pit-like anomalies of probable and possible archaeological interest are visible within the data.	2014
E138	ELS4142	515524 416094	Archaeological evaluation, A160/A180 improvements, North Lincolnshire	Wessex Archaeology was commissioned by Costain to carry out evaluation trenching on land adjacent to the A160, in North Lincolnshire and North East Lincolnshire. The work was undertaken as part of a programme of archaeological works relating to the proposed improvement of the A160/A180 between Habrough and South Killingholme. Within the North Lincolnshire unitary authority, trenches were positioned to the south of the A160/A1077 junction (Areas 4-6; Trenches 16-23) and Trenches 26-29 lay within Area 7 at the junction of the A160 and Manby Road. There were no archaeologically significant features within these trenches, and this corresponded with the isolated and fragmentary targets identified in an earlier geophysical survey. The only features identified related to Post-Medieval agricultural activity in the form of ridge and furrow and land drains.	2014
E139	ELS4206	506766 415367	Aerial Photographic Survey	Carried out by Fairey Surveys	1970
E140	ELS4281	515423 415867	Archaeological mitigation and monitoring, A160/A180	A programme of archaeological mitigation carried out during the spring and summer of 2015 in advance of road improvement works to the A160/A180 access to the Port of Immingham. The scheme extended both sides of the NE Lincolnshire/N Lincolnshire county boundary; it comprised areas of excavation, strip, map and sample excavation, archaeological monitoring, and earthwork survey.	2015
E141	ELS4285	515634 415630	Aerial photography, A160-A180	Air photography, before and during the A160-A180 improvements. Archaeological features visible in some images.	2015
E142	ELS4290	515270 415260	Hornsea Offshore Wind Farm Project One: Archaeological Watching	Archaeological monitoring of a ground investigation trial pit, along with a review of a nearby borehole log, both located along an onshore electrical cable route. Trial pit HOWTP32 was 3m x 0.5m, and was situated in close proximity to previous archaeological trial trench 85, excavated as part of an earlier phase of archaeological trench evaluation. Within Trench 85 a buried soil containing Iron Age pottery and worked flint had been identified, however, no evidence of this deposit and no dating evidence were recorded within HOWTP32. A series of alluvial layers were recorded beneath the subsoil, which are likely to be associated with the water channel that runs along the southern boundary of Plot 104,	

Event Number	HER Number	Co-ordinates	Name	Description	Date
			Brief on Ground Investigation Works	and forms the boundary between North and North-East Lincolnshire. Borehole HOWBH06 recorded a series of silty sandy gravelly clay deposits, which are indicative of Till deposits of the Devensian period. The underlying bedrock of the Burnham Chalk Formation was not encountered within the borehole, which terminated at 20m blow ground level. In summary there were no archaeological remains identified within the GI trial pits, and no organic material was recorded within the reviewed borehole log.	
E143	ELS4297	514775 417818	Archaeological Trial Trenching, Hornsea Offshore Wind Farm Project One	The third and final phase of trial trench evaluation along a cable route associated with an off-shore windfarm. The majority of trenches contained no archaeological deposits or artefacts except for trenches in Lincolnshire. In North Lincolnshire, only a single sherd of Romano-British pottery was recovered from topsoil near North Killingholme, suggesting this trench may lie outside of the Iron Age/ Romano-British settlement identified in an earlier programme of trial trenching to the south. Some ridge and furrow cultivation was seen, indicating that at least the areas of Trenches 105 and 112 had a long history of agricultural use.	2015
E144	ELS4357	516656 417386	Watching Brief, VPI Immingham Power Station, North Lincolnshire 2018	A watching brief was maintained during intrusive Ground Investigation (GI) works. The monitored GI works comprised the excavation of ten test pits, three trial trenches, two access trackways and hand-excavated interventions prior to borehole drilling. No archaeological features, deposits or structures were encountered, but a number of field drains were noted. Natural subsoil was present at the bases of trenches sealed by deposits of made ground or topsoil. The interventions at the site were generally small-scale (narrow strip trenches and hand-dug, small-diameter borehole pits) and covered only a small proportion of the site area. Further, the larger-scale interventions (the trackways) were shallow and subject to immediate flooding, limiting archaeological visibility. These factors may, in part, account for the negative results.	2018
E145	ELS4384	514822 416714	Excavations at SPE4a Hornsea Offshore Wind Farm Project 2, South Killingholme, 2018-19	Strip, map and record excavation undertaken during the construction phase of the installation of the offshore wind farm onshore cable route. The stripped area was adjacent to the south side of the pre-construction set piece excavation area (SPE4) for the Hornsea Offshore Wind Farm Project One. Site was stripped in July/August 2018 but due to staff shortages, record excavation did not fully commence until October in the northern half of the site , and on the southern half of the site not until January 2019. The excavations revealed further evidence of the late Iron Age to Romano-British settlement and agricultural landscape containing intercutting linear features and several phases of enclosure. This was overlain by a Medieval moated site, dating from the 9th to 10th century and in use until the 14th century. Provisional stratigraphic phasing has been applied, which will be refined to site phasing during assessment. Finds from the site consisted of pottery sherds and animal bone in low quantities, some fragments of CBM and an unidentified copper alloy object.	2019
E146	ELS4504	514900 417759	Trial Trenching, Set Piece Excavation, SPE5, Hornsea Offshore Wind Farm Project One	Strip, map and record excavation undertaken during the construction phase of the installation of the offshore wind farm onshore cable route. The stripped area was adjacent to the south side of the pre-construction set piece excavation area (SPE4) for the Hornsea Offshore Wind Farm Project One. Site was stripped in July/August 2018 but due to staff shortages, record excavation did not fully commence until October in the northern half of the site , and on the southern half of the site not until January 2019. The excavations revealed further evidence of the late Iron Age to Romano-British settlement and agricultural landscape containing intercutting linear features and several phases of enclosure. This was overlain by a Medieval moated site, dating from the 9th to 10th century and in use until the 14th century. Provisional stratigraphic phasing has been applied, which will be refined to site phasing during assessment. Finds from the site consisted of pottery sherds and animal bone in low quantities, some fragments of CBM and an unidentified copper alloy object A further smaller Iron Age enclosure was present defined by a series of gullies (5020 = 5029 and 5038 = 5140) and postholes. The enclosure may have been associated with a post-built structure, or was surrounded by a post-built fence. The enclosures were all situated on the boundary between a wet area containing a sequence of alluvial deposits to the south-east and drier ground to the northwest. Activity in the enclosures was likely facilitated by this liminal environment, perhaps exploiting some resource associated with the wet ground or fen. The enclosures may have been used to corral stock, perhaps rounded up from the wet ground where they were pastured. Later activity in SPE5 appears to have been agricultural. Fragments of three furrows and Medieval finds recovered during fieldwalking indicated arable agriculture in the Medieval or post-Medieval periods. None of the recovered artefacts are later than the 1st century AD, and it is probable that activity was abandoned around the end of the 1st century or during the 2nd century. The surviving enclosure elements mostly belonged to the Romano-British phase of activity, although these enclosure ditches had been re-cuts following an Iron Age arrangement. One hundred and eighty-five sherds, weighing 3.236 kg and with 1.95 RE, were presented for study from the SPE5 area. The majority of these sherds were fresh and retrieved from ditches. The Phase 1 activity on the site appears to have occurred in the Iron Age, probably in the 1st century AD. The Phase 2 ditches contained a similar range of material with additional transitional shell-gritted wares and wheel-made Roman wares suggesting activity occurred in the mid-1st century AD into the early 2nd century AD.	2016
E147	ELS4506	514820 416706	Set Piece Excavation, SPE4, Hornsea Offshore Wind Farm Project One	One of seven set piece excavations along the onshore cable route for the Hornsea Project One Offshore Wind Farm (HOW01). SPE4 spanned plots 111 and 112, divided by an east to west aligned extant hedgerow following the parish boundary. SPE4 followed the cable route, incorporating a 90° turn within plot 112. Iron Age and Romano-British activity was focussed in plot 112 and comprised an intensively maintained area of enclosures supplemented by a small roundhouse settlement. Romano-British and Iron Age activity was also present in the south of plot 111, suggesting that the extent of activity of this date was quite large. Medieval activity was focussed on a moated enclosure in the north of plot 111 with drainage and agricultural boundaries extending into plot 112. In the west, the parish boundary runs roughly east to west following the extant hedgerow dividing plots 111 and 112. In the east, the parish boundary turns to the north and ran through the excavation area. This part of	2015

Event Number	HER Number	Co-ordinates	Name	Description	Date
				the boundary was marked by a substantial boundary ditch of Medieval or post-Medieval date that may have had early Romano-British and/or Medieval antecedents. A different boundary towards the west of plot 112 appears to have been maintained from the Iron Age (ditch 8321) until the 19th century and appears on historic maps SPE4 possesses a high level of continuity between its Iron Age/Romano-British, Anglo-Saxon and Medieval/Saxo-Norman periods. The origins of parish boundary 8264 are less clear, but a similar sequence of activity over time is not unlikely. Possible origins for the parish boundary may be Romano-British (8276) and/or Medieval (8213). There was a moderately high level of residuality, with Iron Age artefacts in Romano-British contexts, early Romano-British finds in late Romano-British contexts and a wide variety of material in Medieval and later contexts. Residual Iron Age pottery was fairly common across later features, particularly in the areas north and north-east of roundhouse 4702. The quantity of recovered Iron Age pottery suggests a greater level of activity in the Iron Age than attested by surviving cut features of that date. The Iron Age enclosure system was likely largely truncated by later features. The residuality of Iron Age pottery in later features questions the established chronology of the supposed Iron Age features which may be elements of Romano-British enclosures containing only residual pottery. The Medieval or post-Medieval parish boundary ditch 8264 contained no pottery later than Romano-British in date, although it truncated Medieval features. This level of residuality is a reflection of the density of Romano-British features in the area through which ditch 8264 was cut.	
E148	ELS4510	514879 417799	Trench Watching Brief, TWB8, Hornsea Offshore Wind Farm Project One	TWB8 was positioned to target the area immediately north of SPE5. Furrows extended north from SPE5 into TWB8 but SPE5's Iron Age and Romano-British boundaries did not extend into TWB8. The easternmost furrow within SPE5 continued north-east beyond the area of excavation of TWB8 (which was thinner area than SPE5). In the north of TWB8, furrow 5150 petered out as a result of plough truncation.The TWB8 investigation was also referred to by the designation GWB area AO. Apparent pits were recorded in the cable trench watching brief in the area of TWB8, probably parts of furrows.	2015
E149	ELS4511	514825 416856	Trench Watching Brief, TWB7, Hornsea Offshore Wind Farm Project One	TWB7 (also known as GWB area AM) targeted an area immediately north of the north end of SPE4. Geological features were recorded in its area during the cable trench watching brief (section 24). Eight furrows were recorded in TWB7 immediately north of the north end of SPE4. Four of the furrows were investigated by excavation (20103, 20105, 20107 and 20109). The furrows ran from east-north-east to west-south-west at intervals of generally 8.5 m, but in a range from 7 m to 11 m. The furrows were 1 m to 2.4 m wide and 0.08 m to 0.17 m deep. A range of post-Medieval pottery was recovered from the furrows. Six possible features (200241–200246) were recorded during the cable trench watching brief in the north of TWB7 (section 24). The features comprised dark grey silt clay surrounded by clean orange clay. In some cases the dark centre of the feature was completely surrounded by orange clay, forming a roughly spherical arrangement buried within the natural substrate that is likely geological in origin. A high quantity (3838g) of fired clay was recovered from Plots 111/112 (SPE4, TWB7), comprising undiagnostic, generally small and abraded fragments, sometimes with flattish or irregular surfaces. There are one or two possible wattle impressions, suggesting some sort A structural function has been suggested, owing to the possible presence of wattle impressions, but otherwise the fired clay is of uncertain origin. Associated pottery indicates that this material derives from Iron Age and Romano-British contexts, with a significant proportion from undated contexts.	2015
E150	ELS4514	514920 415450	General Watching Brief, GWB area AS, Plot 106, Hornsea Offshore Wind Farm Project	The designation GWB area AS was assigned within plot 106 following the identification of two linear features during the general watching brief which were later identified as furrows, following excavation. The cable trench watching brief recorded a post-Medieval ditch (202311) running north-east to south-west, parallel to furrows 20213 and 20215. Ditch 202311 correlated with a boundary depicted on the 1st edition Ordnance Survey map. Two north-east to south-west aligned furrows were identified (20213 and 20215), both recorded by the geophysical survey (RPS 2013c) continuing to the north-east was . The furrows measured 1.25 m to 1.5 m wide and 0.12 m to 0.17 m deep and were spaced at centres of 10.2 m. Ridge and furrow agricultural practice is typical of Medieval of post-Medieval date. A high level of variation within the natural substrate was recorded in the area of furrows 20213 and 20215.	2019
E151	ELS4528	516693 418383	AMEP 2, Strip, map and sample excavation, proposed Able Marine Energy Park , land at North Killingholme	AMEP 2 was a site occupied late in the Roman period, with evidence for a continuation into the early Anglo-Saxon period but with sparse evidence for prehistoric activity. A multi-phase enclosure system was based around a central east-west oriented trackway, onto which sub-rectangular enclosures were appended. Internally, several structures and an aisled building (appearing to be the main focus of the site) were recorded. The aisled building probably represented a high status dwelling, with a large quantity of CBM, iron objects, fired clay and roof tile recovered. The pottery assemblage is one of the largest recorded from a single site in North Lincolnshire, with over 12185 sherds. Additionally, a large assemblage of high status dress accessories and personal objects were recovered, as was a late Roman period coin mould. Six inhumations were recorded on the site.	2015
E152	ELS4529	516990 418310	AMEP 3, Strip, map and sample excavation, proposed Able Marine Energy Park , land at North Killingholme	AMEP 3 was characterised by a large main sub-rectangular enclosure, which contained several ring gullies and other fragmentary structural elements. The main enclosure had several subenclosures appended to it and a short stretch of double ditched trackway was recorded. The features displayed evidence of being re-worked and adapted from the mid to late Iron Age through to the early 2nd century AD, a chronology supported by artefactual evidence.	2014

Event Number	HER Number	Co-ordinates	Name	Description	Date
E153	ELS4530	517023 417845	AMEP 4, Strip, map and sample excavation, proposed Able Marine Energy Park , land at South Killingholme	AMEP 4 featured two large enclosures, a large sub-rectangular enclosure in the southern portion of the site and an elongated enclosure located in the northern part of site. Both featured internal sub-divisions, with the southern enclosure displaying evidence of six ring gullies and other structural elements. The southern enclosure was dated between the mid to late Iron Age and early 1st century AD, when it is interpreted as falling into disuse as the focus shifted to the northern enclosure, which was occupied until the late 2nd century AD.	2013
E154	ELS4531	517461 418035	AMEP 5, Strip, map and sample excavation, proposed Able Marine Energy Park , land at South Killingholme	AMEP 5 was located 484m to the northeast of AMEP 4 and measured approximately 21m by 21m. The stripping and single trench revealed no archaeological features or artefacts.	2013
E155	ELS4532	516889 418331	Trial trenches, proposed Able Marine Energy Park , land at North Killingholme	Two machine cut evaluation trenches additional trenches were excavated to ascertain if archaeological features continued beyond their known limits in AMEP 2 and AMEP 3. Three ditches and a burnt posthole were identified and were noted to be Roman in date. Both trenches were on a northeast to southwest orientation and measured 28m by 3m. Trench 1 was located approximately 38m to the east of the southeast corner of AMEP 2. A single feature, [13103] was noted to extend across the trench on a northeast to southwest orientation, however this feature was not excavated due to water ingress. Trench 2 was located approximately 113m to the east of Trench 1 and 25m to the west of AMEP 3. Three features were identified within this trench; two ditches [13205] and [13207], and pit [13203]. Northeast to southwest orientated ditch, [13207], was 2.2m in width with a depth of 0.75m. Occasional charcoal was identified within the ditch suggesting some form of activity within the immediate vicinity. Ditch [13205] was recorded a short distance to the south, measured 1.24m in width, 0.24m in depth and was north to south orientated. It was not possible to ascertain a function for the ditch but it contained a small sherd of Roman pottery. Circular feature [13203] was identified in the northern section of the trench, it had a diameter of 0.6m and a depth of 0.16m. Charcoal flecks and frequent occurrences of stone suggested that this feature may have represented a posthole, of an unknown date.	2014
E156	ELS4574	517210 418230	Photographic Survey, Barrage Balloon Site, South Killingholme	A photographic survey of the site undertaken in 2013 by Allen Archaeology Limited on behalf of Able UK Ltd. The barrage balloon site was identified, its remains consisting of four buildings in varying structural condition and twenty-three concrete anchor points, which had been used to tether barrage balloons. A total of 23 concrete anchors were recorded at the site during this recording process. The anchors were not earth-fast and it is therefore not clear how many, if any, were in-situ. The anchors measured 0.50m x 0.50m x 0.45m high on average with an iron fitting acting as the anchor ring or tethering point on top (Plate 60). The barrage balloons were part of an intricate anti-air defence network and were designed to help protect the strategically important Humber River and its dock and port facilities.	2013
E157	ELS4576	516960 418215	Hand Dug Trenches, Parish Boundary, North and South Killingholme	Two hand dug 2m x 1m trenches that were excavated across the line of the parish boundary between North Killingholme and South Killingholme. The westernmost trench, Trench 1, exposed a bank of topsoil and underlying subsoil or made ground layers, 13300, 13301 and 13302, totalling a maximum of c.0.7m deep, and sealing a c.2m wide, steep sided undated ditch cut, [13304]. It was cut into an alluvial or made ground layer 13305, over the natural geology, 13306 (Plate 56). Trench 2 exposed a sequence comprising topsoil 13400, over subsoil 13401 and natural clay 13402.	2016

Registered Parks and Gardens and Built Heritage Gazetteer

Asset Number	**NHLE/**HER Number	**Grade**	Name	Description	NGR	Period
RPG1	1000971				TA 12710 03425	
BH1	1346859	I	THORNTON ABBEY GATEHOUSE AND WING WALLS, PRECINCT WALLS AND BARBICAN	Abbey gatehouse, wing walls, precinct walls and barbican. Gatehouse and wing walls established 1382 for Abbot Thomas Gresham with 14th and 15th century extensions. Barbican dates to 15th and 16th centuries. Gatehouse has three storeys in brick with limestone ashlar dressing and decorative features and limestone and ironstone ashlar facing to plinth, turrets and central sections. Wing walls are in brick with ashlar dressing. Barbican in brick with chalk and limestone dressing. Gatehouse is on a rectangular plan with pointed entrance archway and two-stage octagonal turrets.	TA 11510 18967	Medieval
BH2	1103714	II	RUINS OF THORNTON ABBEY SOUTH PRECINCT GATEWAY APPROXIMATELY 180 METRES SOUTH OF ABBOT'S LODGE	Ruins of former gateway in the south precinct wall of Thornton Abbey, dated 14th or 15th century. Walling flanks the causeway over the moat. In squared and rubble chalk with brick and some limestone ashlar.	TA 11854 18696	Medieval
BH3	1103709	II	BRIDGE APPROXIMATELY 70 METRES NORTH OF NAVE OF THORNTON ABBEY CHURCH RUINS	Medieval bridge in ashlar with earth-covered roadway over. Twin arch tunnel vaulted bridge with chamfered arches.	TA 11762 19016	Medieval
BH4	1215139	I	REMAINS OF THORNTON ABBEY CHURCH AND ADJOINING MONASTIC RANGES	Ruins of abbey and monastic church, founded as a Priory in 1139. Comprising of late 12th or early 13th century dormitory vault, largely rebuilt mid-13th and late 14th century. Cruciform church plan in chalk, limestone and ironstone rubble. Walls survive to lower courses aside from the south end of the south transept. To the south are remains of a rib-vaulted vestibule and pointed arch. Sections of fine geometrical tracery survive.	TA 11804 18932	Medieval
BH5	1161628	II	CROSS BASE APPROXIMATELY 8 METRES SOUTH OF CHURCH OF ST ANDREW		TA 17525 15067	
BH6	1310011	I	CHURCH OF ST ANDREW		TA 17520 15081	Medieval
BH7	1103701	I	CHURCH OF SAINT DENYS	Parish church, 12th century tower arch, 13th century chancel with later alterations, 14th century nave and lower stages to tower, 15th century upper stage tower and 16th and 17th century clerestory. 18th, 19th and 20th century phases of alteration and restoration. In squared limestone, ironstone and chalk, chalk rubble and flint with	TA 14481 17357	Medieval
BH8	1216658	II	WALLS ENCLOSING ORCHARD APPROXIMATELY 130 METRES EAST SOUTH EAST OF THORNTON ABBEY GATEHOUSE, COLLEGE ROAD	Medieval and post-medieval north wall, approximately 100m in length with chamfered ashlar plinth in limestone with sections of squared chalk, brick and tile. Section continued as grass-covered bank.	TA 11630 18908	Medieval and post-medieval
BH9	1103713	I	ABBOT'S LODGE	House incorporating former monastic range of Thornton Abbey dated 13th or 14th century. Converted to house in 17th century by Sir Vincent Skinner. Two storeys plus attics with pitched tile roof with brick chimney stacks. In limestone ashlar and rubble incorporating vaulted under croft. Tudor arch and chamfered segmental arch with hoodmould inserted.	TA 11787 18854	Medieval and post-medieval
BH10	1103729	I	CHURCH OF SAINT PETER	14th century parish church with 13th century chancel with some reused 12th century moulded stone. Mid-19th century restoration scheme by J Fowler. Tower in ironstone and limestone ashlar, limestone, chalk and flint aisles and chancel and ashlar porch with some re-used medieval masonry. Westmoreland slate roof. Pointed and chamfered windows.	TA 14146 18452	Medieval and post-medieval

BH11	1346976	II	CHURCH OF ST MARGARET		TA 15503 14310	Medieval and post-medieval
BH12	1103707	II	KILLINGHOLME NORTH LOW LIGHTHOUSE	Lighthouse and adjoining lighthouse keeper's house dated 1851 with some later alterations. Rendered brick lighthouse with splayed-out base, top floor has plain iron railing balcony with sash and casement windows. The roof of the tower is a ribbed dome with a brick chimney stack. The adjoining house is in brick, now rough rendered with pitched slate roof. Windows are a combination of sash and 20th century casements.	TA 17778 18443	Post-medieval
BH13	1103706	II	KILLINGHOLME HIGH LIGHTHOUSE	Lighthouse first built 1831, rebuilt 1866-1867 in rendered and colour-washed brick. Tower is six storeys in height, approx. 30m. Sash windows on multiple floors, top floor has iron railing balcony. Top floor has plinth and ribbed dome roof.	TA 17834 18214	Post-medieval
BH14	1215093	II	KILLINGHOLME SOUTH LOW LIGHTHOUSE	Lighthouse dated 1836 in rendered and colour-washed brick. Tower is four storeys in height, approx. Second floor has casement windows, tip floor has wide 18-pane window, timber and iron balcony and ribbed dome roof.	TA 18011 18148	Post-medieval
BH15	1214719	II	WHITE COTTAGE, KING STREET	House dated 17th century or earlier, timber frame now brick infilled and rough rendered. Single storey with steep pitched clay tile roof with rendered chimney stack and sash windows.	TA 13743 20169	Post-medieval
BH16	1031500	II	ABBEY LANE GATEHOUSE, ABBEY LANE	Crossing keeper's house with crossing gates and five lever frame, built 1849 for the Manchester, Sheffield and Lincolnshire Railway. Two storeys with single storey extensions in red brick with Welsh slate roof and gable end. Sash and bay windows now boarded.	TA 10844 19027	Post-medieval
BH17	1346860	II	WALLS ON EAST SIDE OF GARDEN TO CUSTODIAN'S LODGE AND ADJOINING SECTION TO SOUTH, APPROXIMATELY 50 METRES SOUTH EAST OF THORNTON ABBEY GATEHOUSE	19th century garden wall in squared chalk and limestone with chalk rubble and brick. 20th century concrete coping.	TA 11544 18921	Post-medieval
BH18	1227899	II	COACH HOUSE/GRANARY APPROXIMATELY 20 METRES NORTH OF ABBOT'S LODGE	17th or 18th century coach house and granary building in brick and ashlar, some reused from ruined Abbey with later brick patching. Pitched pantile roof, two storeys with timber carriage doors, ventilation slits and recessed dove holes. Left return has blocked window.	TA 11785 18880	Post-medieval
BH19	1346854	II*	MANOR FARMHOUSE, EAST HALTON ROAD	House in brick with pantile roof, 16th century east wing, 17th century west wing and late 19th century porch with later additions and alterations on an L-shape plan. Two storeys plus attics with brick end stacks. Cogged brick bands between floors. Windows and doors have brick drip moulds. Right gable end has gothic-style gabled porch.	TA 14406 17669	Post-medieval
BH20	1214980	II	STABLES/GRANARY APPROXIMATELY 50 METRES EAST OF MANOR FARMHOUSE	Mid 18th century stables and granary in brick with pantile roof. 2 storeys, board doors with wrought-iron strap hinges under round brick arches.	TA 14447 17673	Post-medieval
BH21	1215113	II	THE NOOK		TA 15088 16205	
BH22	1346858	II	BAPTIST CHAPEL		TA 15836 15670	
BH23	1161587	II	APPLETREE COTTAGE		TA 15564 14311	
BH24	1249630	II	SIGNAL BOX OPPOSITE BROCKLESBY STATION		TA 11890 13565	
BH25	1103715	II	BROCKLESBY STATION		TA 11894 13547	
BH26	1166070	II*	NEWSHAM LODGE		TA 12616 12735	Post-medieval

BH27	1063419	I	NEWSHAM BRIDGE		TA 13189 13451	
BH28	1161630	II	CHURCHFIELD MANOR		TA 17820 15363	
BH29	1161631	II	BELMONT COTTAGE, 21, CHURCH LANE		TA 17552 15043	
BH30	1455139	II	Immingham War Memorial		TA1902615155	Modern
BH31	1391349	II	THE IRON BUNGALOW		TA 17822 14364	Modern
BH32	1103675	II	BRICK AND TILE KILN INCLUDING CHIMNEY, SKITTER ROAD	Early 20th century brick and tile kiln with associated chimney built for Wilkinson and Houghton Ltd in red brick on rectangular plan. Kiln is approximately 45m long and 7 metres wide, comprising of eight vaulted chambers with flat grass covered roof. Chimney is approximately 27m in height, tapered two stage in red brick with white brick lettering. Largest surviving brick and tile kiln on the Humber Banks.	TA 15669 21264	Modern
BH33	1214966					

Annex B: Figures 12A.1-12A.4

Figure 12A.1: Designated Heritage Assets

Figure 12A.2: Non-Designated Heritage Assets

Figure 12A.3: Historic Landscape Characterisation (Current)

Figure 12A.4: Fieldwork Events

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BH32 (NHLE:1103675)
BH15 (NHLE:1214719)
A43 (NHLE:1007816)
BH8 (NHLE:1216658)
BH3 (NHLE:1103709)
BH16 (NHLE:1031500)
A46 (NHLE:1011198)
BH4 (NHLE:1215139)
BH1 (NHLE:1346859)
BH18 (NHLE:1227899)
A41 (NHLE:1007813)
BH10 (NHLE:1103729)
BH12 (NHLE:1103707)
BH17 (NHLE:1346860)
BH2 (NHLE:1103714)
A42 (NHLE:1007815)
BH14 (NHLE:1215093)
BH9 (NHLE:1103713)
BH20 (NHLE:1214980)
BH13 (NHLE:1103706)
A44 (NHLE:1008044)
BH19 (NHLE:1346854)
BH7 (NHLE:1103701)
BH33 (NHLE:1214966)
BH21 (NHLE:1215113)
BH22 (NHLE:1346858)
BH28 (NHLE:1161630)
BH6 (NHLE:1310011)
BH30 (NHLE:1455139)
BH5 (NHLE:1161628)
BH29 (NHLE:1161631)
BH11 (NHLE:1346976)
BH31 (NHLE:1391349)
BH24 (NHLE:1249630)
BH23 (NHLE:1161587)
BH27 (NHLE:1063419)
BH25 (NHLE:1103715)
HPG1 (NHLE:1000971)
BH26 (NHLE:1166070)
A45 (NHLE:1038686)

1:45,000 @ A3

1 0.5 0 1 2 3 4 5 km

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PROJECT
Humber Zero

CLIENT
Phillips 66 /
VPI Immingham

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Leeds, LS11 9AR
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LEGEND
- Phillips 66 Site
- VPI Site
- Phillips 66 5km Study Area
- VPI Immingham 5km Study Area
- Grade I Listed Building
- Grade II Listed Building
- Grade II* Listed Building
- Scheduled Monument
- Park/Garden
- Heritage at Risk

NOTES

ISSUE PURPOSE
FINAL

PROJECT NUMBER
60668866

FIGURE TITLE
Location of Designated Heritage Assets

FIGURE NUMBER
Figure 12A.1

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LEGEND

- Phillips 66 Site
- VPI Site
- Phillips 66 1km Study Area
- VPI Immingham 1km Study Area

North Lincolnshire HER - Heritage Asset Point (High Density)

- A124
- A15
- A19
- A4
- A52
- A53
- A62
- A8

North Lincolnshire HER

- Heritage Asset Point
- Heritage Asset Line
- Heritage Asset Polygon
- Cropmark
- Cropmark Sketch Plot

R&F Orientation

- A52
- A53

NOTES

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PROJECT NUMBER

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FIGURE TITLE

Location of Non-Designated Heritage Assets

FIGURE NUMBER

Figure 12A.2

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LEGEND

- Phillips 66 Site
- VPI Site
- Phillips 66 1km Study Area
- VPI Immingham 1km Study Area

HLC Types

- Communications
- Fields and Enclosed Land
- Historic Earthworks
- Industry
- Recreational Open Space
- Settlement
- Woodland

NOTES

ISSUE PURPOSE

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PROJECT NUMBER

60668866

FIGURE TITLE

Historic Landscape Characterisation - Current Types

FIGURE NUMBER

Figure 12A.3

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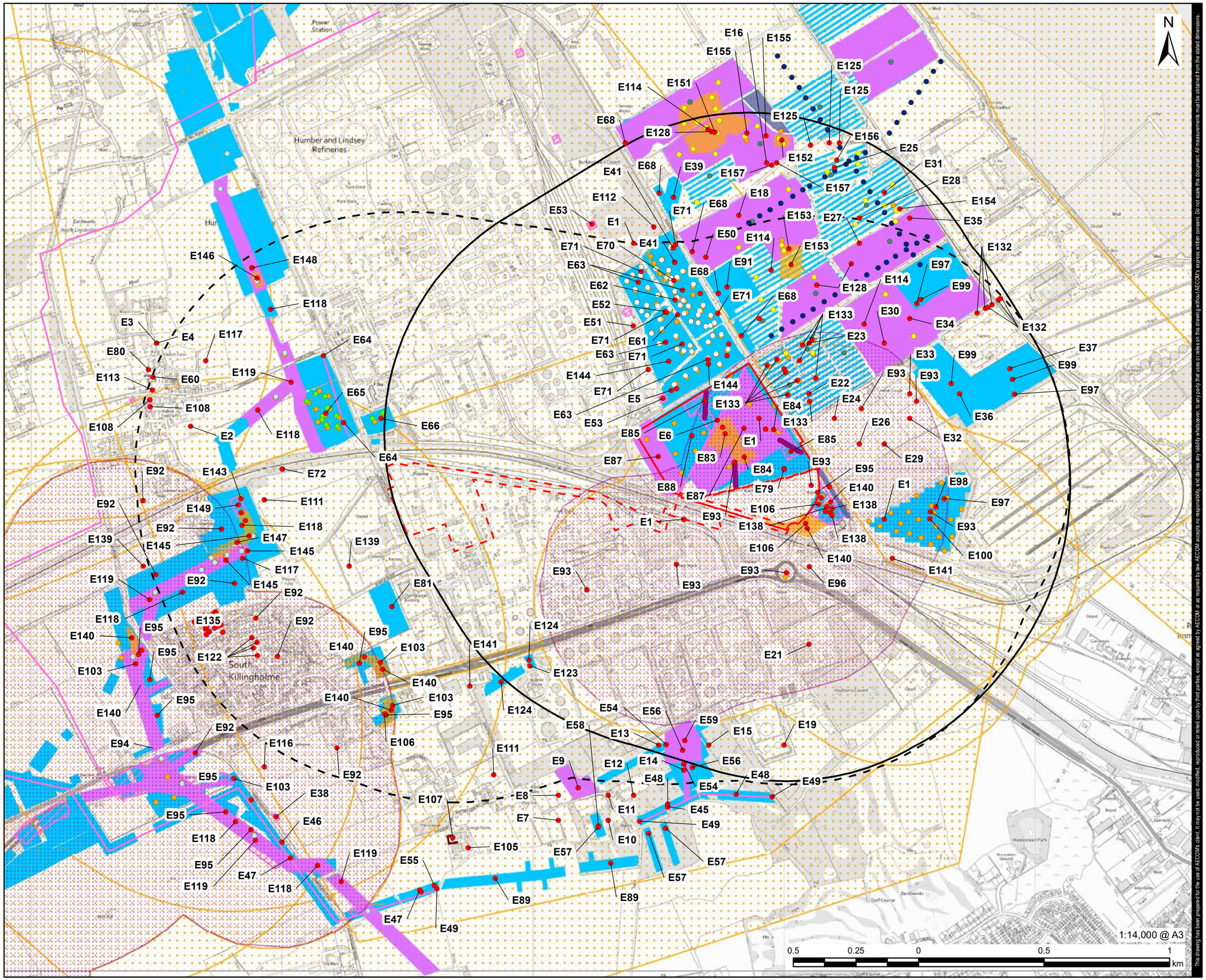

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LEGEND

- Phillips 66 Site
- VPI Site
- Phillips 66 1km Study Area
- VPI Immingham 1km Study Area
- North Lincolnshire HER Event Point

North Lincolnshire HER Event Point (High Density)

- E67
- E69
- E101
- E102
- E126
- E129
- E131
- AP Assessment
- Building Photography
- Desk Based Assessment
- Earthwork Survey
- Fieldwalked Area
- Geophyscial Survey

Excavation Area

- Point
- Region

Watching Brief

- Point
- Line
- Region

NOTES

ISSUE PURPOSE

FINAL

PROJECT NUMBER

60668866

FIGURE TITLE

Location of Fieldwork Events

FIGURE NUMBER

Figure 12A.4

Annex C: Viewpoints (Figures 12A.5-12A.25)

Figure 12A.5 General image looking east taken from the gates (VPI Site)

Figure 12A.6 North-east boundary looking out towards the port (VPI Site)

Figure 12A.7 General image of site conditions (VPI Site)

Figure 12A.8 Photo taken looking south into fenced off area of site (VPI Site)

Figure 12A.9 Photo taken looking south-west within the VPI Site with VPI Immingham CHP Plant (to west) and Philips 66 Humber Refinery in background

Figure 12A.10: Spoil heap within VPI Site

Figure 12A.11 Existing pipe bridge over the railway on south-west boundary of VPI Site

Figure 12A.12: Existing stack at VPI Site taken looking north-west

Figure 12A.13: Existing VPI Immingham CHP Plant cooling towers looking north-west (VPI Site)

Figure 12A.14 Looking north from south of VPI Site

Figure 12A.15 Spoil heaps (VPI Site)

Figure 12A.16: Drain in north-west corner (VPI Site)

Figure 12A.17: Immingham War Memorial (BH30) urban setting with no views of the Sites

Figure 12A.18: Church of St Andrew (BH6) and cross base (bh5) (Sites not visible)

Figure 12A.19: Belmont Cottage (BH29) (Sites not visible)

Figure 12A.20: The Iron Bungalow (BH31) (Sites not visible)

Figure 12A.21 The Nook (BH21)

Figure 12A.22: View of Phillips 66 Site east from Town St, South Killingholme around the corner from BH21

Figure 12A.23: St Denys Church (BH7) North Killingholme

Figure 12A.24: St Denys (BH7) Churchyard looking east to Lindsey oil refinery

Figure 12A.25: White Cottage (B15) (Sites not visible – too distant)